

Technical Memorandum

Date: June 18, 2014

To: Jason Smith
Tecumseh Products Company

From: Graham Crockford and Stacy Metz, TRC

cc: Chris DeWetter, Tecumseh Products Company
Douglas McClure, Conlin, McKenney & Philbrick, PC

Project No.: 203342.0001.0000, Phase 4

Subject: Summary of 2014 Passive Soil Gas Survey Activities
Former Tecumseh Products Company Site in Tecumseh, Michigan
(RCRA-05-2010-0012)

Introduction

In April 2014 a supplemental passive soil gas (PSG) survey was completed at the former Tecumseh Products Company (TPC) site in Tecumseh, Michigan. This supplemental source area investigation was designed to support the design of final corrective measures by further defining the lateral extent of impacted areas on the former TPC property (i.e., high resolution source characterization). This Technical Memorandum provides a summary of those investigation activities including a description of field activities and a summary of sampling data.

Background

TPC retained TRC Environmental Corporation (TRC) to investigate soil and groundwater conditions at the former TPC site located in Tecumseh, Michigan. TRC has been assisting TPC with investigative activities in accordance with the RCRA Administrative Order on Consent (RCRA 05-2010-0012) for the site. Based on these investigation activities, two general source areas were identified: the northern source area and the southern source area. A PSG survey was completed through the northern source area in 2010 to help locate potential source areas. By comparison, the southern source area was better defined with a likely source identified.

Since that time a soil vapