ENVIRON

May 31, 2011

Electronic Mail

Brian Jankauskas
New York State Department of Environmental Conservation
Remedial Bureau A - Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, New York 12233-7015

Re: Additional Sampling Results
101 Green Acres Road Site
Valley Stream, New York
NYSDEC Case No. 1-30-084

Dear Mr. Jankauskas:

ENVIRON International Corporation (ENVIRON) has prepared this letter, on behalf of Bulova Corporation (Bulova), as a follow-up to the *Additional Sampling Results Report* (ENVIRON; October 2010). As presented in the October 2010 report and the *Supplemental Vapor Intrusion Investigation Plan* (ENVIRON, October 29, 2010), Bulova proposed to complete a supplemental on-site vapor intrusion investigation at the above-referenced property (the "Site"). The site location is depicted as Figure 1 and the site layout and sample locations are depicted on Figure 2. The investigation included the collection of field measurements to evaluate the pressure differential between indoor air and the sub-slab soil vapor and the collection and analysis of sub-slab soil vapor samples, indoor air samples and an ambient air sample. The investigation also included the collection and analysis of two rounds of groundwater samples from six on-site monitoring wells and one off-site monitoring well.

The groundwater sampling activities were completed during September 2010 and February 2011, in accordance with the Site *Operation and Maintenance Plan* (ENVIRON, March 2000). The vapor intrusion-related sampling activities were conducted during February 2011 in accordance with the *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (New York State Department of Health [NYSDOH], October 2006). The following sections summarize the results of the additional sampling completed at the Site and present conclusions and recommendations based on the results of the additional sampling activities. Detailed information regarding the Site history, environmental setting, and the results of the prior investigation activities were previously provided to the New York State Department of Environmental Conservation (NYSDEC) in reports prepared by ENVIRON and Weston Solutions, Inc. (Weston).

Additional Sampling Results

Groundwater Monitoring

Water Level Measurements and Sampling Procedures

Synoptic groundwater level measurements were collected in conjunction with the groundwater sampling events completed during September 2010 and February 2011. Monitoring well locations are depicted on Figure 2. The depth-to-water measurements were collected at each monitoring well using an electronic interface probe. The depth-to-water measurements and corresponding groundwater elevation data derived from the measurements are presented in Table 1. Potentiometric surface maps associated with the September 2010 and February 2011

gauging/monitoring events are provided as Figure 3 and Figure 4, respectively. Consistent with the results of prior groundwater monitoring events at the Site, water level data collected during the gauging/monitoring events indicates that groundwater flow is directed toward the southeast and generally coincides with local topography.[1]

During each groundwater sampling event, ENVIRON collected groundwater samples at all existing on-site permanent monitoring wells (*i.e.,* MW-HD1 through MW-HD6) and one existing off-site monitoring well (*i.e.,* MW-HD7). Duplicate groundwater samples were collected from monitoring well MW-HD6 during the September 2010 and February 2011 sampling events. The groundwater sampling activities were conducted using a stainless steel submersible pump equipped with dedicated discharge tubing. Initial water quality indicator measurements were collected prior to purging each well. The indicator parameters include pH, water temperature, specific conductance, dissolved oxygen, turbidity and oxidation/reduction potential. Water quality indicators were measured during purging and purging continued until indicator values had stabilized or until three well volumes had been purged from the well. Groundwater field parameters are provided in Appendix A.

Each groundwater sample was analyzed for the six primary constituents of concern identified in NYSDEC's March 2000 *Record of Decision* associated with the Site (*i.e.,* tetrachloroethene [PCE]; trichloroethene [TCE]; 1,1,1-trichloroethane [TCA]; 1,1-Dichloroethane [1,1-DCA]; 1,1,-Dichloroethene [1,1-DCE]; and Freon 113). Laboratory services were provided by Accutest Laboratories of Dayton, New Jersey, an Environmental Laboratory Approval Program (ELAP)-certified laboratory. Laboratory deliverables are provided in Attachment A.

Groundwater Sampling Results

Analytical results from the September 2010 and February 2011 groundwater sampling events are summarized on Table 2 and Table 3, respectively. Consistent with prior sampling events at the Site, elevated VOC concentrations were detected in groundwater samples collected from monitoring wells at the southeast portion of the site (*i.e.,* MW-HD4 and MW-HD6). Reported VOC concentrations in groundwater samples collected from the other on-site and off-site monitoring wells were below the laboratory method detection limits and/or the corresponding Ambient Water Quality Standard. Consistent with the prior groundwater monitoring results at the Site, the reported VOC concentrations in groundwater at the southeastern portion of the Site have continued to display an overall decreasing trend. In addition, although the reported concentrations of several VOCs are above the NYSDEC Ambient Water Quality criteria, the reported VOC concentrations have decreased by more than three orders of magnitude since the interim response actions were completed at the Site. Charts depicting constituent concentrations in groundwater at the southeast portion of the site (*i.e.,* MW-HD4) are provided in Appendix B.

Vapor Intrusion Evaluation

Building Walkthrough Survey

As noted above, an additional vapor intrusion investigation was completed during February 2011 to further evaluate the vapor intrusion exposure pathway at the Site. Prior to conducting the vapor intrusion investigation, a building walkthrough survey was completed to identify potential background sources of indoor air contamination. Based on the information provided by the store manager, the pre-sampling building walkthrough site conditions have not changed

[1] Anomalous water level measurements were recorded at MW-HD3 during September 2010 and at MW-HD2 during February 2011. The anomalous measurements were not used to evaluate the groundwater flow direction at the Site.

since the prior vapor intrusion sampling events at the site. Therefore, a copy of the previously completed form is provided as Appendix C.

Pressure Differential Evaluation

As detailed in the October 2010 report, ENVIRON has installed six permanent soil vapor sampling points, positioned immediately adjacent to areas where prior soil gas investigations identified elevated VOC concentrations beneath the footprint of the current building at the Site (i.e., Weston sample locations SL02, SL03, SL06, and SL13) and in non-retail areas at the southwest portion of the building. The locations of the soil vapor sampling points are depicted on Figure 2.

Prior to initiating the vapor intrusion sampling activities, pressure measurements were collected to evaluate the pressure differential between the sub-slab soil vapor and the air within the building at the site. The pressure differential measurements were collected within the central portion of the building (*i.e.,* sub-slab sampling ports ENV02 and ENV03) and in the vicinity of exterior doors (*i.e.,* sub-slab sampling ports ENV01 and ENV04). In accordance with the *Supplemental Vapor Intrusion Investigation Plan*, the pressure differential measurements were collected using a hand-held digital micromanometer (*i.e.,* TSI Velocicalc Model 9555 Series).

An initial pressure differential measurement event was started on February 2, 2011, with measurements logged every 5-minutes over an approximately 24-hour period. A second pressure differential measurement event was started on February 15, 2011, with measurements logged every 5-minutes over an approximately 72-hour period.[2] A summary of the average pressure differential measurements is provided in Table 4. The pressure differential and barometric pressure measurements collected at each sampling location across each measurement event are presented graphically in Appendix D.

As depicted on the graphs provided in Appendix D, the pressure differential results demonstrate variable, short-term fluctuations between negative and positive pressure gradients between the indoor air and sub-slab soil vapor. However, as summarized in Table 4, the average pressure differential measurements across each measurement event indicate that the overall conditions at the Site consist of a slight positive pressure within the building or a balanced pressure between the building and the sub-slab soil vapor.

Sample Collection

The vapor intrusion sampling activities were completed on February 3, 2011 and included the following:

- Collection of soil vapor samples from the six sub-slab soil vapor locations;
- Collection of concurrent indoor air samples from locations positioned adjacent to or in the vicinity of each sub-slab soil gas sampling location; and
- Collection of a concurrent ambient air sample from the rear parking area at the Site.

Vapor intrusion investigation sampling locations are depicted on Figure 2. As described above, each indoor air sample location was positioned immediately adjacent to or in the vicinity of the respective sub-slab soil vapor location. All sampling canisters were positioned in the breathing zone, approximately 3 to 5 feet above the floor surface. The ambient air sample location was

[2] Pressure monitoring did not extend across the full monitoring period at each sampling location due to limited battery life on certain meters.

positioned outside of the building in an area that is reasonably representative of background conditions and was not adjacent to high traffic areas.

Sampling activities took place during normal business hours, while the heating, ventilation, and cooling (HVAC) system and the building's doors were operating in a manner consistent with normal operating conditions. Home Depot store personnel confirmed that the HVAC system was in normal operation during the time that the samples were collected.

Samples were collected using laboratory-provided 6-liter stainless steel Summa® canisters, and transported to an ELAP-certified laboratory. Laboratory services were provided by Accutest Laboratories of Dayton, New Jersey. Consistent with the March 2008 vapor intrusion investigation, each sample was analyzed for PCE, TCE, TCA, 1,1,-DCA, 1,1-DCE, and Freon 113 using USEPA Method TO-15. In addition, for quality assurance purposes, one duplicate sample was collected during the sampling event. Each Summa® canister was equipped with a regulator pre-set by the laboratory to correspond to an 8-hour sampling time. Laboratory deliverables are provided in Attachment A.

Vapor Intrusion Investigation Results

The sub-slab soil vapor sampling results associated with the vapor intrusion sampling activities conducted during February 2011 are summarized in Table 5 and the indoor air and ambient air sampling results are presented in Table 6. A comparison of the sub-slab soil vapor and indoor air sampling results, sorted by location, is presented in Appendix E.

As summarized in Table 4, elevated VOC concentrations were detected in certain sub-slab soil vapor samples collected at the Site. However, site-specific conditions affect soil vapor migration and intrusion. As such, the presence of elevated VOC concentrations beneath the building slab does not necessarily indicate that an unacceptable exposure to contaminants in indoor air via the vapor intrusion pathway currently exists. In addition, several factors, including but not limited to, building construction, building size, and air circulation, can influence the migration of sub-slab soil vapor into indoor air and serve to address potential unacceptable exposure via the vapor intrusion pathway. For example, the competent concrete slab throughout the warehouse-style building at the Site, the generally positive/neutral pressures within the building, and the air exchanges within the building can serve to address potential unacceptable exposure via the vapor intrusion pathway. Therefore, the characterization of indoor air quality is critical when evaluating if there is an unacceptable exposure to contaminants via the vapor intrusion pathway.

Although TCA, TCE, 1,1,-DCA, and 1,1-DCE were detected in sub-slab soil vapor samples and in groundwater samples collected at the Site, none of these constituents were detected in any of the indoor air samples collected during February 2011. As summarized in Table 5, VOC detections in the indoor air samples during the February 2011 sampling event were limited to low concentrations of PCE (0.59 µg/m3, maximum). However, all of the reported PCE concentrations are below the NYSDOH Air Guidance Values, USEPA benchmark values for indoor air quality in public and commercial buildings, and corresponding Occupational Indoor Air Standards. The lack of other site-specific COCs in the indoor air samples (e.g., TCA) indicates that the PCE detections in the indoor air samples are related, at least in part, to the presence of ambient/background sources rather than the intrusion of sub-slab soil vapors.

A comparison of the soil vapor and indoor air results to the NYSDOH Decision Matrices, as outlined in the *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (NYSDOH, October 2006), is presented in Appendix E. As detailed in the October 2010 report and depicted on the annotated decision matrices, data associated with a majority of the sample

locations across the multiple sampling events at the Site (*i.e.,* October 2009, January 2010, and February 2011) correlate with decision matrix recommendations for no further action, or monitor. In addition, the overall trend across the sampling events is an increase in the number of decision matrix recommendations for no further action. Also, as discussed in the October 2010 report, where the sample location data correlate with decision matrix recommendations to monitor/mitigate or mitigate, the recommendations are associated with sample locations where the constituents of concern were not detected in indoor air (*i.e.,* TCA and TCE) or sample locations where the decision matrix recommendations are driven by indoor air concentrations associated with an ambient/background source rather than a vapor intrusion-related source (*i.e.,* PCE and TCE).

Data Usability

In accordance with Section 2.1 and Appendix 2B of the *Technical Guidance for Site Investigation and Remediation* (DER-10; May 2010), ENVIRON has included a Data Usability Summary Report associated with each sampling event described above. The Data Usability Summary Reports are included as Appendix F. As presented in Appendix F, the data usability review determined that the data deliverables associated with each sampling event were complete and that the data quality was acceptable.

Conclusions and Recommendations

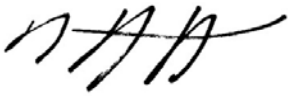
As detailed above, ENVIRON completed additional sampling activities at the 101 Green Acres Road site in Valley Stream, New York. The additional sampling activities included the collection and analysis of groundwater samples from six on-site monitoring wells and one off-site monitoring well during September 2010 and February 2011; the collection of pressure measurements to evaluate the pressure differential between the sub-slab soil vapor and the air within the building at the Site; and the collection and analysis of sub-slab soil vapor, indoor air, and ambient air samples from several locations at the Site. The findings of the additional sampling activities can be summarized as follows:

- Consistent with the results of prior groundwater sampling events at the Site, analysis of groundwater samples collected from monitoring wells located at the southeast portion of Site identified certain VOCs at concentrations above the corresponding Ambient Water Quality Standards. However, reported VOC concentrations in groundwater at the southeastern portion of the Site have continued to display an overall decreasing trend and the reported VOC concentrations have decreased by more than three orders of magnitude since the interim response actions were completed at the Site. Reported VOC concentrations in groundwater samples collected from other areas at the Site and from the off-site monitoring well were all below the laboratory method detection limits and/or the corresponding Ambient Water Quality Standard. At the time of the Record of Decision associated with the Site (NYSDEC; March 2000), NYSDEC determined that natural attenuation represented an appropriate alternative to address impacted groundwater at the Site. Similar to prior sampling results, the recent groundwater monitoring activities have confirmed that VOC concentrations in groundwater are continuing to decrease and that off-site groundwater has not been impacted. As such, natural attenuation continues to be an appropriate alternative to address the remaining impacted groundwater at the Site.
- The pressure differential measurements identified short-term fluctuations in the pressure gradients between the indoor air and sub-slab soil vapor, with average pressure differential measurements across each measurement event indicating an overall condition of slight positive pressure within the building or a balanced pressure between the building and the sub-slab soil vapor.

- Consistent with the prior soil vapor sampling results, elevated VOC concentrations were detected in soil vapor samples collected from certain locations beneath the existing building slab foundation, most notably beneath the southeastern and western portions of the building. However, reported VOC concentrations in corresponding indoor air samples (which were limited to trace PCE concentrations) were below corresponding NYSDOH Air Guidance Values, Calculated Health-Based Indoor Air Criterion, USEPA benchmark values for indoor air quality in public and commercial buildings, and Occupational Indoor Air Standards. Consistent with the results of prior sampling events at the Site, the trace VOC concentrations detected in the indoor air samples during the February 2011 sampling event are believed to be related to ambient/background sources rather than sub-slab vapors. Based on the results of the February 2011 sampling event and similar results identified during the October 2009 and January 2010 sampling events, the existing building at the Site (*i.e.,* competent concrete slab, building construction, building size, air circulation, and the generally positive/neutral pressures within the building) is serving as an effective mitigation measure to address the vapor intrusion exposure pathway and no additional actions are warranted with respect to current human exposure via the vapor intrusion pathway at the Site.

Please contact me at your earliest convenience to discuss any questions or comments.

Sincerely,



Michael Potts
Senior Manager

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Attachments

cc: B. Weber, Bulova
M. Bernstein, Van Ness Feldman, P.C.
C. Leas, Sive, Paget & Riesel, P.C.

Tables

TABLE 1
Groundwater Elevation Data
101 Green Acres Road
Valley Stream, New York

Monitoring Well	Top of Casing Elevation (Feet AMSL)	September 28, 2010 Data		February 2, 2011 Data	
		Depth-to-Water (Feet)	Groundwater Elevation (Feet AMSL)	Depth-to-Water (Feet)	Groundwater Elevation (Feet AMSL)
MW-HD1	9.93	6.15	3.78	4.70	5.23
MW-HD2	9.45	5.68	3.77	4.44	5.01
MW-HD3	9.93	6.60	3.33	4.30	5.63
MW-HD4	10.09	6.80	3.29	5.62	4.47
MW-HD5	9.45	5.97	3.48	4.79	4.66
MW-HD6	9.97	6.71	3.26	5.54	4.43
MW-HD7	9.33	5.61	3.72	4.79	4.54

Abbreviation:
AMSL: Above mean sea level.

TABLE 2
Summary of Groundwater Analytical Results - September 2010
101 Green Acres Road
Valley Stream, New York

Location ENVIRON Sample ID Date Sampled Matrix Comment	NYSDEC Ambient Water Quality Standard - Source of Drinking Water	MWHD1 MWHD1-100928 9/28/2010 Groundwater	MWHD2 MWHD2-100928 9/28/2010 Groundwater	MWHD3 MWHD3-100928 9/28/2010 Groundwater	MWHD4 MWHD4-100928 9/28/2010 Groundwater	MWHD5 MWHD5-100928 9/28/2010 Groundwater
Volatile Organic Compounds						
1,1-Dichloroethane	5	ND (0.29)	ND (0.29)	ND (0.29)	**13.9 (0.29)**	ND (0.29)
1,1-Dichloroethene	5	ND (0.40)	ND (0.40)	ND (0.40)	**27.3 (0.4)**	ND (0.40)
Freon 113	5	ND (0.38)	ND (0.38)	ND (0.38)	3.4 J (0.38)	ND (0.38)
Tetrachloroethene	5	ND (0.27)	ND (0.27)	ND (0.27)	4.3 (0.27)	1.6 (0.27)
1,1,1-Trichloroethane	5	ND (0.26)	ND (0.26)	ND (0.26)	**27.8 (0.26)**	ND (0.26)
Trichloroethene	5	ND (0.24)	ND (0.24)	0.57 J (0.24)	**15.3 (0.24)**	0.84 J (0.24)

Notes:

1 All concentrations are presented in ug/L (ppb). Detection limits are in parentheses.

2 Bold concentrations exceed the NYSDEC Ambient Water Quality Standard (Source of Drinking Water).

Abbreviations:

ND -- Not Detected.

J -- Estimated Concentration.

TABLE 2
Summary of Groundwater Analytical Results - September 2010
101 Green Acres Road
Valley Stream, New York

Location ENVIRON Sample ID Date Sampled Matrix Comment	NYSDEC Ambient Water Quality Standard - Source of Drinking Water	MWHD6 MWHD6-100928 9/28/2010 Groundwater	MWHD6 MWHD6-100928D 9/28/2010 Groundwater Duplicate	MWHD7 MWHD7-100928 9/28/2010 Groundwater	QAQC FB-100928 9/28/2010 Blank Water Field Blank	QAQC TB-100928 9/28/2010 Blank Water Trip Blank
Volatile Organic Compounds						
1,1-Dichloroethane	5	**10.5 (0.29)**	**10.1 (0.29)**	ND (0.29)	ND (0.29)	ND (0.29)
1,1-Dichloroethene	5	**38.1 (0.4)**	**35.4 (0.4)**	ND (0.40)	ND (0.40)	ND (0.40)
Freon 113	5	3.3 J (0.38)	3.2 J (0.38)	ND (0.38)	ND (0.38)	ND (0.38)
Tetrachloroethene	5	2.4 (0.27)	2.3 (0.27)	ND (0.27)	ND (0.27)	ND (0.27)
1,1,1-Trichloroethane	5	4.8 (0.26)	4.6 (0.26	ND (0.26)	ND (0.26)	ND (0.26)
Trichloroethene	5	**12.1 (0.24)**	**11.3 (0.24)**	0.91 J (0.24)	ND (0.24)	ND (0.24)

Notes:

1 All concentrations are presented in ug/L (ppb).
Detection limits are in parentheses.

2 Bold concentrations exceed the NYSDEC Ambient Water Quality Standard (Source of Drinking Water).

Abbreviations:

ND -- Not Detected.

J -- Estimated Concentration.

TABLE 3
Summary of Groundwater Analytical Results - February 2011
101 Green Acres Road
Valley Stream, New York

Location ENVIRON Sample ID Date Sampled Matrix Comment	NYSDEC Ambient Water Quality Standard - Source of Drinking Water	MWHD1 MWHD1-110202 2/2/2011 Groundwater	MWHD2 MWHD2-1110202 2/2/2011 Groundwater	MWHD3 MWHD3-1110202 2/2/2011 Groundwater	MWHD4 MWHD4-110203 2/3/2011 Groundwater	MWHD5 MWHD5-110203 2/3/2011 Groundwater
Volatile Organic Compounds						
1,1-Dichloroethane	5	ND (0.29)	ND (0.29)	ND (0.29)	4.7 (0.29)	ND (0.29)
1,1-Dichloroethene	5	ND (0.40)	ND (0.40)	ND (0.40)	**53.2 (0.4)**	ND (0.40)
Freon 113	5	ND (0.38)	ND (0.38)	ND (0.38)	4.1 J (0.38)	ND (0.38)
Tetrachloroethene	5	ND (0.27)	ND (0.27)	ND (0.27)	2.3 (0.27)	ND (0.27)
1,1,1-Trichloroethane	5	ND (0.26)	ND (0.26)	ND (0.26)	**58.0 (0.26)**	ND (0.26)
Trichloroethene	5	ND (0.24)	ND (0.24)	ND (0.24)	**21.0 (0.24)**	ND (0.24)

Notes:

1 All concentrations are presented in ug/L (ppb). Detection limits are in parentheses.

2 Bold concentrations exceed the NYSDEC Ambient Water Quality Standard (Source of Drinking Water).

Abbreviations:

ND -- Not Detected.

J -- Estimated Concentration.

TABLE 3
Summary of Groundwater Analytical Results - February 2011
101 Green Acres Road
Valley Stream, New York

Location ENVIRON Sample ID Date Sampled Matrix Comment	NYSDEC Ambient Water Quality Standard - Source of Drinking Water	MWHD6 MWHD6-110203 2/3/2011 Groundwater	MWHD6 MWHD6-110203D 2/3/2011 Groundwater Duplicate	MWHD7 MWHD7-110202 2/2/2011 Groundwater	QAQC FB-110203 2/3/2011 Blank Water Field Blank	QAQC TB-110203 2/3/2011 Blank Water Trip Blank
Volatile Organic Compounds						
1,1-Dichloroethane	5	4.1 (0.29)	3.8 (0.29)	ND (0.29)	ND (0.29)	ND (0.29)
1,1-Dichloroethene	5	**6.5 (0.4)**	**5.6 (0.4)**	ND (0.40)	ND (0.40)	ND (0.40)
Freon 113	5	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)
Tetrachloroethene	5	0.68 J (0.27)	0.78 J (0.27)	ND (0.27)	ND (0.27)	ND (0.27)
1,1,1-Trichloroethane	5	ND (0.26)	ND (0.26	ND (0.26)	ND (0.26)	ND (0.26)
Trichloroethene	5	4.3 (0.24)	4.0 (0.24)	0.57 J (0.24)	ND (0.24)	ND (0.24)

Notes:

1 All concentrations are presented in ug/L (ppb).
Detection limits are in parentheses.

2 Bold concentrations exceed the NYSDEC Ambient Water Quality Standard (Source of Drinking Water).

Abbreviations:

ND -- Not Detected.

J -- Estimated Concentration.

TABLE 4
Summary of Pressure Differential Measurements
101 Green Acres Road
Valley Stream, New York

Location	February 2nd Test		February 15th Test	
	Average Pressure Differential (inches of H_2O)	Test Duration	Average Pressure Differential (inches of H_2O)	Test Duration
ENV-01	-0.001	0 days, 14 hours, 40 minutes	-0.001	2 days, 23 hours, 4 minutes
ENV-02	+0.011	1 day, 0 hours, 0 minutes	0.000	0 days, 14 hours, 29 minutes
ENV-03	-0.005	1 day, 0 hours, 5 minutes	+0.001	0 days, 17 hours, 0 minutes
ENV-04	+0.007	1 day, 0 hours, 10 minutes	+0.001	2 days, 7 hours, 50 minutes
Building Average	**+0.003 inches of H_2O**		**0.000 inches of H_2O**	

TABLE 5
Summary of Soil Vapor Analytical Results
101 Green Acres Road
Valley Stream, New York

Location	ENV-01	ENV-02	ENV-03	ENV-04	ENV-04	ENV-05	ENV-06
ENVIRON Sample ID	SV01-110203	SV02-110203	SV03-110203	SV04-110203	SV04-110203D	SV05-110203	SV06-110203
Date Sampled	2/3/2011	2/3/2011	2/3/2011	2/3/2011	2/3/2011	2/3/2011	2/3/2011
Matrix	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor
Comment					Duplicate		
Volatile Organic Compounds							
1,1-Dichloroethane	3530 (16)	ND (0.40)	ND (0.40)	19 (0.40)	20 (0.39)	ND (0.40)	0.77 J (0.10)
1,1-Dichloroethylene	564 (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.095)
Freon 113	379 (0.76)	3.1 J (0.76)	363 (0.76)	421 (0.76)	395 (0.76)	30 (0.76)	281 (0.20)
1,1,1-Trichloroethane	6490 (21)	4.5 (0.53)	17 (0.53)	161 (0.53)	167 (0.53)	73.7 (0.53)	123 (0.13)
Tetrachloroethylene	75.3 (1.1)	355 (1.1)	96.3 (1.1)	174 (1.1)	193 (1.1)	5.8 (1.1)	239 (0.27)
Trichloroethylene	21 (0.52)	31 (0.52)	256 (0.52)	2230 (7.1)	2100 (7.3)	48 (0.52)	133 (0.13)

Notes:

1 All concentrations are presented in $\mu g/m^3$. Detection limits are in parentheses.

Abbreviations:

ND -- Not Detected.

TABLE 6
Summary of Indoor Air Analytical Results
101 Green Acres Road
Valley Stream, New York

Location ENVIRON Sample ID Date Sampled Matrix Comment	NYSDOH Air Guideline Value	USEPA Indoor Air Benchmark (90th Percentile)	Calculated Human Health Risk-Based Indoor Air Criteria	Occupational Indoor Air Standard	ENV-01 IA01-110203 2/3/2011 Indoor Air	ENV-02 IA02-110203 2/3/2011 Indoor Air	ENV-03 IA03-110203 2/3/2011 Indoor Air	ENV-04 IA04-110203 2/3/2011 Indoor Air	ENV-05 IA05-110203 2/3/2011 Indoor Air	ENV-06 IA06-110203 2/3/2011 Indoor Air	QAQC FB-110203 2/3/2011 Ambient Air
Volatile Organic Compounds											
1,1-Dichloroethane	NA	< 0.7	NC	400,000	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
1,1-Dichloroethylene	NA	< 1.4	NC	20,000	ND (0.095)	ND (0.095)	ND (0.095)	ND (0.095)	ND (0.095)	ND (0.095)	ND (0.095)
Freon 113	NA	NA	130,000	7,600,000	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
1,1,1-Trichloroethane	NA	20.6	NC	1,900,000	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)
Tetrachloroethylene	100	15.9	NC	680,000	0.35 (0.27)	0.37 (0.27)	0.35 (0.27)	0.59 (0.27)	0.39 (0.27)	0.39 (0.27)	ND (0.27)
Trichloroethylene	5	4.2	NC	540,000	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)

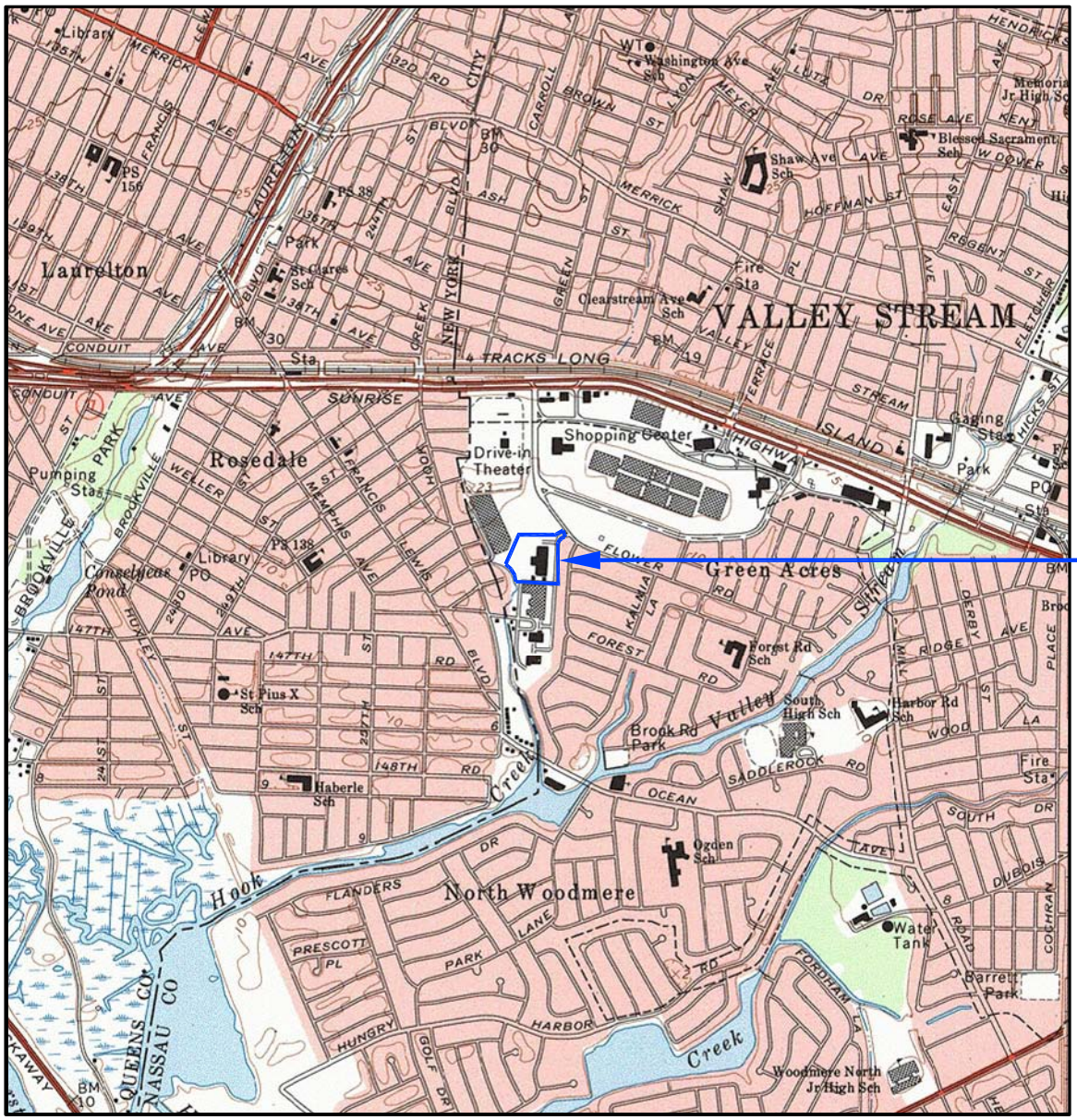
Notes:

1 All concentrations are presented in $\mu g/m^3$. Detection limits are in parentheses.
2 Calculated Risk-Based Criteria developed based on a routine indoor worker scenario.
3 Occupational Indoor Air Standard represents the lowest of the corresponding OSHA PEL, ACGIH TLV, and NIOSH REL.

Abbreviations:

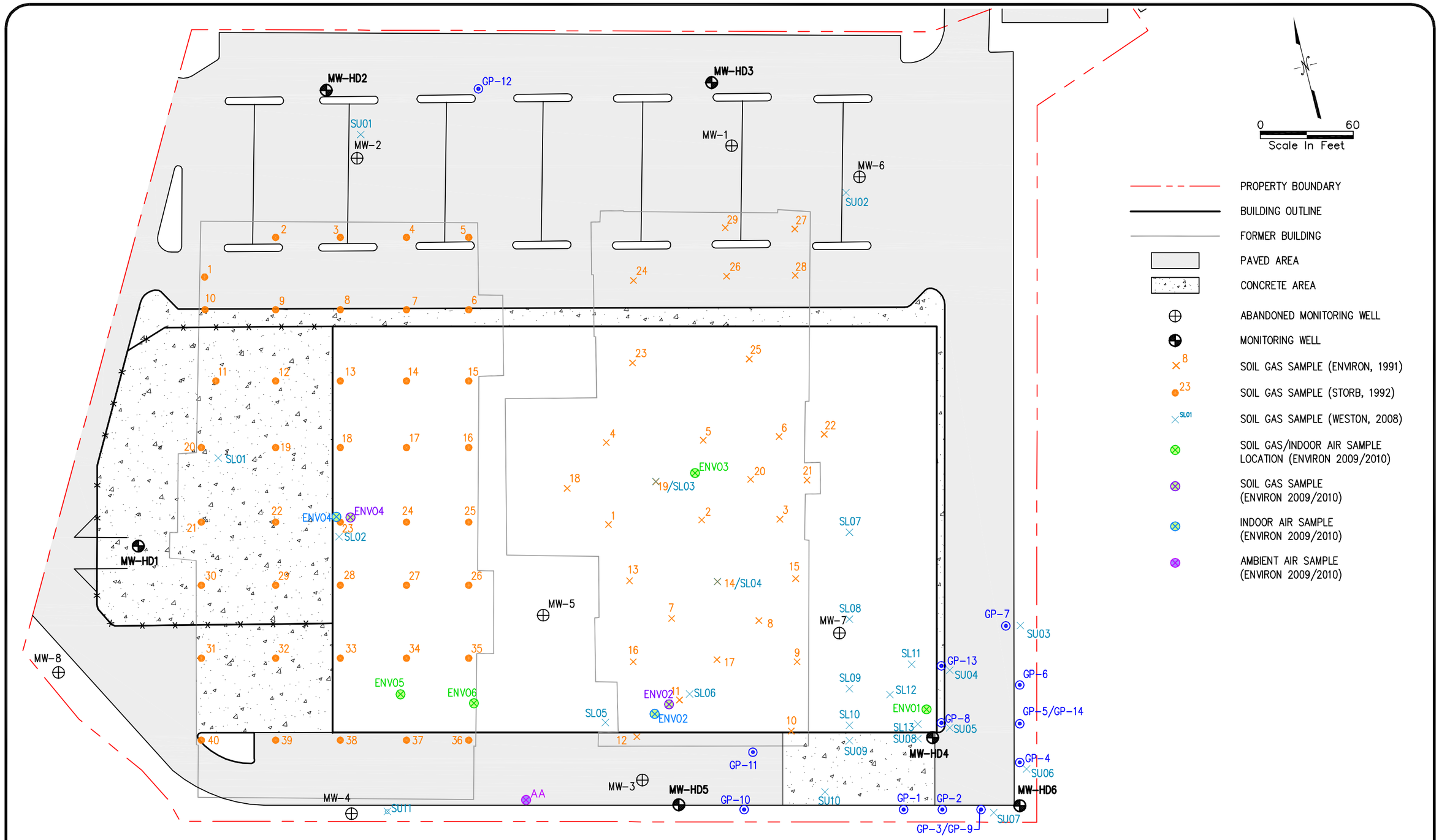
ND -- Not Detected.
NA -- Not Available.
NC -- Not Calculated.

Figures



SOURCE: 40°39'35" N, 73°43'28" W WGS84 TOPO! map printed on 01/20/00 from "NYC.tpo"

ENVIRON	SITE LOCATION MAP 101 GREEN ACRES ROAD SITE VALLEY STREAM, NEW YORK	FIGURE 1
DRAFTED BY: KPM/PMASCARO | DATE: 2/19/09		021961BJ01



SOURCE: HENDERSON AND BODWELL CONSULTING ENGINEERS GRADING & UTILITIES PLAN, SEPT. 1992

ENVIRON

DRAFTED BY: KPM/PRM/KPM | DATE: 4/22/10

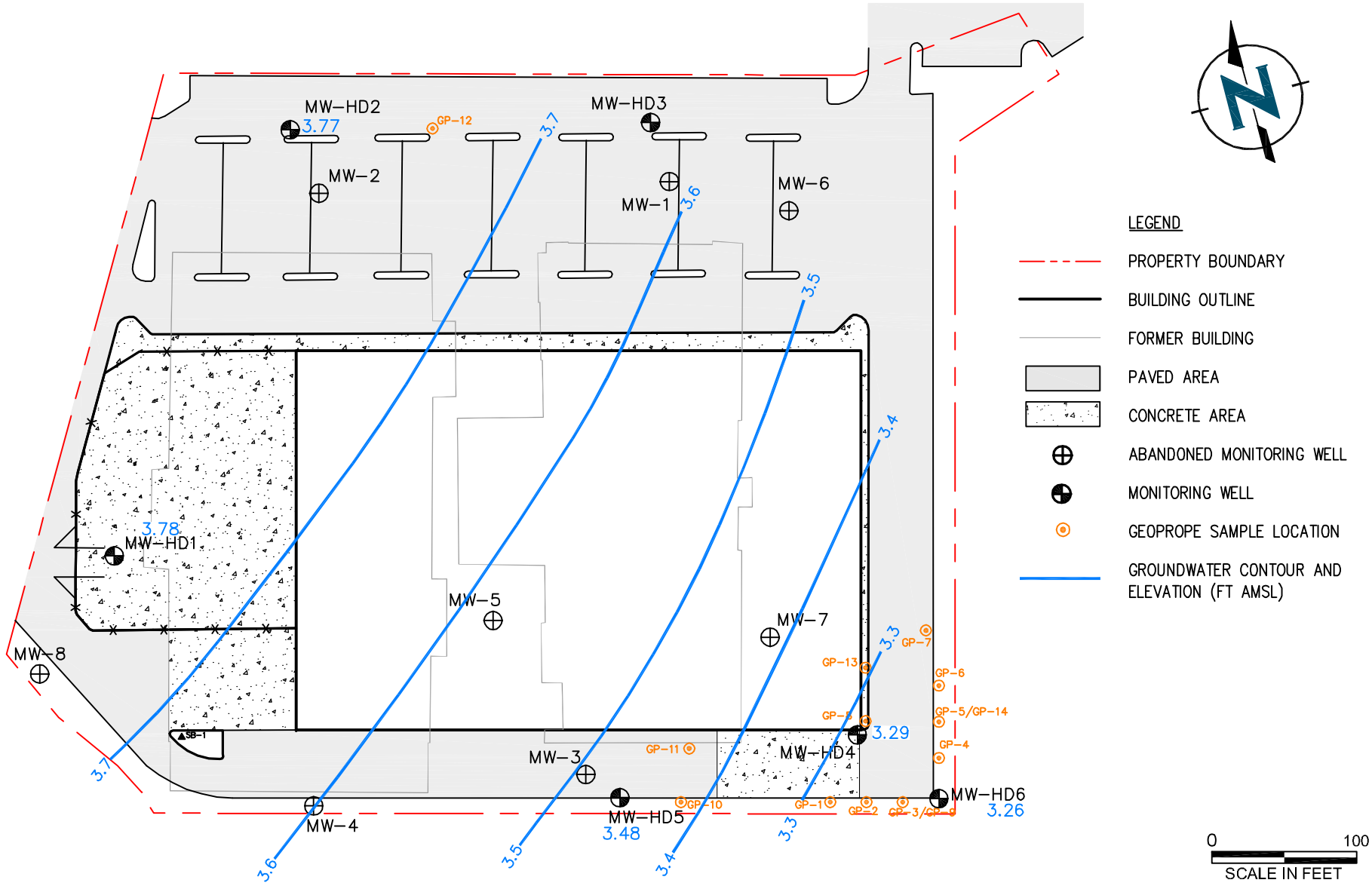
SITE LAYOUT AND SAMPLE LOCATIONS

101 GREEN ACRES ROAD SITE

VALLEY STREAM, NEW YORK

FIGURE 2

021961BS05



ENVIRON
www.environcorp.com

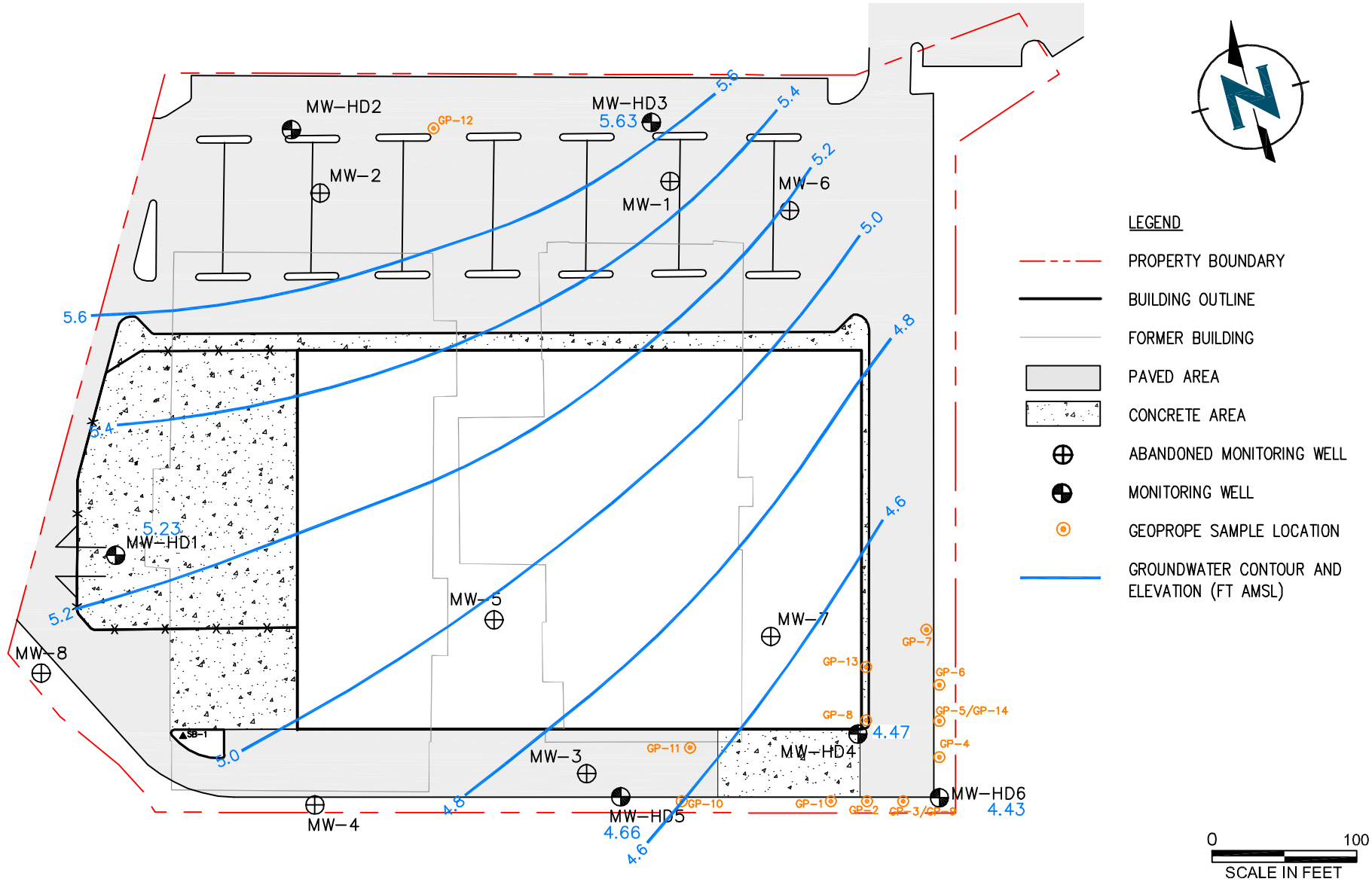
DRAFTED BY: BJK | DATE: 05/18/2011

GROUND WATER POTENTIOMETRIC SURFACE - SEPTEMBER 2010

101 GREEN ACRES ROAD SITE
VALLEY STREAM, NEW YORK

FIGURE
3

021961B



ENVIRON
www.environcorp.com

DRAFTED BY: BJK | DATE: 05/18/2011

GROUND WATER POTENTIOMETRIC SURFACE - FEBRUARY 2011

101 GREEN ACRES ROAD SITE
VALLEY STREAM, NEW YORK

FIGURE
4

021961B

Appendix A

Groundwater Field Indicator Parameters

Appendix A
Ground Water Field Parameters
101 Green Acres Road
Valley Stream, New York

Sample Point ID	MWHD1	MWHD2	MWHD3	MWHD4	MWHD5	MWHD6	MWHD7
Date	2/2/2011	2/2/2011	2/2/2011	2/3/2011	2/3/2011	2/3/2011	2/2/2011
Weather Conditions	Overcast, ~45*F	Overcast, ~45*F	Overcast, ~45*F	Overcast, ~45*F	Overcast, ~45*F	Overcast, ~45*F	Overcast, ~45*F
PID Reading (ppm)	ND	ND	ND	ND	ND	ND	ND
Free Product Thickness	ND	ND	ND	ND	ND	ND	ND
Total Depth (ft)	17.5	13.5	14.55	14.6	14.65	14.15	39.18
Depth to Water (ft)	4.7	4.44	4.3	5.62	4.79	5.54	4.7
Height Water Column (ft)	12.8	9.06	10.25	8.98	9.86	7.44	34.48
One Casing Volume (gal.)	8.35	5.91	6.68	5.85	6.43	1.21	5.62
Three Volumes (gal.)	25.04	17.72	20.05	17.56	19.29	3.64	16.86
Actual Purge Volume (gal.)	24	18	18	17	18	5	17
Purge Start Time	1526	1429	1345	1037	1212	1127	1219
Purge End Time	1558	1455	1409	1117	1240	1139	1242
Flow Rate (gpm)	0.80	0.70	0.80	0.40	0.60	0.40	0.70
Date Sampled	2/2/2011	2/2/2011	2/2/2011	2/3/2011	2/3/2011	2/3/2011	2/2/2011
Time Sampled	1558	1455	1409	1125	1240	1005	1242
Purge Method	SP	SP	SP	SP	SP	SP	SP
Sampling Method	TB	TB	TB	TB	TB	TB	TB
Depth to Water After Purge (ft)	5	4.7	6.2	5.62	4.9	5.54	4.7
Depth to Water Before Sampling (ft)	5	4.7	6.2	5.62	4.9	5.54	4.7

SAMPLING/PURGE METHOD
ND = not detected
PP = peristaltic pump
SP = submersible pump
TB = Teflon bailer
WP = whale pump
* = well purged dry

Appendix A
Ground Water Field Parameters
101 Green Acres Road
Valley Stream, New York

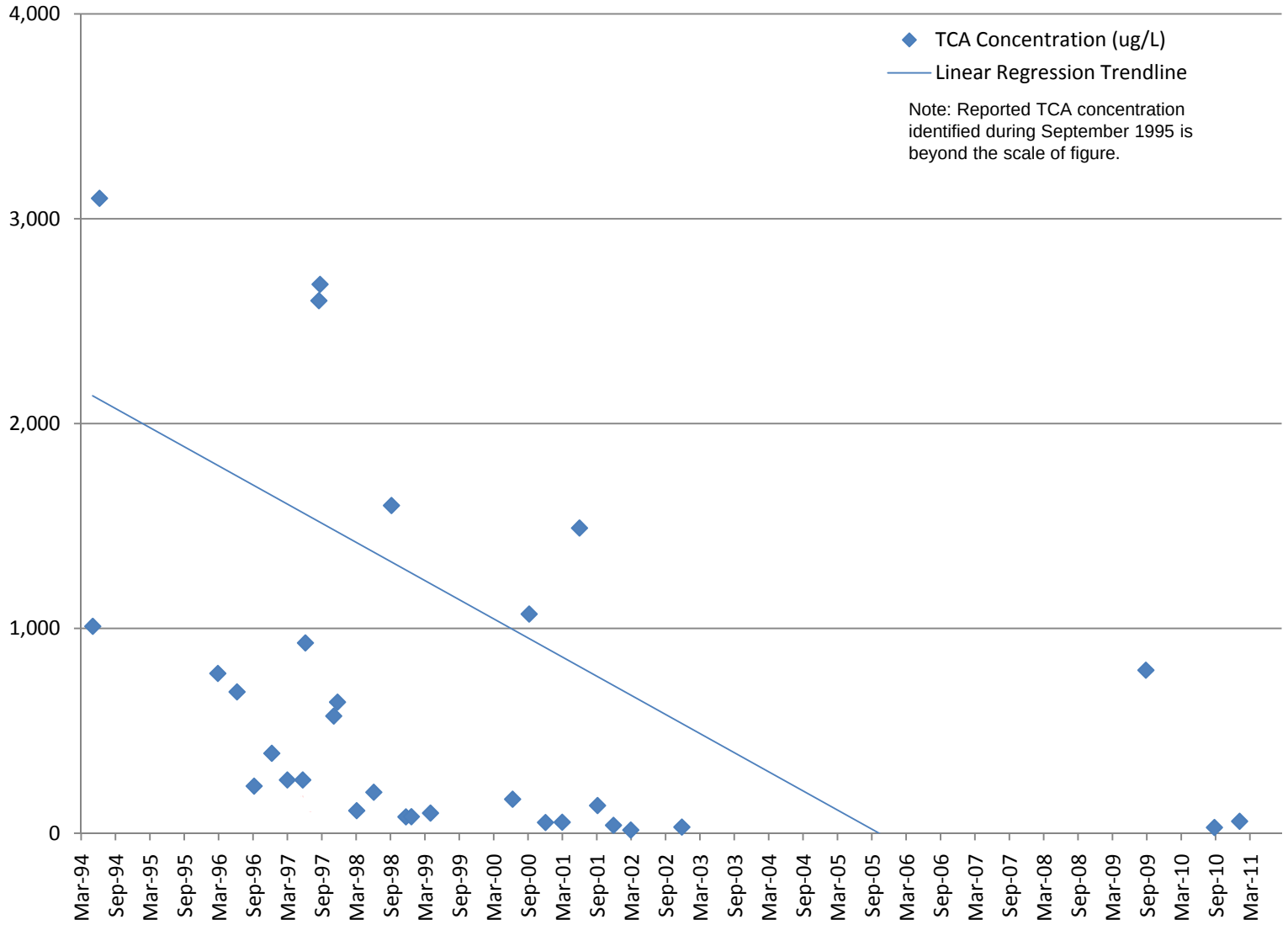
FIELD PARAMETERS	MWHD1	MWHD2	MWHD3	MWHD4	MWHD5	MWHD6	MWHD7
Initial							
pH	8.42	10.29	9.09	4.74	6.42	6.06	8.79
Specific Conductivity (µs/cm)	47.8	0.414	0.515	0.466	0.241	0.451	1.96
Turbidity (NTU)	45.8	342	411	152	32.8	>999	>999
Dissolved Oxygen (ppm)	7.71	10.71	9.36	8.51	9.11	14.46	4.96
Temperature (°C)	11.51	8.99	6.5	13.44	9.19	12.29	14.13
Oxygen Reduction Potential (mV)	60	-39	13	119	38	12	-11
During Purging							
pH	8.59	10.57	11.44	5.88	7.84	6.62	9.54
Specific Conductivity (µs/cm)	20.1	0.491	0.802	0.434	0.352	0.424	1.33
Turbidity (NTU)	56.3	75.4	100	0	10.6	80.1	828
Dissolved Oxygen (ppm)	0	1.63	1.49	0	4.05	0	0
Temperature (°C)	9.63	10.87	9.56	15.97	10.7	13.32	15.51
Oxygen Reduction Potential (mV)	48	-69	-119	55	-42	18	-41
After Purging / At Sampling							
pH	8.52	10.75	11.46	5.88	7.9	6.7	9.49
Specific Conductivity (µs/cm)	15.2	0.653	0.955	0.437	0.374	0.428	1.37
Turbidity (NTU)	44.7	51.7	46.4	0.5	3.5	36.4	530
Dissolved Oxygen (ppm)	0.43	0.38	0	0	3.3	0	0
Temperature (°C)	9.27	11.15	10.45	15.98	10.54	13.4	15.53
Oxygen Reduction Potential (mV)	51	-78	-123	55	-44	15	-42

SAMPLING/PURGE METHOD
ND = not detected
PP = peristaltic pump
SP = submersible pump
TB = Teflon bailer
WP = whale pump
* = well purged dry

Note: pH readings recorded in all wells sampled on February 2, 2011 are attributed to a pH meter malfunction and do not represent accurate groundwater parameters.

Appendix B

Historic Groundwater Concentrations – MW-HD4

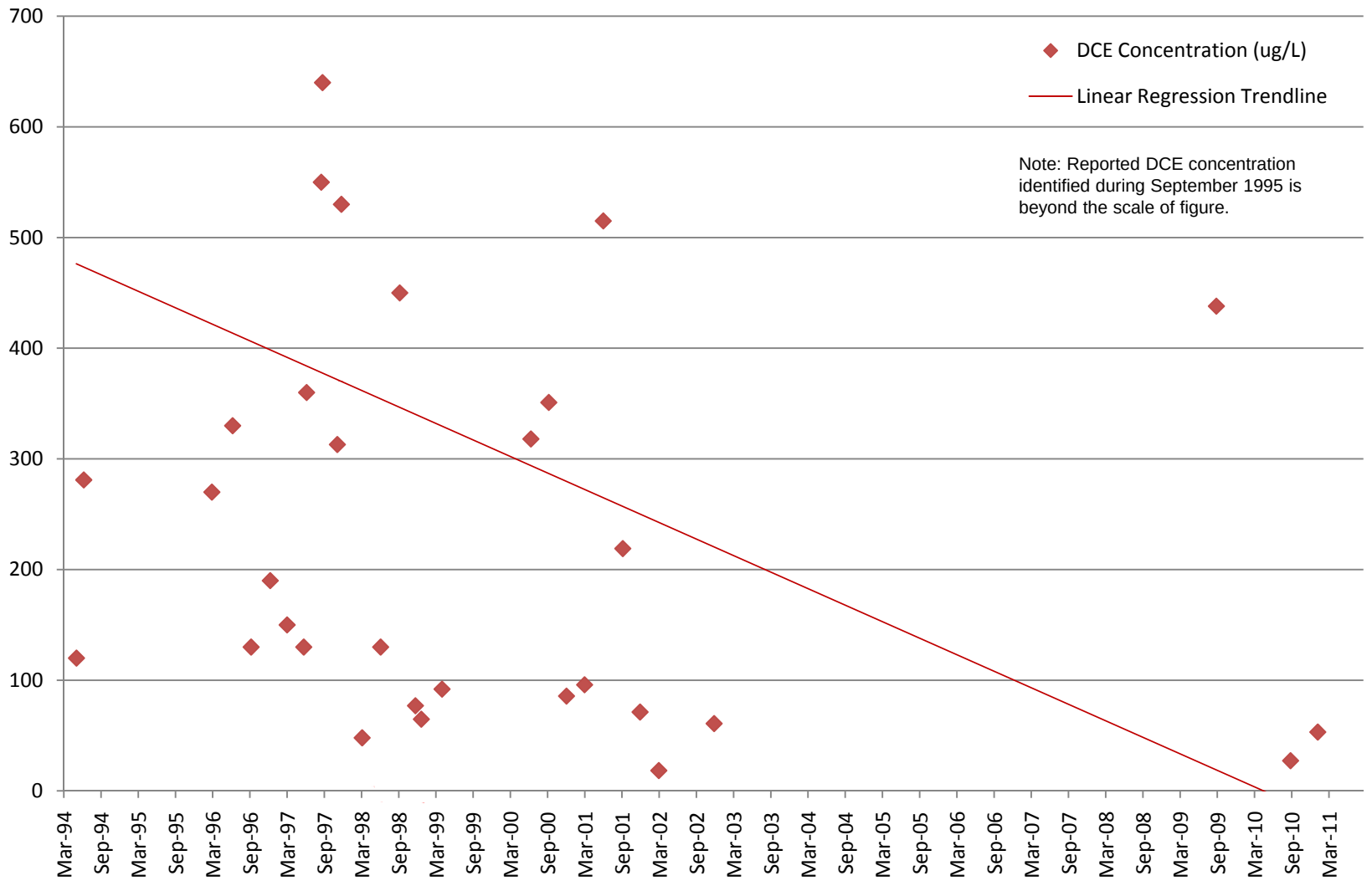


ENVIRON

DRAFTED BY: NJS | DATE: 5/5/2011

Historical 1,1,1-TCA Concentrations – MW-HD4
101 Green Acres Road – Valley Stream, NY

FIGURE
B-1

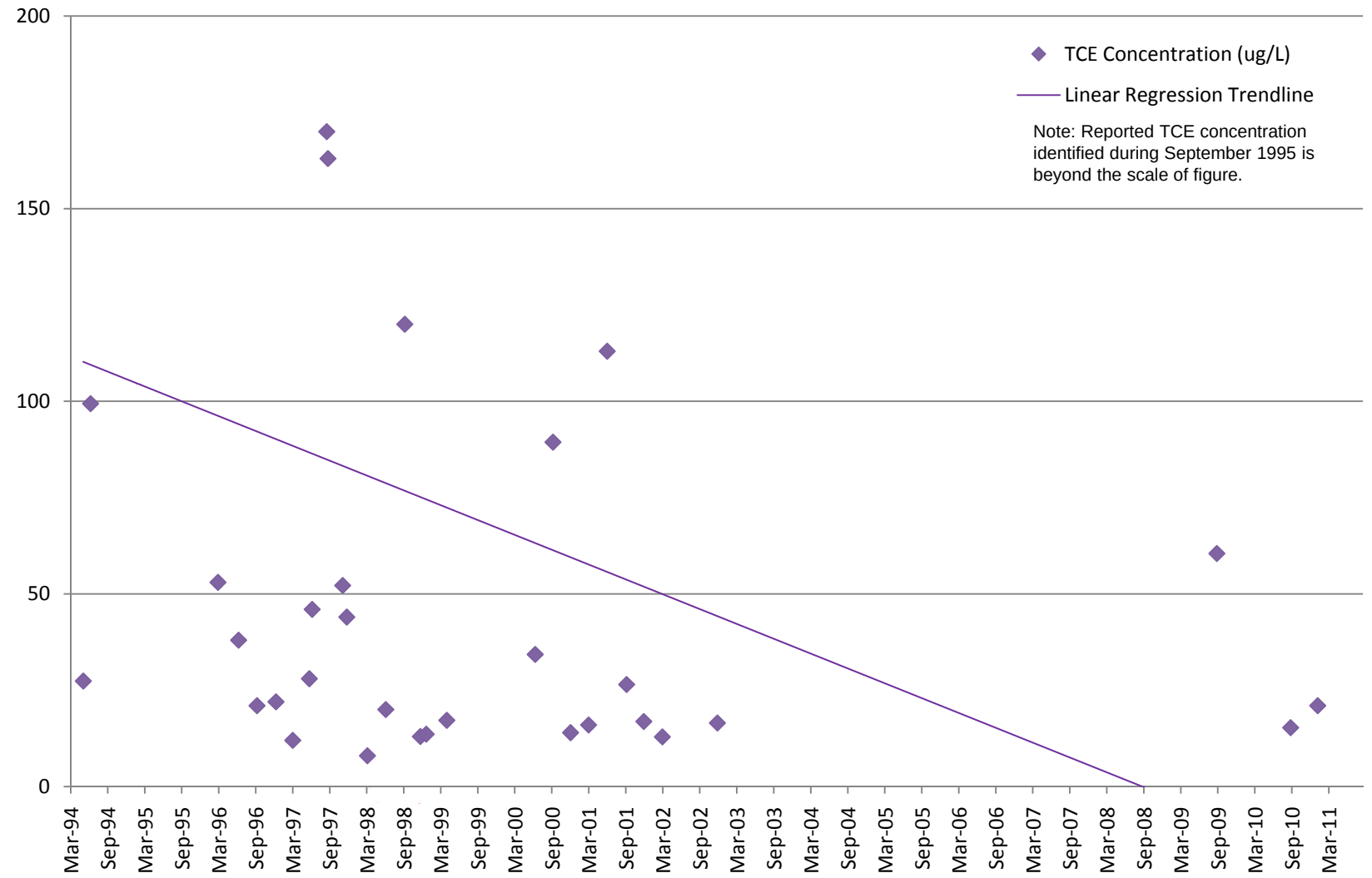


ENVIRON

DRAFTED BY: NJS | DATE: 5/5/2011

Historical 1,1-DCE Concentrations – MW-HD4
101 Green Acres Road – Valley Stream, NY

FIGURE
B-2



ENVIRON

DRAFTED BY: NJS | DATE: 5/5/2011

Historical TCE Concentrations – MW-HD4
101 Green Acres Road – Valley Stream, NY

FIGURE
B-3

Appendix C

Indoor Air Quality Questionnaire and Building Inventory Form

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name _Will Larrison___ Date/Time Prepared: 10/21/2009, 16:41; other questions via e-mail

Preparer's Affiliation _ENVIRON International Corporation___ Phone No.__609-243-9877_____

Purpose of Investigation_Assessment of potential vapor intrusion_____

1. OCCUPANT:

Interviewed: Y / N

Last Name: _Kuhns_____ First Name: _Jeff_____ (Store Manager)

Address: __101 Green Acres Road, Valley Stream, NY 11581___

County: __Nassau__

Home Phone: _____ Office Phone: 516-823-0700 ext 310

Number of Occupants/persons at this location _____ Age of Occupants _Adults_

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	Commercial/Multi-use
Industrial	Church	Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other: NA

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) Home Improvement Sales

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:

Number of floors 1 Building age 15

Is the building insulated? Y / N How air tight? Tight / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

Airflow near source

Outdoor air infiltration

Infiltration into air ducts

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other N/A
d. Basement floor:	uncovered	covered	covered with N/A	
e. Concrete floor:	unsealed	sealed ?	sealed with Diamond-Guard Athene MSDS.	
f. Foundation walls:	poured	block	stone	other N/A
g. Foundation walls:	unsealed	sealed	sealed with N/A	
h. The basement is:	wet	damp	dry	moldy N/A
i. The basement is:	finished	unfinished	partially finished	N/A
j. Sump present?	Y (N)			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: _____(feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Some joints and cracks present, but they all appear to be sealed

---

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: Electric

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other_____
Air conditioning:	Central Air	Window units	Open Windows	None

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

multiple roof top package units 1-12 have concentric air diffusers low pressure duct systems, units 13-16 have duct systems all in good shape. see attached sketch.

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	NA
1st Floor	Home Improvement Sales
2nd Floor	NA
3rd Floor	NA
4th Floor	NA

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / [N] Receiving Docks

b. Does the garage have a separate heating unit? Y / N / [NA]

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) [Y] / N / NA
Please specify: Pre-owned equipment sold in store

d. Has the building ever had a fire? Y (N) When?_____

e. Is a kerosene or unvented gas space heater present? Y / [N] Where?_____

f. Is there a workshop or hobby/craft area? [Y] / N Where & Type?_____

g. Is there smoking in the building? Y / [N] How frequently?_____

h. Have cleaning products been used recently? [Y] / N When & Type? Daily, Commercial Cleaning

i. Have cosmetic products been used recently? Y / [N] When & Type?_____

j. Has painting/staining been done in the last 6 months? Y / N Where & When? Nothing by me but store could have?

k. Is there new carpet, drapes or other textiles? Y / [N] Where & When? These items sold in store

l. Have air fresheners been used recently? Y / N When & Type? Store could have?

m. Is there a kitchen exhaust fan? Y / [N] If yes, where vented?_____

n. Is there a bathroom exhaust fan? (Y) / N If yes, where vented? outside

o. Is there a clothes dryer? Y / [N] If yes, is it vented outside? Y / N

p. Has there been a pesticide application? (Y) / N When & Type? See attached

Are there odors in the building? [Y] / N
If yes, please describe: _____

Do any of the building occupants use solvents at work? Y / N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) [No]
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / [N] Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: [Public Water] Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: [Public Sewer] Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency) N/A

a. Provide reasons why relocation is recommended: _____

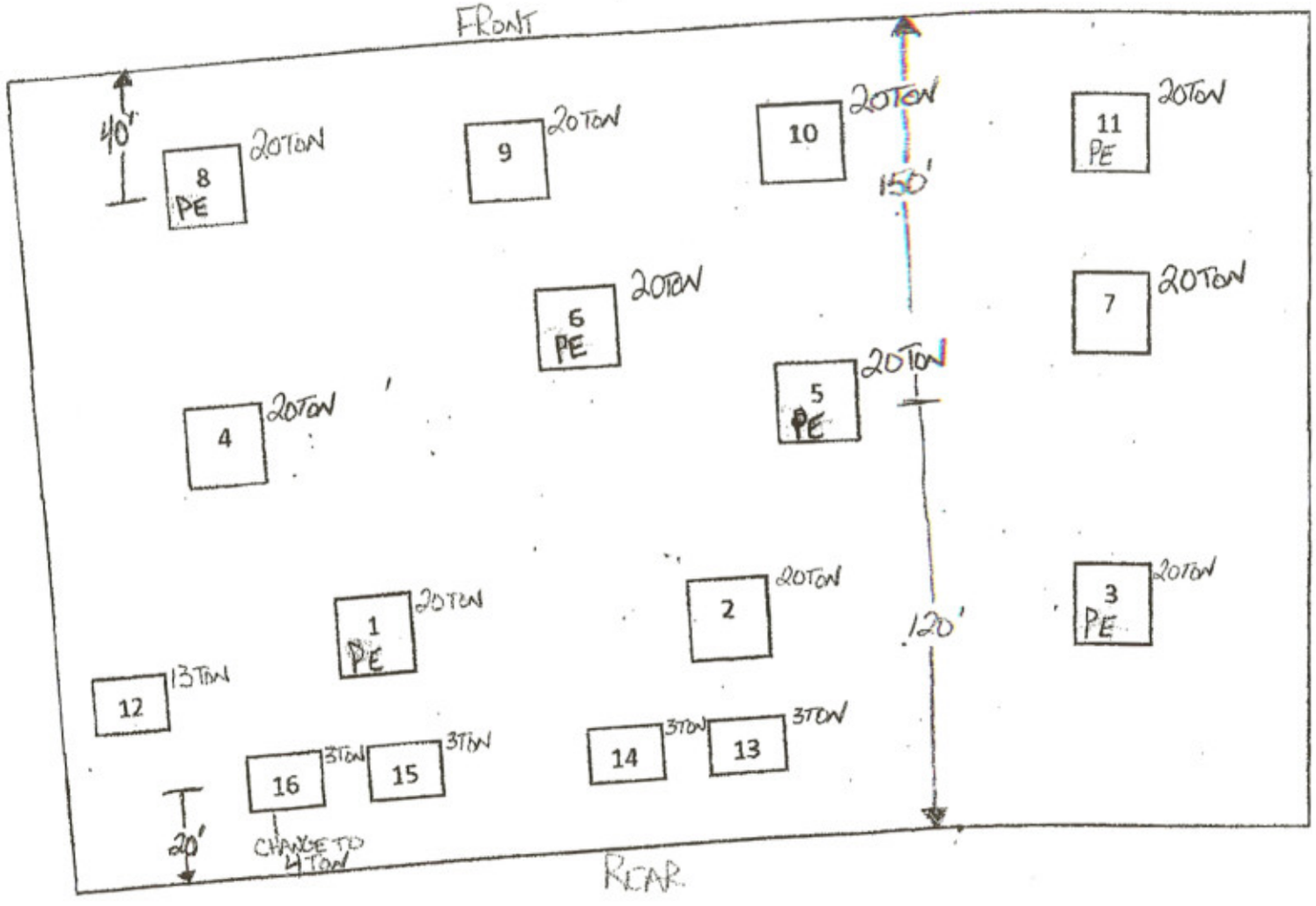
b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

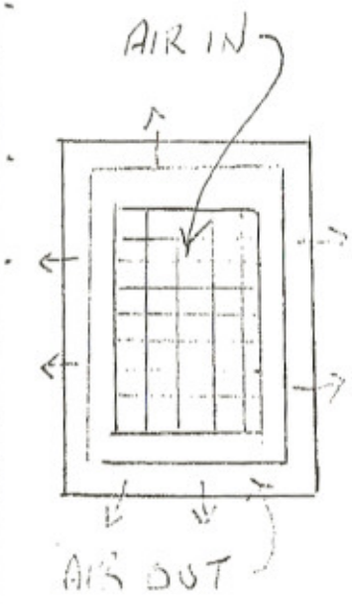
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? *Y / N*

HOME DEPOT VALLEY STREAM # 1216

RTU Layout





MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: DIAMAGARD

GENERAL USE: Concrete sealer

PRODUCT DESCRIPTION: Clear to light amber liquid, slightly alkaline, may cause eye and skin irritation upon contact.

MANUFACTURER'S NAME DiamaShield	DATE PREPARED: March 10, 2005 SUPERSEDES: NEW Page 1 of 4
ADDRESS (NUMBER, STREET, P.O. BOX) 32700 Industrial Drive	TELEPHONE NUMBER FOR INFORMATION (800)696.3280
(CITY, STATE AND ZIP CODE) COUNTRY Madison Heights, MI 48071 USA	EMERGENCY TELEPHONE NUMBER (800) 696.3280
DISTRIBUTOR'S NAME Same	
ADDRESS (NUMBER, STREET, P.O. BOX)	TELEPHONE NUMBER FOR INFORMATION
(CITY, STATE AND ZIP CODE) COUNTRY	EMERGENCY TELEPHONE NUMBER

SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	CAS #	% (by weight)	OSHA PEL PPM	OSHA PEL MG/M³	ACGIH TWA PPM	ACGIH TWA MG/M³	SARA TITLE III	RQ LBS
Proprietary Ingredient A (*, a)	Not specified	7 - 13				1*		
Proprietary Ingredient B (a)	Not specified	5 - 10	not established					
Proprietary Ingredient C (a)	Not specified	3 - 7	not established					

(*) The ACGIH Threshold Limit Value (TLV) has not been established nor has OSHA established the Permissible Exposure Limit (PEL) for this product, therefore the limits described have been established as guidelines by the manufacturer.

(a) The specific product is not identified due to "Trade Secret" status. In emergency situations further information may be obtained by the on - duty physician calling the emergency information number listed above. Reference 29 CFR 1910.1200 and / or 40 CFR 350.

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Alkaline liquid, prolonged contact may cause skin & eye irritation. Ingestion may cause gastric distress. Hazard symbols for this product - None. R-Phrases - Not classified

POTENTIAL HEALTH EFFECTS

INHALATION: Inhalation of mists or vapors may cause irritation to upper respiratory tract and mucous membranes.

SKIN: Contact with skin may cause irritation, dermatitis.

EYES: Contact with eyes may cause pain and irritation.

INGESTION: Irritating to digestive tract; may cause gastric distress, stomach pains.

CARCINOGENICITY NTP? No IARC MONOGRAPHS? No OSHA REGULATED? No

SECTION 4 - FIRST AID MEASURES

INHALATION: Remove affected person to fresh air; wash mouth and nasal passages with water repeatedly; if breathing difficulties persist seek medical attention.

SKIN: Wash contacted area with soap and water; DO NOT attempt to neutralize with chemical agents; if irritation persists, seek medical attention.

EYES: Remove contact lenses. Immediately flush eyes for 15 minutes in clear running water while holding eyelids open; seek medical attention immediately.

INGESTION: Drink large quantities of water or milk; DO NOT induce vomiting; seek medical attention immediately.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT (METHOD USED)	FLAMMABLE LIMITS	LEL: Not applicable	UEL: Not applicable
Non-flammable	AUTOIGNITION TEMPERATURE:	Not determined	NFPA CLASS: None

GENERAL HAZARDS: Product is alkaline. Products of combustion include compounds of carbon, hydrogen and oxygen, including carbon monoxide.

EXTINGUISHING MEDIA
Carbon dioxide, water, water fog, dry chemical, chemical foam

FIRE FIGHTING PROCEDURES
Keep containers cool with water spray to prevent container rupture due to steam buildup; floor will become slippery if material is released. Material is alkaline and will irritate the eyes if product is allowed to directly contact the eyes.

UNUSUAL FIRE AND EXPLOSION HAZARDS
None

HAZARDOUS COMBUSTION PRODUCTS
Smoke, fumes, oxides of carbon

SECTION 6 - ENVIRONMENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Material is alkaline and will irritate the eyes if product is allowed to directly contact the eyes. Wash small spills to sanitary sewer. Large spills - confine spill, soak up with approved absorbent, shovel product into approved container for disposal.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep container closed when not in use; protect containers from abuse; protect from extreme temperatures. Keep this and other chemicals out of reach of children.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS
The use of local exhaust ventilation is recommended. Use corrosion-resistant ventilation equipment.

PERSONAL PROTECTION:

RESPIRATORY PROTECTION (SPECIFY TYPE): None required while threshold limits (Section 2) are kept below maximum allowable concentrations; if TWA exceeds limits, NIOSH approved respirator must be worn. Refer to 29 CFR 1910.134 or European Standard EN 149 for complete regulations.

PROTECTIVE GLOVES: Neoprene or rubber gloves with cuffs.

EYE PROTECTION: Goggles with side shields; safety eyebath nearby.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Coveralls, apron, or other equipment should be worn to minimize skin contact.

WORK / HYGIENIC PRACTICES: Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE (MM Hg) 17 mm Hg @ 20 ° C	VAPOR DENSITY (AIR = 1) < 1
SPECIFIC GRAVITY (WATER = 1) 1.106	EVAPORATION RATE (WATER = 1) < 1
SOLUBILITY IN WATER Appreciable (> 95%)	FREEZING POINT 32°F (0° C)
pH Approximately 11.0	APPEARANCE AND ODOR Clear to light amber liquid, practically odorless
BOILING POINT 212°F (100° C)	PHYSICAL STATE Liquid
VISCOSITY Like that of water	VOLATILE ORGANIC COMPOUNDS (Total VOC's) None

SECTION 10 - STABILITY AND REACTIVITY

STABILITY UNSTABLE: STABLE: XXX	CONDITIONS TO AVOID: Extreme temperatures, keep from freezing

INCOMPATIBILITY (MATERIALS TO AVOID):
Strong oxidizers, strong acids

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon and lithium, hydrocarbons, fumes, and smoke may be produced.

HAZARDOUS POLYMERIZATION MAY OCCUR: WILL NOT OCCUR: XXX	CONDITIONS TO AVOID: None

SECTION 11 - TOXICOLOGICAL INFORMATION

Hazardous Ingredients	%	CAS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
Proprietary Ingredient A (*, a)	7 - 13	Not specified	16,540 mg / kg Oral - rat	Not established
Proprietary Ingredient B (a)	5 - 10	Not specified	7460 mg / kg Oral - rat	Not established
Proprietary Ingredient C (a)	3 - 7	Not specified	Not established	Not established

SECTION 12 - ECOLOGICAL INFORMATION

No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture are classified as a Marine Pollutant.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of in accordance with Local, State, and Federal Regulations. Refer to "40 CFR Protection of Environment Parts 260 - 299" for complete waste disposal regulations for alkaline materials. Consult your local, state, or Federal Environmental Protection Agency before disposing of any chemicals.

SECTION 14 - TRANSPORT INFORMATION

PROPER SHIPPING NAME: Not Regulated

HAZARD CLASS / Pack Group: None / None
REFERENCE: Not Applicable
IDENTIFICATION NUMBER: None
LABEL: None Required

IATA HAZARD CLASS / Pack Group: None
IMDG HAZARD CLASS: None
RID/ADR Dangerous Goods Code: None
Canadian TDG Class / Division: None
HAZARD SYMBOLS: None

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EC, Canadian TDG, and United Nations TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

SECTION 15 - REGULATORY INFORMATION

TSCA (Toxic substance Control Act)
All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.

SARA TITLE III (Superfund Amendments and Reauthorization Act)
311/312 Hazard Categories
None

313 Reportable Ingredients:
None

CERCLA (Comprehensive Response Compensation and Liability Act)
None

CPR (Canadian Controlled Products Regulations)
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

IDL (Canadian Ingredient Disclosure List)
Components of this product identified by CAS number and listed on the Canadian Ingredient Disclosure List are shown in Section 2.

DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List)
Components of this product identified by CAS number are listed on the DSL or NDSL and may or may not be listed in Section 2 of this document. Only ingredients classified as "hazardous" are listed in Section 2 unless otherwise indicated.

EINECS (European Inventory of Existing Commercial Chemical Substances)
Components of this product identified by CAS numbers are on the European Inventory of Existing Commercial Chemical Substances.

EC Risk Phrases
Not classified

EC Safety Phrases
S24/25 Avoid contact with skin and eyes
S28 After contact with skin, wash immediately with plenty of soap and water.

SECTION 16 - OTHER INFORMATION

No specific notes.

HMIS HAZARD RATINGS				
	HEALTH	1	0 = INSIGNIFICANT	3 = HIGH
	FLAMMABILITY	0	1 = SLIGHT	4 = EXTREME
	REACTIVITY	0	2 = MODERATE	
	PERSONAL PROTECTIVE EQUIPMENT	C	Safety Glasses, Gloves, Apron	

REVISION SUMMARY: This MSDS has been revised in the following sections:
Section 2, all items proprietary

MSDS Prepared by: Comprehensive Data Base, Inc.
P.O. Box 5604
Lakeland, FL 33807 USA
(863) 644 - 3298 www.compdatabase.com

Pesticide Usage Report

From: 6/1/2009 To: 11/23/2009

HOME DEPOT
101 GREEN ACRES ROAD
VALLEY STREAM, NY 11581

Pesticide Application for Site: Exterior

EPA Reg. Number / Lot Number	Pesticide Name	Device ID	Applicator	Pesticide Type	Amount	Unit of Measure	Conc. %	Date
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1.00000000	6/10/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1.00000000	6/10/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1.00000000	7/22/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1.00000000	8/26/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1.00000000	8/26/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1.00000000	8/26/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1.00000000	8/26/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1.00000000	8/26/2009
Target Pest:								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1.00000000	9/30/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1.00000000	9/30/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1.00000000	9/30/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1.00000000	9/30/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1.00000000	9/30/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1.00000000	9/30/2009

Copesan® SPECIALISTS IN PEST SOLUTIONS   RapidTrax™ A Copesan Technology

Pesticide Usage Report

From: 6/1/2009   To: 11/23/2009

HOME DEPOT
101 GREEN ACRES ROAD
VALLEY STREAM, NY 11581

Pesticide Application for Site: Exterior

EPA Reg. Number / Lot Number	Pesticide Name	Device ID	Applicator	Pesticide Type	Amount	Unit of Measure	Conc. %	Date
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	9/30/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/21/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/21/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/21/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/21/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/21/2009
Target Pest: House Mouse								

Site Summary

EPA Reg. Number	Pesticide Name	Pesticide Type	Amount	Unit of Measure
12455-79	Contrac All-Weather Blox	Rodent Control Bait	24.00	Ounces
7173-258	first strike	Rodent Control Bait	60.00	Grams

Pesticide Application for Site: Interior -> Break room

EPA Reg. Number / Lot Number	Pesticide Name	Device ID	Applicator	Pesticide Type	Amount	Unit of Measure	Conc. %	Date
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/7/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/7/2009
Target Pest: House Mouse								

Site Summary

EPA Reg. Number	Pesticide Name	Pesticide Type	Amount	Unit of Measure
7173-258	first strike	Rodent Control Bait	10.00	Grams

Pesticide Application for Site: Interior -> General Retail

EPA Reg. Number / Lot Number	Pesticide Name	Device ID	Applicator	Pesticide Type	Amount	Unit of Measure	Conc. %	Date
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/7/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/7/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/7/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/7/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/7/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/7/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/7/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/7/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	11/4/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	11/4/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	11/4/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	11/4/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	11/4/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	11/4/2009

Pesticide Usage Report

From: 6/1/2009 To: 11/23/2009

HOME DEPOT
101 GREEN ACRES ROAD
VALLEY STREAM, NY 11581

Pesticide Application for Site: Interior -> General Retail

EPA Reg. Number / Lot Number	Pesticide Name	Device ID	Applicator	Pesticide Type	Amount	Unit of Measure	Conc. %	Date
Target Pest: House Mouse								

Site Summary

EPA Reg. Number	Pesticide Name	Pesticide Type	Amount	Unit of Measure
7173-258	first strike	Rodent Control Bait	70.00	Grams

Pesticide Application for Site: Interior -> Indoor Lumber

EPA Reg. Number / Lot Number	Pesticide Name	Device ID	Applicator	Pesticide Type	Amount	Unit of Measure	Conc. %	Date
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1.00000000	10/7/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1.00000000	10/7/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1.00000000	11/4/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1.00000000	11/4/2009
Target Pest: House Mouse								

Site Summary

EPA Reg. Number	Pesticide Name	Pesticide Type	Amount	Unit of Measure
7173-258	first strike	Rodent Control Bait	20.00	Grams

Pesticide Usage Report

From: 6/1/2009 To: 11/23/2009

HOME DEPOT
101 GREEN ACRES ROAD
VALLEY STREAM, NY 11581

Pesticide Application for Site: Interior -> Lawn & Garden

EPA Reg. Number / Lot Number	Pesticide Name	Device ID	Applicator	Pesticide Type	Amount	Unit of Measure	Conc. %	Date
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/7/2009
Target Pest: House Mouse								
	glue board	(Site)	C. Espinal	Other	1.00		0. 00000000	10/7/2009
Target Pest:								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/7/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/7/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/7/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	11/4/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	11/4/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	11/4/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	11/4/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	11/4/2009
Target Pest: House Mouse								

Site Summary

EPA Reg. Number	Pesticide Name	Pesticide Type	Amount	Unit of Measure
	glue board	Other	1.00	
7173-258	first strike	Rodent Control Bait	45.00	Grams

Pesticide Application for Site: Interior -> Receiving

EPA Reg. Number / Lot Number	Pesticide Name	Device ID	Applicator	Pesticide Type	Amount	Unit of Measure	Conc. %	Date
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/7/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/7/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/7/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/7/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	10/7/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	11/4/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	11/4/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	11/4/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	11/4/2009
Target Pest: House Mouse								

Site Summary

EPA Reg. Number	Pesticide Name	Pesticide Type	Amount	Unit of Measure
7173-258	first strike	Rodent Control Bait	45.00	Grams

Pesticide Usage Report

From: 6/1/2009 To: 11/23/2009

HOME DEPOT
101 GREEN ACRES ROAD
VALLEY STREAM, NY 11581

Pesticide Application for Site: Interior 1

EPA Reg. Number / Lot Number	Pesticide Name	Device ID	Applicator	Pesticide Type	Amount	Unit of Measure	Conc. %	Date
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1. 00000000	6/24/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1. 00000000	6/24/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1. 00000000	6/24/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1. 00000000	6/24/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1. 00000000	6/24/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1. 00000000	6/24/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1. 00000000	6/24/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1. 00000000	7/8/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1. 00000000	7/8/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1. 00000000	7/8/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1. 00000000	7/8/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1. 00000000	7/8/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1. 00000000	7/22/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1. 00000000	8/12/2009

Pesticide Usage Report

From: 6/1/2009 To: 11/23/2009

HOME DEPOT
101 GREEN ACRES ROAD
VALLEY STREAM, NY 11581

Pesticide Application for Site: Interior 1

EPA Reg. Number / Lot Number	Pesticide Name	Device ID	Applicator	Pesticide Type	Amount	Unit of Measure	Conc. %	Date
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1. 00000000	8/12/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1. 00000000	8/12/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1. 00000000	8/12/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1. 00000000	8/12/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1. 00000000	8/12/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1. 00000000	8/12/2009
Target Pest:								
12455-79	Contrac All-Weather Blox	(Site)	C. Espinal	Rodent Control Bait	3.00	Ounces	1. 00000000	8/12/2009
Target Pest:								
	EcoEMEMPT KO	(Site)	C. Espinal	Other	5.00	Ounces	1. 00000000	9/9/2009
Target Pest: Roaches								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	9/9/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	9/9/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	9/9/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	9/9/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	9/9/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1.	9/9/2009

Copesan SPECIALISTS IN PEST SOLUTIONS RapidTrax A Copesan Technology

Pesticide Usage Report

From: 6/1/2009 To: 11/23/2009

HOME DEPOT
101 GREEN ACRES ROAD
VALLEY STREAM, NY 11581

Pesticide Application for Site: Interior 1

EPA Reg. Number / Lot Number	Pesticide Name	Device ID	Applicator	Pesticide Type	Amount	Unit of Measure	Conc. %	Date
							00000000	
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	9/9/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	9/9/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	9/9/2009
Target Pest: House Mouse								
7173-258	first strike	(Site)	C. Espinal	Rodent Control Bait	5.00	Grams	1. 00000000	9/9/2009
Target Pest: House Mouse								

Site Summary

EPA Reg. Number	Pesticide Name	Pesticide Type	Amount	Unit of Measure
	EcoEMEMPT KO	Other	5.00	Ounces
12455-79	Contrac All-Weather Blox	Rodent Control Bait	63.00	Ounces
7173-258	first strike	Rodent Control Bait	50.00	Grams

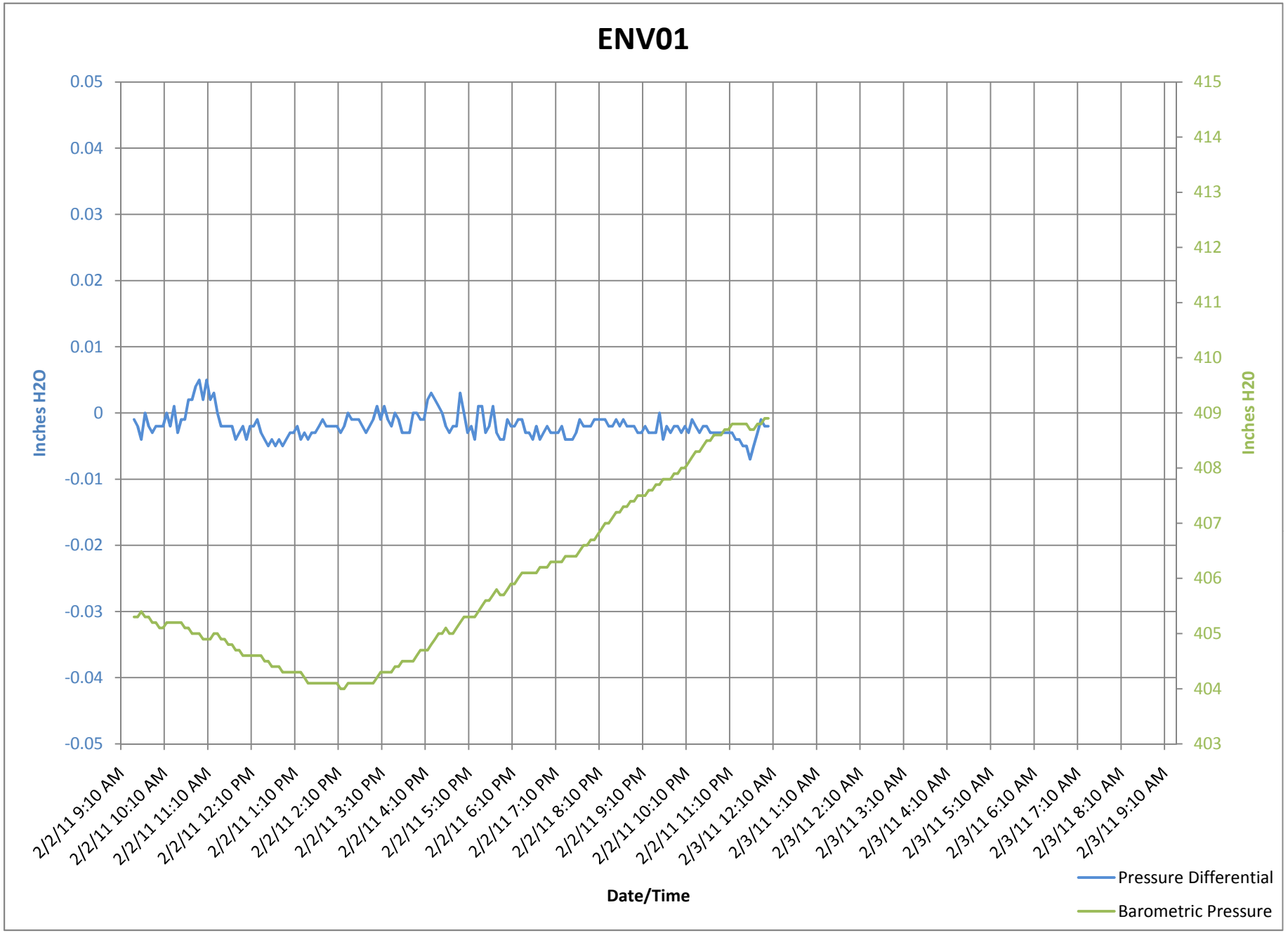
Facility Summary

EPA Reg. Number	Pesticide Name	Pesticide Type	Amount	Unit of Measure
	EcoEMEMPT KO	Other	5.00	Ounces
	glue board	Other	1.00	
12455-79	Contrac All-Weather Blox	Rodent Control Bait	87.00	Ounces
7173-258	first strike	Rodent Control Bait	300.00	Grams

Appendix D

Pressure Differential Data

Appendix D-1
February 2, 2011 Measurement Event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Inches H2O
415
414
413
412
411
410
409
408
407
406
405
404
403
Inches H20
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2/2/11 10:10 AM
2/2/11 11:10 AM
2/2/11 12:10 PM
2/2/11 1:10 PM
2/2/11 2:10 PM
2/2/11 3:10 PM
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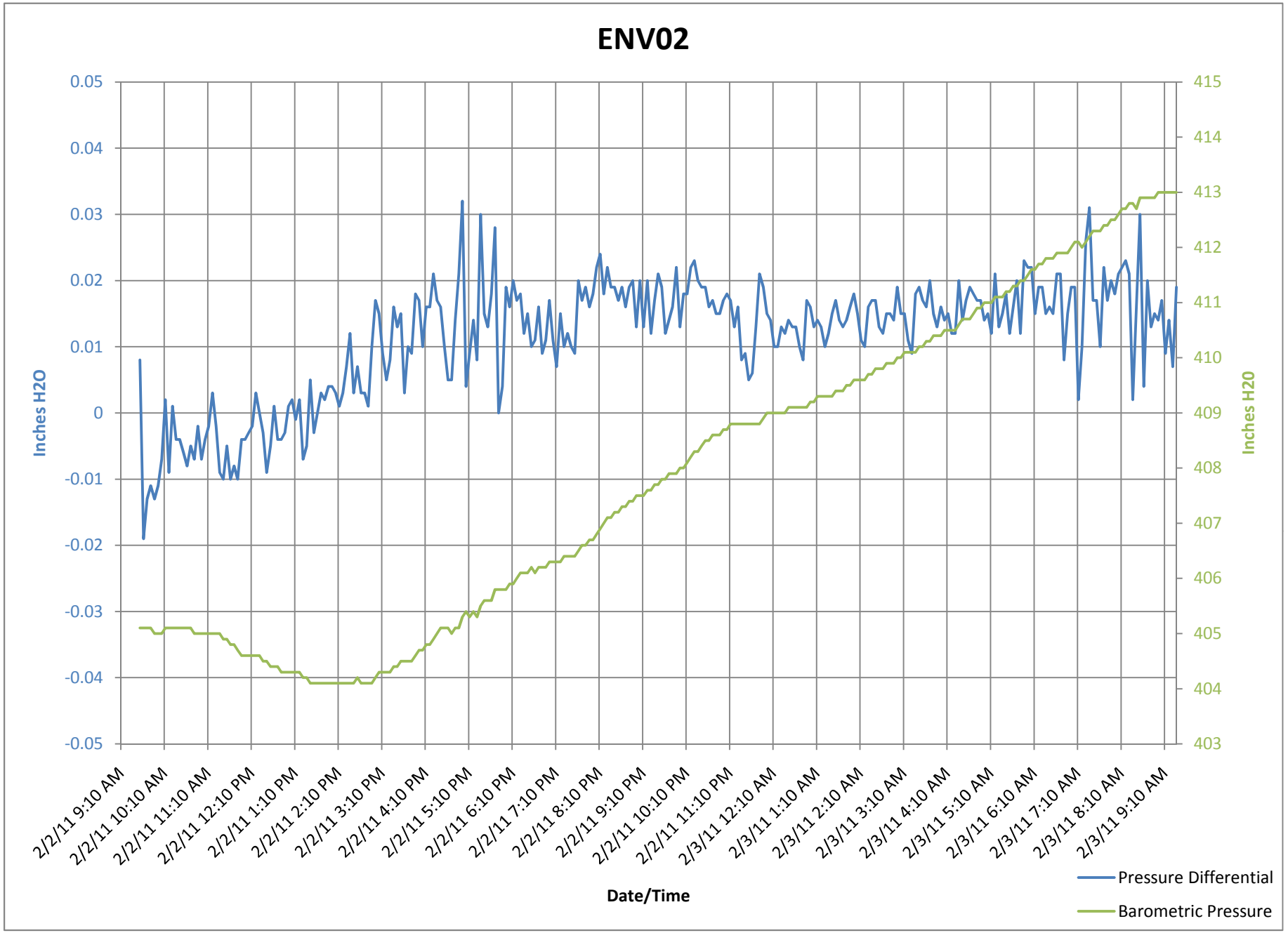
Date/Time
Pressure Differential
Barometric Pressure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0.02
0.01
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Inches H2O
415
414
413
412
411
410
409
408
407
406
405
404
403
Inches H20
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2/2/11 10:10 AM
2/2/11 11:10 AM
2/2/11 12:10 PM
2/2/11 1:10 PM
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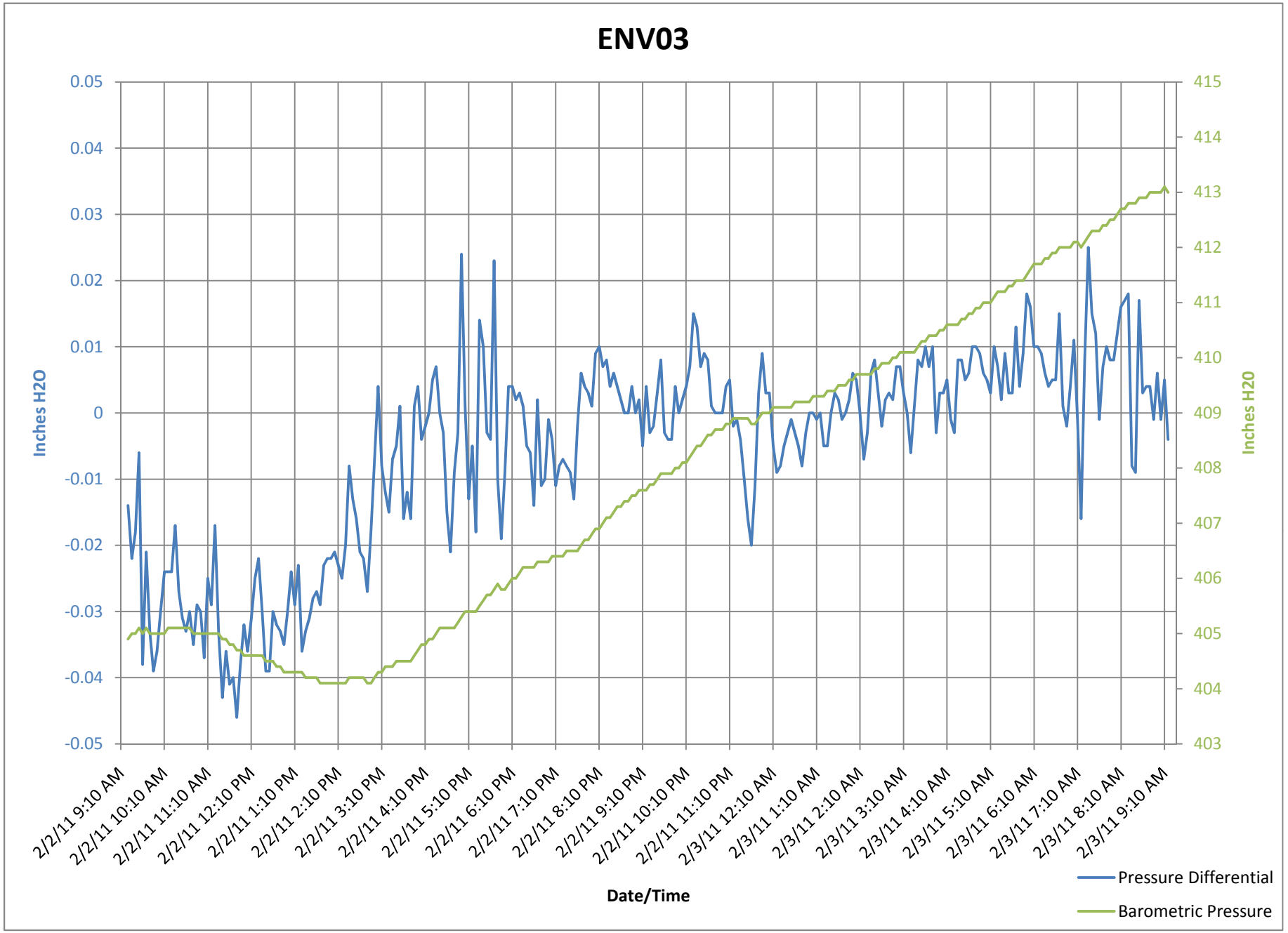
Date/Time
Pressure Differential
Barometric Pressure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-0.04
-0.05
415
414
413
412
411
410
409
408
407
406
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404
403
2/2/11 9:10 AM
2/2/11 10:10 AM
2/2/11 11:10 AM
2/2/11 12:10 PM
2/2/11 1:10 PM
2/2/11 2:10 PM
2/2/11 3:10 PM
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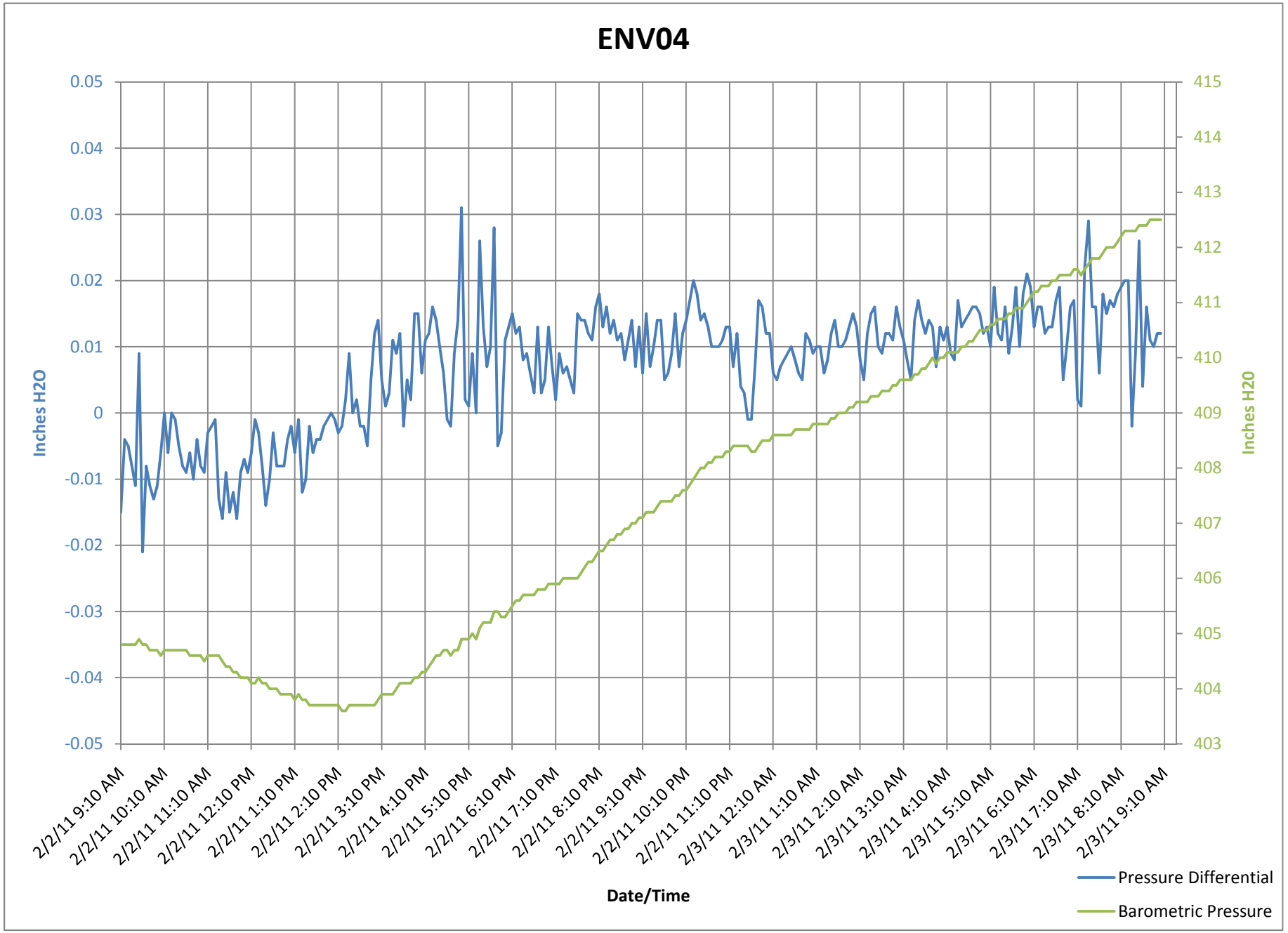
Date/Time
Pressure Differential
Barometric Pressure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0.03
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0
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-0.02
-0.03
-0.04
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Inches H2O
415
414
413
412
411
410
409
408
407
406
405
404
403
Inches H20
2/2/11 9:10 AM
2/2/11 10:10 AM
2/2/11 11:10 AM
2/2/11 12:10 PM
2/2/11 1:10 PM
2/2/11 2:10 PM
2/2/11 3:10 PM
2/2/11 4:10 PM
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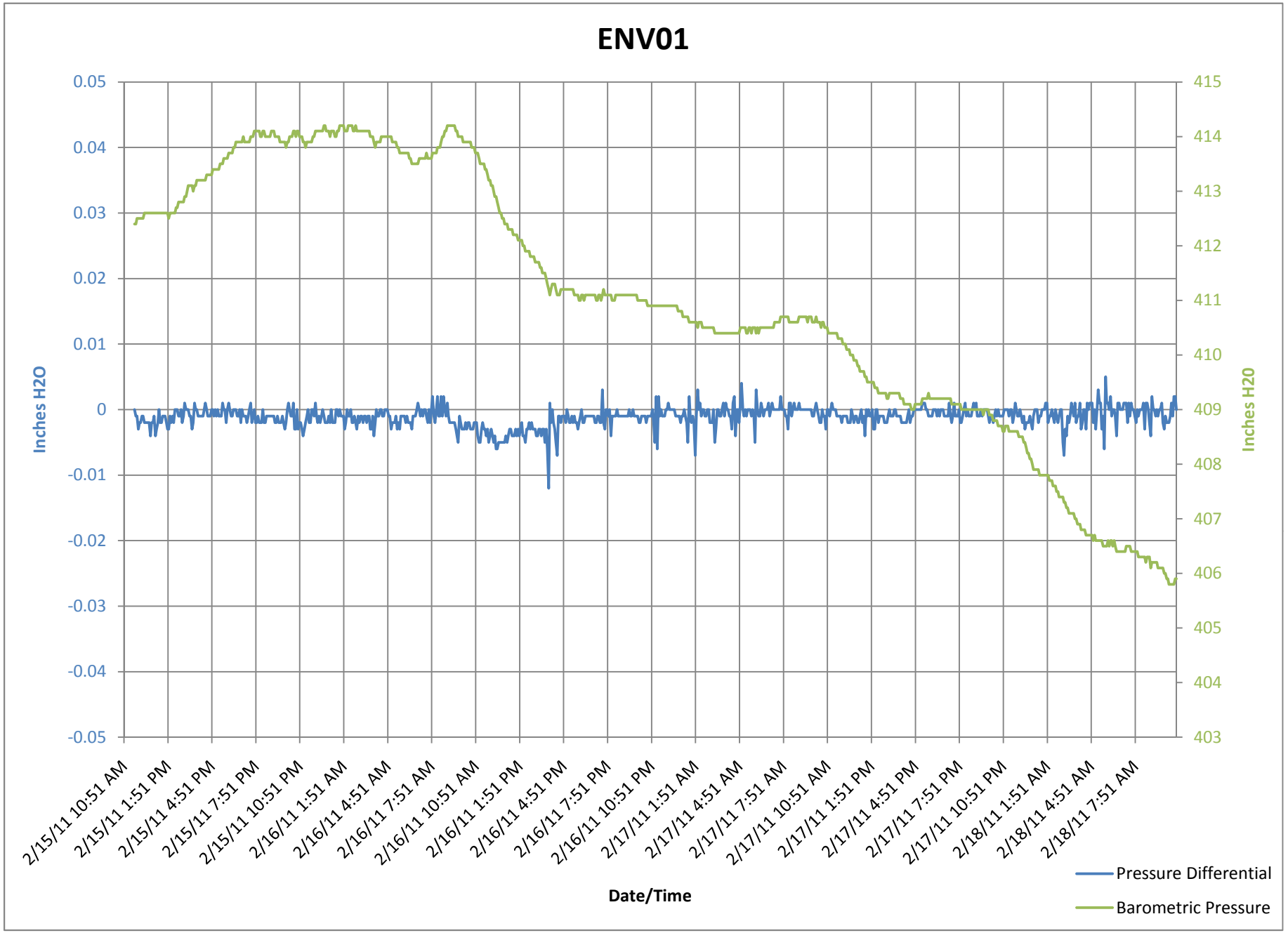
2/2/11 9:10 PM
2/2/11 10:10 PM
2/2/11 11:10 PM
2/3/11 12:10 AM
2/3/11 1:10 AM
2/3/11 2:10 AM
2/3/11 3:10 AM
2/3/11 4:10 AM
2/3/11 5:10 AM
2/3/11 6:10 AM
2/3/11 7:10 AM
2/3/11 8:10 AM
2/3/11 9:10 AM
Date/Time
Pressure Differential
Barometric Pressure

Appendix D-2
February 15, 2011 Measurement Event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0.05
0.04
0.03
0.02
0.01
0
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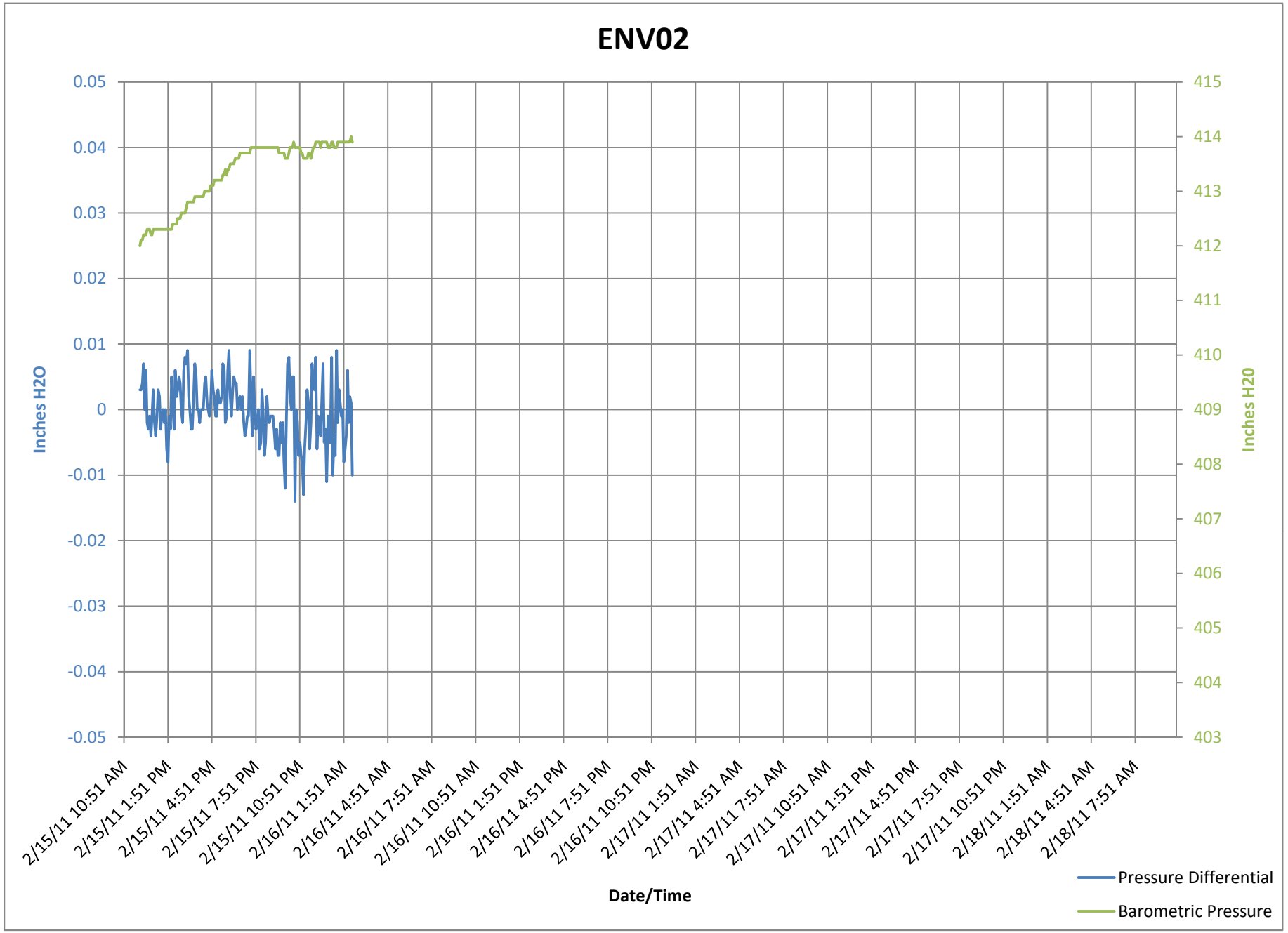
-0.02
-0.03
-0.04
-0.05
Inches H2O
415
414
413
412
411
410
409
408
407
406
405
404
403
Inches H20
2/15/11 10:51 AM
2/15/11 1:51 PM
2/15/11 4:51 PM
2/15/11 7:51 PM
2/15/11 10:51 PM
2/16/11 1:51 AM
2/16/11 4:51 AM
2/16/11 7:51 AM
2/16/11 10:51 AM
2/16/11 1:51 PM
2/16/11 4:51 PM
2/16/11 7:51 PM
2/16/11 10:51 PM
2/17/11 1:51 AM
2/17/11 4:51 AM
2/17/11 7:51 AM
2/17/11 10:51 AM
2/17/11 1:51 PM
2/17/11 4:51 PM
2/17/11 7:51 PM
2/17/11 10:51 PM
2/18/11 1:51 AM
2/18/11 4:51 AM
2/18/11 7:51 AM
Date/Time
Pressure Differential
Barometric Pressure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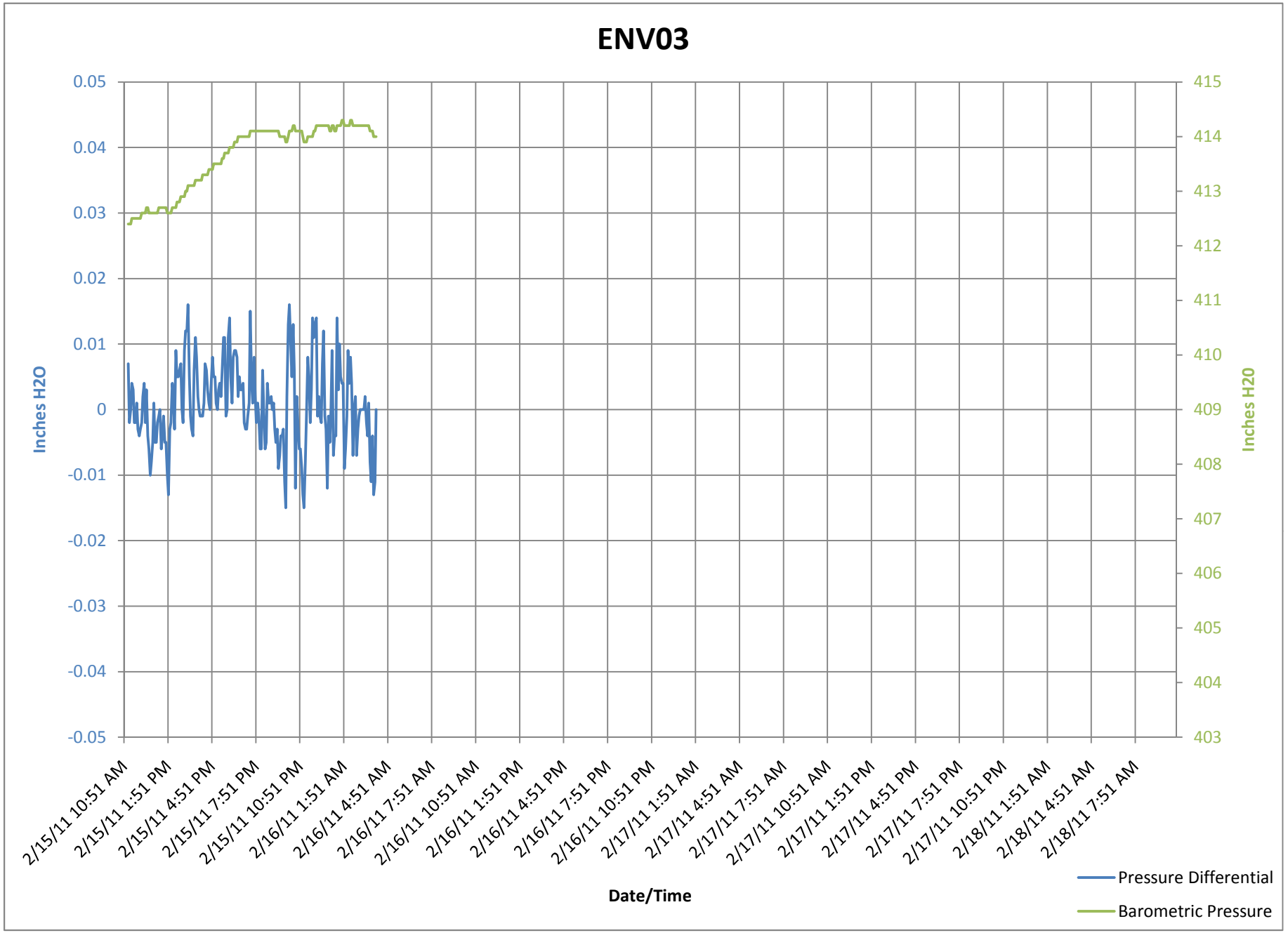
0.04
0.03
0.02
0.01
0
-0.01
-0.02
-0.03
-0.04
-0.05
Inches H2O
415
414
413
412
411
410
409
408
407
406
405
404
403
Inches H20
2/15/11 10:51 AM
2/15/11 1:51 PM
2/15/11 4:51 PM
2/15/11 7:51 PM
2/15/11 10:51 PM
2/16/11 1:51 AM
2/16/11 4:51 AM
2/16/11 7:51 AM
2/16/11 10:51 AM
2/16/11 1:51 PM
2/16/11 4:51 PM
2/16/11 7:51 PM
2/16/11 10:51 PM
2/17/11 1:51 AM
2/17/11 4:51 AM
2/17/11 7:51 AM
2/17/11 10:51 AM
2/17/11 1:51 PM
2/17/11 4:51 PM
2/17/11 7:51 PM
2/17/11 10:51 PM
2/18/11 1:51 AM
2/18/11 4:51 AM
2/18/11 7:51 AM
Date/Time
Pressure Differential
Barometric Pressure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0.04
0.03
0.02
0.01
0
-0.01
-0.02
-0.03
-0.04
-0.05
Inches H2O
415
414
413
412
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405
404
403
Inches H20
2/15/11 10:51 AM
2/15/11 1:51 PM
2/15/11 4:51 PM
2/15/11 7:51 PM
2/15/11 10:51 PM
2/16/11 1:51 AM
2/16/11 4:51 AM
2/16/11 7:51 AM
2/16/11 10:51 AM
2/16/11 1:51 PM
2/16/11 4:51 PM
2/16/11 7:51 PM
2/16/11 10:51 PM
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2/17/11 4:51 AM
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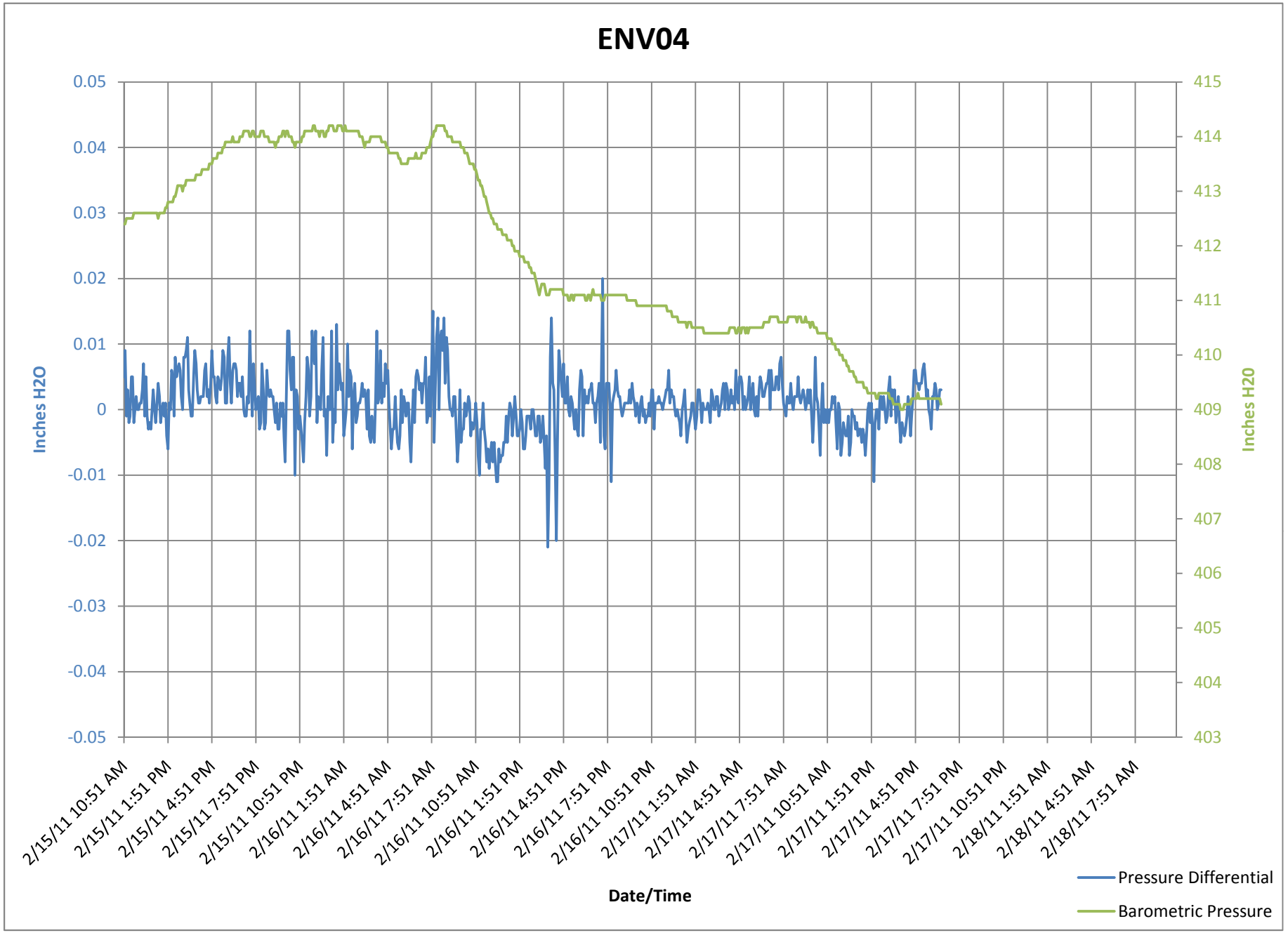
2/17/11 10:51 AM
2/17/11 1:51 PM
2/17/11 4:51 PM
2/17/11 7:51 PM
2/17/11 10:51 PM
2/18/11 1:51 AM
2/18/11 4:51 AM
2/18/11 7:51 AM
Date/Time
Pressure Differential
Barometric Pressure


ENV04
0.05
0.04
0.03
0.02
0.01
0
-0.01
-0.02
-0.03
-0.04
-0.05
Inches H2O
415
414
413
412
411
410
409
408
407
406
405
404
403
Inches H20
2/15/11 10:51 AM
2/15/11 1:51 PM
2/15/11 4:51 PM
2/15/11 7:51 PM
2/15/11 10:51 PM
2/16/11 1:51 AM
2/16/11 4:51 AM
2/16/11 7:51 AM
2/16/11 10:51 AM
2/16/11 1:51 PM
2/16/11 4:51 PM
2/16/11 7:51 PM
2/16/11 10:51 PM
2/17/11 1:51 AM
2/17/11 4:51 AM
2/17/11 7:51 AM
2/17/11 10:51 AM
2/17/11 1:51 PM
2/17/11 4:51 PM
2/17/11 7:51 PM
2/17/11 10:51 PM
2/18/11 1:51 AM
2/18/11 4:51 AM
2/18/11 7:51 AM
Date/Time
Pressure Differential
Barometric Pressure

Appendix E

Summary of Vapor Intrusion Analytical Results & NYSDOH Decision Matrices

APPENDIX E
Summary of Soil Vapor Intrusion Analytical Results
101 Green Acres Road
Valley Stream, New York

Location	ENV-01	ENV-01	ENV-01	ENV-02	ENV-02	ENV-02	ENV-03	ENV-03	ENV-03	ENV-04	ENV-04	ENV-04	ENV-05	ENV-05	ENV-05	ENV-06	ENV-06	ENV-06
ENVIRON Sample ID	IA01-091027	IA01-100121	IA01-110203	IA02-091027	IA02-100121	IA02-110203	IA03-091027	IA03-100121	IA03-110203	IA04-091027	IA04-100121	IA04-110203	IA05-091027	IA05-100121	IA05-110203	IA06-091027	IA06-100121	IA06-110203
Date Sampled	10/27/2009	1/21/2010	2/3/2011	10/27/2009	1/21/2010	2/3/2011	10/27/2009	1/21/2010	2/3/2011	10/27/2009	1/21/2010	2/3/2011	10/27/2009	1/21/2010	2/3/2011	10/27/2009	1/21/2010	2/3/2011
Matrix	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air
Comment																		
Volatile Organic Compounds																		
1,1-Dichloroethane	ND (0.13)	ND (0.13)	ND (0.10)	ND (0.13)	ND (0.13)	ND (0.10)	ND (0.13)	ND (0.13)	ND (0.10)	ND (0.13)	ND (0.13)	ND (0.10)	ND (0.13)	ND (0.13)	ND (0.10)	ND (0.13)	ND (0.13)	ND (0.10)
1,1-Dichloroethylene	ND (0.17)	ND (0.17)	ND (0.095)	ND (0.17)	ND (0.17)	ND (0.095)	ND (0.17)	ND (0.17)	ND (0.095)	ND (0.17)	ND (0.17)	ND (0.095)	ND (0.17)	ND (0.17)	ND (0.095)	ND (0.17)	ND (0.17)	ND (0.095)
Freon 113	ND (0.17)	ND (0.17)	ND (0.20)	ND (0.17)	ND (0.17)	ND (0.20)	1.8 (0.17)	ND (0.17)	ND (0.20)	ND (0.17)	ND (0.17)	ND (0.20)	ND (0.17)	ND (0.17)	ND (0.20)	ND (0.17)	ND (0.17)	ND (0.20)
1,1,1-Trichloroethane	ND (0.14)	ND (0.14)	ND (0.13)	ND (0.14)	ND (0.14)	ND (0.13)	ND (0.14)	ND (0.14)	ND (0.13)	ND (0.14)	ND (0.14)	ND (0.13)	ND (0.14)	ND (0.14)	ND (0.13)	ND (0.14)	ND (0.14)	ND (0.13)
Tetrachloroethylene	2.9 (0.14)	4.8 (0.14)	0.35 (0.27)	2.2 (0.14)	2.1 (0.14)	0.37 (0.27)	2.5 (0.14)	10 (0.14)	0.35 (0.27)	1.5 (0.14)	4.2 (0.14)	0.59 (0.27)	1.5 (0.14)	2.3 (0.14)	0.39 (0.27)	1.7 (0.14)	4.3 (0.14)	0.39 (0.27)
Trichloroethylene	ND (0.10)	1.4 (0.10)	ND (0.13)	ND (0.10)	ND (0.10)	ND (0.13)	ND (0.10)	ND (0.10)	ND (0.13)	0.23 (0.10)	ND (0.10)	ND (0.13)	ND (0.10)	ND (0.10)	ND (0.13)	ND (0.10)	ND (0.10)	ND (0.13)

Location	ENV-01	ENV-01	ENV-01	ENV-02	ENV-02	ENV-02	ENV-03	ENV-03	ENV-03	ENV-04	ENV-04	ENV-04	ENV-05	ENV-05	ENV-05	ENV-06	ENV-06	ENV-06
ENVIRON Sample ID	SV01-091027	SV01-100121	SV01-110203	SV02-091027	SV02-100121	SV02-110203	SV03-091027	SV03-100121	SV03-110203	SV04-091027	SV04-100121	SV04-110203	SV05-091027	SV05-100121	SV05-110203	SV06-091027	SV06-100121	SV06-110203
Date Sampled	10/27/2009	1/21/2010	2/3/2011	10/27/2009	1/21/2010	2/3/2011	10/27/2009	1/21/2010	2/3/2011	10/27/2009	1/21/2010	2/3/2011	10/27/2009	1/21/2010	2/3/2011	10/27/2009	1/21/2010	2/3/2011
Matrix	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor
Comment																		
Volatile Organic Compounds																		
1,1-Dichloroethane	2630 (6.5)	3460 (6.9)	3530 (16)	ND (0.53)	ND (0.53)	ND (0.40)	ND (0.53)	ND (0.53)	ND (0.40)	19 (1.3)	19 (0.53)	19 (0.40)	6.5 (0.53)	4.0 (0.53)	ND (0.40)	ND (0.53)	ND (0.53)	0.77 J (0.10)
1,1-Dichloroethylene	261 (0.71)	404 (0.71)	564 (0.38)	ND (0.71)	ND (0.71)	ND (0.38)	ND (0.71)	ND (0.71)	ND (0.38)	ND (1.7)	ND (0.71)	ND (0.38)	ND (0.71)	ND (0.71)	ND (0.38)	ND (0.71)	ND (0.71)	ND (0.095)
Freon 113	889 (0.67)	973 (0.67)	379 (0.76)	ND (0.67)	5.8 J (0.67)	3.1 J (0.76)	1330 (1.7)	1180 (0.67)	363 (0.76)	1590 (1.7)	1510 (8.4)	421 (0.76)	63 (0.67)	48 (0.67)	30 (0.76)	451 (0.67)	513 (0.67)	281 (0.20)
1,1,1-Trichloroethane	4440 (6.5)	8240 (7.1)	6490 (21)	2.8 J (0.53)	4.5 (0.53)	4.5 (0.53)	19 (0.53)	18 (0.53)	17 (0.53)	197 (1.4)	215 (0.53)	161 (0.53)	151 (0.53)	119 (0.53)	73.7 (0.53)	142 (0.53)	149 (0.53)	123 (0.13)
Tetrachloroethylene	111 (0.56)	107 (0.56)	75.3 (1.1)	221 (0.56)	338 (0.56)	355 (1.1)	112 (0.56)	97.0 (0.56)	96.3 (1.1)	215 (1.4)	207 (0.56)	174 (1.1)	72.6 (0.56)	56 (0.56)	5.8 (1.1)	235 (0.56)	233 (0.56)	239 (0.27)
Trichloroethylene	32 (0.4)	32 (0.4)	21 (0.52)	37 (0.4)	51 (0.4)	31 (0.52)	277 (0.4)	260 (0.4)	256 (0.52)	3630 (4.5)	3240 (5)	2230 (7.1)	218 (0.4)	148 (0.4)	48 (0.52)	177 (0.4)	185 (0.4)	133 (0.13)

Location	ENV-04	ENV-04	ENV-04
ENVIRON Sample ID	SV04D-091027	SV04-100121D	SV04-110203D
Date Sampled	10/27/2009	1/21/2010	2/3/2011
Matrix	Soil Vapor	Soil Vapor	Soil Vapor
Comment	Duplicate	Duplicate	Duplicate
Volatile Organic Compounds			
1,1-Dichloroethane	18 (1.3)	16 (0.53)	20 (0.39)
1,1-Dichloroethylene	ND (1.7)	ND (0.71)	ND (0.38)
Freon 113	1590 (1.7)	1330 (8.4)	395 (0.76)
1,1,1-Trichloroethane	192 (1.4)	188 (0.53)	167 (0.53)
Tetrachloroethylene	196 (1.4)	180 (0.56)	193 (1.1)
Trichloroethylene	3690 (5)	2990 (5.2)	2100 (7.3)

Notes:
1 All concentrations are presented in $\mu g/m^3$. Detection limits are in parentheses.
Abbreviations:
ND -- Not Detected.

APPENDIX E
Summary of Soil Vapor Intrusion Analytical Results
101 Green Acres Road
Valley Stream, New York

October 2009 Sampling Event

NYSDOH Soil Vapor/Indoor Air Matrix 2 (October 2006) - 1,1,1-Trichloroethane

	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m)			
SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m3)	< 3	3 to < 30	30 to < 100	100 and above
< 100	NO FURTHER ACTION ENV-02, ENV-03	Identify source(s) and reduce exposures	Identify source(s) and reduce exposures	Identify source(s) and reduce exposures
100 to < 1,000	MONITOR ENV-04, ENV-05, ENV-06	MONITOR / MITIGATE	MITIGATE	MITIGATE
1,000 and above	MITIGATE ENV-01	MITIGATE	MITIGATE	MITIGATE

NYSDOH Soil Vapor/Indoor Air Matrix 2 (October 2006) - Tetrachloroethene

	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m)			
SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m3)	< 3	3 to < 30	30 to < 100	100 and above
< 100	NO FURTHER ACTION ENV-05	Identify source(s) and reduce exposures	Identify source(s) and reduce exposures	Identify source(s) and reduce exposures
100 to < 1,000	MONITOR ENV-01, ENV-02, ENV-03, ENV-04, ENV-06	MONITOR / MITIGATE	MITIGATE	MITIGATE
1,000 and above	MITIGATE	MITIGATE	MITIGATE	MITIGATE

NYSDOH Soil Vapor/Indoor Air Matrix 1 (October 2006) - Trichloroethene

	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m)			
SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m3)	< 0.25	0.25 to < 1	1 to < 5.0	5.0 and above
< 5	NO FURTHER ACTION	Identify source(s) and reduce exposures	Identify source(s) and reduce exposures	Identify source(s) and reduce exposures
5 to < 50	NO FURTHER ACTION ENV-01, ENV-02	MONITOR	MONITOR	MITIGATE
50 to < 250	MONITOR ENV-05, ENV-06	MONITOR / MITIGATE	MITIGATE	MITIGATE
250 and above	MITIGATE ENV-03, ENV-04	MITIGATE	MITIGATE	MITIGATE

January 2010 Sampling Event

NYSDOH Soil Vapor/Indoor Air Matrix 2 (October 2006) - 1,1,1-Trichloroethane

	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m)			
SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m3)	< 3	3 to < 30	30 to < 100	100 and above
< 100	NO FURTHER ACTION ENV-02, ENV-03	Identify source(s) and reduce exposures	Identify source(s) and reduce exposures	Identify source(s) and reduce exposures
100 to < 1,000	MONITOR ENV-04, ENV-05, ENV-06	MONITOR / MITIGATE	MITIGATE	MITIGATE
1,000 and above	MITIGATE ENV-01	MITIGATE	MITIGATE	MITIGATE

NYSDOH Soil Vapor/Indoor Air Matrix 2 (October 2006) - Tetrachloroethene

	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m)			
SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m3)	< 3	3 to < 30	30 to < 100	100 and above
< 100	NO FURTHER ACTION ENV-05	Identify source(s) and reduce exposures ENV-03	Identify source(s) and reduce exposures	Identify source(s) and reduce exposures
100 to < 1,000	MONITOR ENV-02	MONITOR / MITIGATE ENV-01, ENV-04, ENV-06	MITIGATE	MITIGATE
1,000 and above	MITIGATE	MITIGATE	MITIGATE	MITIGATE

NYSDOH Soil Vapor/Indoor Air Matrix 1 (October 2006) - Trichloroethene

	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m)			
SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m3)	< 0.25	0.25 to < 1	1 to < 5.0	5.0 and above
< 5	NO FURTHER ACTION	Identify source(s) and reduce exposures	Identify source(s) and reduce exposures	Identify source(s) and reduce exposures
5 to < 50	NO FURTHER ACTION ENV-02	MONITOR	MONITOR ENV-01	MITIGATE
50 to < 250	MONITOR ENV-05, ENV-06	MONITOR / MITIGATE	MITIGATE	MITIGATE
250 and above	MITIGATE ENV-03, ENV-04	MITIGATE	MITIGATE	MITIGATE

February 2011 Sampling Event

NYSDOH Soil Vapor/Indoor Air Matrix 2 (October 2006) - 1,1,1-Trichloroethane

	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m)			
SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m3)	< 3	3 to < 30	30 to < 100	100 and above
< 100	NO FURTHER ACTION ENV-02, ENV-03, ENV-05	Identify source(s) and reduce exposures	Identify source(s) and reduce exposures	Identify source(s) and reduce exposures
100 to < 1,000	MONITOR ENV-04, ENV-06	MONITOR / MITIGATE	MITIGATE	MITIGATE
1,000 and above	MITIGATE ENV-01	MITIGATE	MITIGATE	MITIGATE

NYSDOH Soil Vapor/Indoor Air Matrix 2 (October 2006) - Tetrachloroethene

	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m)			
SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m3)	< 3	3 to < 30	30 to < 100	100 and above
< 100	NO FURTHER ACTION ENV-01, ENV-03, ENV-05	Identify source(s) and reduce exposures	Identify source(s) and reduce exposures	Identify source(s) and reduce exposures
100 to < 1,000	MONITOR ENV-02, ENV-04, ENV-06	MONITOR / MITIGATE	MITIGATE	MITIGATE
1,000 and above	MITIGATE	MITIGATE	MITIGATE	MITIGATE

NYSDOH Soil Vapor/Indoor Air Matrix 1 (October 2006) - Trichloroethene

	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m)			
SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m3)	< 0.25	0.25 to < 1	1 to < 5.0	5.0 and above
< 5	NO FURTHER ACTION	Identify source(s) and reduce exposures	Identify source(s) and reduce exposures	Identify source(s) and reduce exposures
5 to < 50	NO FURTHER ACTION ENV-01, ENV-02, ENV-05	MONITOR	MONITOR	MITIGATE
50 to < 250	MONITOR ENV-06	MONITOR / MITIGATE	MITIGATE	MITIGATE
250 and above	MITIGATE ENV-03, ENV-04	MITIGATE	MITIGATE	MITIGATE

Appendix F

Data Usability Summary Reports

April 07, 2011
ENVIRON International Corporation
Att: Mr. Nicholas Scala, Senior Associate
214 Carnegie Center
Princeton, New Jersey 08540

Re: Bulova Corporation /Valley Stream, NY Site Data Deliverables; Laboratory Job No. JA67488
ENVIRON Project No. : 02-1961B

Dear Mr. Scala,

Enclosed with this cover letter are the results of our data review of the laboratory deliverables pertaining to the referenced site. The review was conducted according to the guidelines established by NYSDEC's Data Usability Summary Review [1] ('DUSR') process; data flags (qualifiers) were assigned to samples based on guidance contained in EPA Region II's data validation guidelines [2].

Site Name: Bulova Corporation, Valley Stream, NY

Fractions	Laboratory:	Accutest Laboratories
Volatile Organics	Matrix:	Aqueous

Reviewer: Chris Taylor
Prepared By: Environmental Quality Associates, Inc.

SECTION A
Sample Information

The above-referenced analytical job number / samples were analyzed by Accutest Laboratories, Dayton, NJ ('Accutest'). Samples were analyzed for volatile organics by EPA SW-846, Method 8260B. Ten aqueous samples, including one trip blank (TB) and one field blank (FB) were collected on 02/02 and 02/03/2011, and received at the laboratory under intact custody seal on 02/04/2011 at a recorded temperature of 3.0 degrees C, on ice, in good condition. The chain-of-custody indicated that all samples were (pH) unpreserved with exception of the trip blank.

SECTION B
General Comments

Summary of data completeness and overall quality of data deliverables package
Data deliverables were complete as received.

Overall data quality
Data quality was acceptable, incorporating any applied data qualifiers as detailed in the accompanying QC and calibration summary forms, and discussed in the applicable narrative sections below.

Six target compounds were specified for analysis for these samples, as follow: 1,1-dichloroethane (1,1-dca); 1,1-dichloroethene (1,1-dce); Freon-113; tetrachloroethene (pce); 1,1,1-trichloroethane (1,1,1-tca); trichloroethene (tce).

SECTION C
Volatile Organic Fraction

NYSDEC-ASP holding times from lab receipt to analysis were met in all samples; as were EPA technical holding times from sample collection to analysis. As noted above, all samples were pH unpreserved with exception of the trip blank; all samples were analyzed within seven days of collection, which negates the need for acid preservation.

Surrogate recoveries, blank spike recoveries, matrix spike (MS) and matrix spike duplicate (MSD) recoveries, instrument tune parameters and internal standard recoveries and retention times were within acceptable limits. Both method blanks and the trip and field blanks were reported free of contamination.

The precision (%RPD) value associated with sample JA67488-1 (field sample ID MWHD1-110202) MS/MSD recoveries exceeded the upper limit for tetrachloroethene (16/15%); although tetrachloroethene was reported as non-detect (U) in the parent (unspiked) sample, the results indicate potential matrix heterogeneity, and the reported result for tetrachloroethene in MWHD1-110202 was flagged as estimated 'UJ' with indeterminate bias direction.

Initial calibration (ICAL) %RSD values and relative response factors for target compounds and method CCC and SPCC compounds were within acceptable limits. For the continuing calibrations (CCAL) of 02/08/11 (2A105357.D) and 02/09/11 (2A105408.D), calibration performance criteria for target compounds were within limits.

Target compounds which were reported as positives were qualitatively verified from chromatograms and associated mass spectra against standard materials. A reported positive value was verified from the raw data and is shown in the QC/Cal summary attached.

SECTION D
Overall Recommendations

The results of the review and qualification process for the above analytical fractions and associated samples are summarized on the attached QC and Calibration summary tables, in order to facilitate the end-user's' review of these data. Any required data qualifiers have been applied directly to the laboratory Form 1s associated with affected samples.

Very truly yours,
Environmental Quality Associates, Inc.

Chris W. Taylor
Vice President

/cwt
Attachments

[1] NYSDEC Draft DER-10, Technical Guidance for Site Investigation and Remediation, Appendix 2B, "Guidance for the Development of Data Usability Summary Reports", December 2002

[2] EPA Region II, SOP HW-24, Rev. #2, "Validating Organic Compounds by SW-846 Method 8260B", October, 2006

Environmental Quality Associates, Inc.

SUMMARY OF CALIBRATION AND QC PROCEDURES
EPA SW-846 METHOD 8260B, GC-MS VOLATILES

Calibration or QC Check	Minimum Frequency	Acceptance Criteria	QC Non-Compliance Description	Data Qualification Action[1]
Sample Preservation	All samples	Water: 4°C, $Na_2S_2O_3$, HCl to pH<2 Soil & Other: 4°C	None found *Note: all samples except TB noted as pH unpreserved*	*n/a all samples analyzed w/in 7 days of collection*
Holding Times	All samples	Water: 14 days Soil: 14 days (if samples maintained at 4°)	None found	
MS Tuning	Every 12 hours, prior to calibrations	Method 8260B, Table 4 criteria	None found	
Initial Calibration	Prior to sample analysis, and whenever continuing calibrations fail to meet acceptance criteria (minimum 5 levels)	SPCC average RRF >0.300 (chlorobenzene & 1122-tca) & >0.100 for other 3 SPCC CCC RRF %RSD<30, and (a) linear : mean RSD all analytes ≤15% w/ no single analyte >30%, or (b) regression : r ≥ 0.99 for each affected analyte	None found	
Retention Time Windows	Each sample analyzed	Relative retention time (RRT) of each positive analyte within ± 0.06 of associated IS RRT	None found	
Method Blank / Trip Blank	After ICV or CCV, before sample analysis, minimum one per analytical batch/ Trip Blank per cooler	No analytes detected ≥ PQL for method blank.	V2A4495-MB none found V2A4497-MB none found	
Continuing Calibration Verification (CCV)	Daily, before sample analysis, and after each successive 12 hours of sample analysis	SPCC average RRF >0.300 (chlorobenzene & 1122-tca) & >0.100 for other 3 SPCC CCC RRF %D<20, and all analytes within ± 20% of expected value	None found	

Notes:
[1] See DV report for details.

Calibration or QC Check	Minimum Frequency	Acceptance Criteria	QC Non-Compliance Description	Data Qualification Action[1]
Surrogate Compound Spike	Every sample, spiked sample, blank and standard	All analytes recovered within lab-established recovery ranges (see SW-846, Method 8000B, Sect. 8.7)	None found	
Internal Standards (IS)	Every sample, spiked sample, blank and standard	Retention time (RT): ± 30 seconds from RT of IS in ICAL midpoint standard	None found	
		IS area: between -50% and +100% of IS area in ICAL midpoint standard	None found	
Laboratory Control Sample (LCS)	Once per each analytical batch (should include all reported analytes), and should be prepared independently from calibration standards	All analytes recovered within 70 - 130% of expected (true) value, or recovery within laboratory-derived statistical limits	V2A4495-BS none found V2A4497-BS none found	
Matrix Spike / Matrix Spike Duplicate (MS/MSD)	Once per each 20 samples (should include all reported analytes), and should be prepared independently from calibration standards	All analytes recovered within laboratory-derived statistical limits for each matrix type, and	JA67488-6 MS, MSD	Recoveries & RPD OK
			JA67488-1 MS, MSD	Recoveries OK
		%RPD between MS/MSD below laboratory-derived statistical limits	JA67488-1 MS, MSD tetrachloroethene RPD above lab limit (16 vs. 15%)	Flag tetrachloroethene 'UJ' in parent sample; imprecision w/ indeterminate bias direction

Notes:
[1] See DV report for details.

Initial Calibration

Calibration Date:	01/13/11	
Lab File IDs :	2A104421-28.D	
CCC RSDs ≤ 30%?	yes	
SPCC RRFs > specd. values ?	yes	
All Target Mean RSD <15%?	yes	
If No, was regression used ?	n/a	
If regression used, r ≥ 0.99 ?	n/a	
Qualification Action:	n/a	
Affected Samples:	All SDG samples	

Continuing Calibrations

	Cal 1	Cal 2		
Calibration Date:	02/08/11	02/09/11		
Lab File ID :	2A105357.D	2A105408.D		
CCC %Ds ≤ 20%?	yes	yes		
SPCC RRFs > specd. values ?	yes	yes		
All Target %D <20%?	yes	yes		
If No, list target analytes >20%:				
Analytical Bias:	n/a	n/a		
Qualification Action:	n/a	n/a		
Affected Samples:	JA67488-6,6MS/MSD, 7, 8, 9, 10	JA67488-1, 1MS/MSD, 2, 3, 4, 5		

Sample Result Confirmation

Sample ID: JA67488-4 (MWHD4-110203)
Compound: trichloroethene IS: 1,4-difluorobenzene
Reported concentration: **21.0** µg/L File ID: 2A105417.D

	Ax	IS	Df
Concentration, µg/L =	19601	50	1
	148241	0.315	
	Ais	RRF	

Concentration, µg/L = **20.99**

Result Confirmed? Yes

Reviewer comments : calcs are based on 5.0 mL initial sample purge volume

where:
Ax = area response of target quant ion
IS = mass of internal standard injected, ng
Df = dilution factor

Ais = area response of internal standard quant ion
RRF = ICAL average relative response factor

April 08, 2011
ENVIRON International Corporation
Att: Mr. Nicholas Scala, Senior Associate
214 Carnegie Center
Princeton, New Jersey 08540

Re: Bulova Corporation /Valley Stream, NY Site Data Deliverables; Laboratory Job No. JA67495
ENVIRON Project No. : 02-1961B

Dear Mr. Scala,

Enclosed with this cover letter are the results of our data review of the laboratory deliverables pertaining to the referenced site. The review was conducted according to the guidelines established by NYSDEC's Data Usability Summary Review [1] ('DUSR') process; any data flags (qualifiers) which are assigned to samples are based on guidance contained in EPA Region II's data validation guidelines [2].

Site Name: Bulova Corporation, Valley Stream, NY

Fractions	Laboratory:	Accutest Laboratories
Volatile Organics	Matrix:	Air

Reviewer: Chris Taylor
Prepared By: Environmental Quality Associates, Inc.

SECTION A
Sample Information

The above-referenced analytical job number / samples were analyzed by Accutest Laboratories, Dayton, NJ ('Accutest'). Samples were analyzed for volatile organics by EPA Compendium Method TO-15. Fourteen samples were collected in 6-liter canisters on 02/03/2011, and received at the laboratory on 02/04/2011.

SECTION B
General Comments

Summary of data completeness and overall quality of data deliverables package
Data deliverables were complete as received.

Overall data quality
Data quality was acceptable, as detailed in the accompanying QC and calibration summary forms, and discussed in the applicable narrative sections below.

Six target compounds were specified for analysis for these samples, as follow: 1,1-dichloroethane (1,1-dca); 1,1-dichloroethene (1,1-dce); Freon-113; tetrachloroethene (pce); 1,1,1-trichloroethane (1,1,1-tca); trichloroethene (tce).

Samples SV01, SV04 and SV04D were re-analyzed at appropriate volume dilutions due to concentrations of target compounds which exceeded the calibrated detector range in the initial analyses.

SECTION C
Data Quality Assessment – TO-15

HOLDING TIMES
Method specified holding times from collection to analysis (30 days maximum) were met for all samples.

SAMPLE CONDITION

Sample condition and canister pressures (in and out) were documented and were acceptable.

METHOD BLANKS

Method blanks associated with submitted sample canisters were reported free of target and non-target contamination.

SURROGATE & INTERNAL STANDARD COMPOUNDS

Surrogate recoveries were within laboratory established limits for this sample set. It is noted that method and NYSDEC guidance do not require surrogate spikes for TO-15 canisters.

Internal standard (IS) recoveries were within the +/- 40% limits specified by the method for all associated samples and QC samples. All IS retention times were within acceptable range.

INSTRUMENT PERFORMANCE CHECK

Instrument tuning parameters for BFB were within method limits and performed within required frequency.

INITIAL CALIBRATION

The %RSD values in the ICAL sequence of 01/21/2011 were within method-specified limits of maximum 30% RSD.

All reported individual and average RRF values for target compounds were above minimum required values.

It is noted that repeat runs for several concentration levels (0.2, 0.5, 5.0, 10, 20 and 40 ppb) were performed in the initial calibration sequence. No discussion of calibration issues was found in the laboratory narrative as to the cause of these re-analyses. No QA action was taken, since reported parameters were within acceptable limits, and review of run logs indicated that the additional runs were for the calibration of naphthalene.

CALIBRATION VERIFICATION

Calibration verification metrics for the continuing calibrations on 02/08 and 02/09/2011 were within acceptable limits.

LABORATORY REPLICATES

Sample JA67495-13 (IA06-110203) was taken as a laboratory (batch) replicate. Precision RPD values were within laboratory-derived limits for reported target compounds.

FIELD DUPLICATES

Samples JA67495-8 and -9 (SVO4-110203 and SV04-1110203D) were identified as collocated samples. Precision RPD values were within laboratory-derived limits for reported target compounds.

LABORATORY BLANK SPIKES / BLANK SPIKE DUPLICATES

Duplicates of Blank Spike samples were performed for both analytical batch runs associated with site samples. Recoveries and duplicate precision results were within acceptable limits.

SAMPLE RESULT VERIFICATION

Target compounds which were reported as positives were qualitatively verified from chromatograms and associated mass spectra against standard materials. A reported positive value was quantitatively verified from the raw data and is shown in the QC/Cal summary attached, along with collocated samples' %RPD derivation.

SECTION D
Overall Recommendations

The results of the review and qualification process for the above analytical fractions and associated samples are summarized on the attached QC and Calibration summary tables, in order to facilitate the end-user's' review of these data. Based on the review as performed and described herein, no data qualifiers were necessary for any SDG samples.

Very truly yours,
Environmental Quality Associates, Inc.

Chris W. Taylor
Vice President

/cwt
Attachments

[1] NYSDEC Draft DER-10, Technical Guidance for Site Investigation and Remediation, Appendix 2B, "Guidance for the Development of Data Usability Summary Reports", December 2002

[2] EPA Region II, SOP #HW-31, Rev. #4, "Validating Air Samples, Volatile Organic Analysis of Ambient Air in Canister by Method TO-15", October, 2006

CALIBRATION AND QC SUMMARY
EPA METHOD TO-15, GC-MS VOLATILES

Calibration or QC Check	Minimum Frequency	Acceptance Criteria	QC Non-Compliance Description	Data Qualification Action[1]
Sample Preservation	All samples	Certified clean & leak-free canisters per method	None found	
Holding Times	All samples	Analysis within 30 days from collection	None found	
MS Tuning	Every 24 hours, prior to calibrations	Method TO-15, Sect. 10.4 and Table 3 criteria	None found	
Initial Calibration	Prior to sample analysis, and whenever continuing calibrations fail to meet acceptance criteria (minimum 5 levels)	RSD of mean RRF each target must be $\leq$ 30.0% Note: Linear regression is optional for targets w/ RSD >30%; r must be >0.99	None found	
Retention Time Windows	Each sample analyzed	Relative retention time (RRT) of each positive analyte within $\pm$ 0.06 of associated IS RRT	None found	
Continuing Calibration Verification (CCV)	Daily, before sample analysis, and after each successive 24 hours of sample analysis	Response %D for each Target must be $\leq$ 30.0% $\%D = \frac{RRFc - RRFi}{RRFi} * 100$	None found	
		$\%D = \frac{True - Found}{True\ Value} * 100$	n/a	
Method Blank (certified clean canister; w/ ultra-pure zero air)	After ICV or CCV, before sample analysis, minimum once per 24-hour period	No analytes detected $\geq$ PQL* for method blank * PQL = 3x MDL	02/08/11 V2W1252-MB All targets ND JA67495- 1-2;4-5;7-9;11-12 02/09/11 V2W1253-MB All targets ND JA67495- 2-3;6;8-10;13-14	

Notes:
[1] See DV report for details.

Data Reviewer: Chris Taylor
For: ENVIRON_Princeton, NJ

Calibration or QC Check	Minimum Frequency	Acceptance Criteria	QC Non-Compliance Description	Data Qualification Action[1]
Surrogates	Note: per NYSDEC and method guidance, use of surrogates for TO-15 is not required	All surrogates recovered within 70 - 130% of expected (true) value, or recovery within laboratory-derived statistical limits	None found	
Internal Standards (IS)	Every sample, blank and standard	Retention time (RT): ± 20 seconds max from CCAL or average of ICAL	None found	
		IS area: max. ± 40% from corresponding CCAL	None found	
Laboratory Control Sample (LCS) aka Laboratory-Fortified Blank (LFB) aka Blank Spike	Once per each analytical batch (should include all reported analytes), and should be prepared independently from calibration standards	All analytes recovered within 70 - 130% of expected (true) value, or recovery within laboratory-derived statistical limits	02/08/11 V2W1252-BS/BSD None found 02/09/11 V2W1253-BS/BSD None found	
Field Duplicates	As submitted to laboratory and identified to reviewer	Not established; use lab-derived limits. Calculate RPD values and report.	JA67495-8, 9 SV04;SV04D Field duplicates	n/a
Lab Duplicates	As analyzed by laboratory	Not established; use lab-derived limits.	JA67495-13, 13DUP Lab duplicates	n/a

Notes:
[1] See DV report for details.

Data Reviewer: Chris Taylor
For: ENVIRON_Princeton, NJ

Initial Calibration

Calibration Date:	01/21/11
Lab File IDs :	2W29353-364.D
RRFs > specd. values ?	yes
Target RSDs ≤ 30%?	yes
If No, was regression used ?	n/a
If regression used, r ≥ 0.99 ?	
If No, list compounds :	
Analytical Bias:	
Qualification Action:	n/a
Affected Samples:	All samples and dilutions
Comments :	

%RSD VERIFICATION	
target compound:	trichloroethene
Standard Conc.	Response
RRF 0.04	0.585
RRF 0.1	0.513
RRF 0.2	0.454
RRF 0.5	0.424
RRF 5.0	0.402
RRF 10	0.430
RRF 20	0.446
RRF 40	0.424
Calc'd. AVG RRF	0.460
STD DEV	0.060
Calc'd. %RSD	13.13
Lab AVG RRF	0.460
Lab %RSD	13.14
Verified ?	*yes*

RRF VERIFICATION	
target compound:	tetrachloroethene
Int. Std. (IS) :	chlorobenzene-d5
ICal file ID:	2W29359
Lab RRF 0.04 :	0.995
Target area(Ax) :	994
IS Area (Ais) :	249821
IS Conc. (Cis) :	10.0
RRF 0.04 =	(Ax * Cis) / (Ais * Cx)
Calc. RRF 0.04 =	0.995
Verified ?	*yes*

Continuing Calibrations

Calibration Date:	02/08/11	02/09/11
Lab File ID :	2W29647.D	2W9676.D
All Target %Ds ≤ 30%?	yes	yes
If No, list target analytes >30%:		
Analytical Bias:	n/a	n/a
Qualification Action:	n/a	n/a
Affected Samples:	JA67495- 1,2,4,5,7-9,11,12	JA67495- 2,3,6,8-10,13-14, 13DUP

%D VERIFICATION (2W29647)	
compound:	trichloroethene
Lab %D:	8.3
CCAL RRFc :	0.422
ICAL AVG. RRFi :	0.460
Calc. %D =	(RRFc - RRFi) / RRFi
Calc. %D =	-8.2
Verified ?	*yes*
	OK for rounding

RRF VERIFICATION (2W9676)	
compound:	1,1,1-trichloroethane
Int. Std. (IS) :	bromochloromethane
Lab RRF 10:	4.596
Target area(Ax) :	513092
IS Area (Ais) :	111629
IS Conc. (Cis) :	10.0
RRF 10 =	(Ax * Cis) / (Ais * Cx)
Calc. RRF 10 =	4.596
Verified ?	*yes*

Sample Result Verification

Sample ID:	SV01-110203	JA67495-2		2W29680
Compound:	1,1,1,-trichloroethane	(MW = 133.4)	IS:	bromochloromethane
Reported concentration:	1190	ppbv		
	6490	ug/m^3		

	Ax	IS	DF	
Concentration, ppbv =	381417	10.0	155	80 ml; 31 DF
	111263	4.450		
	Ais	RRF		

Concentration, ppbv = **1194**

Concentration, ug/m^3 = $\frac{\text{ppbv} * \text{MW}}{24.45}$ 1,1,1-tca MW = 133.4

Concentration, ug/m^3 = **6515**

Result Confirmed? *yes* *OK for rounding*

where:
Ax = area response of target quant ion
IS = internal standard injected, ppbv
Df = dilution factor

Ais = area response of internal standard quant ion
RRF = ICAL average relative response factor

FIELD DUPLICATE SAMPLE PRECISION DERIVATION

Target Compound	Sample ID SV04-110203 Sample Conc. pbbv	Dupe ID SV04-110203D Duplicate Conc. pbbv	%RPD
1,1-dichloroethane	4.6	5.0	8.3
1,1-dichloroethene	ND 0.80	ND 0.80	NC
Freon-113	54.9	51.5	6.4
1,1,1-trichloroethane	29.5	30.6	3.7
tetrachloroethene	25.6	28.5	10.7
trichloroethene	415	391	6.0

ND : not detected in sample at listed RL concentration
NC : not calculated

Attachment A

Laboratory Deliverables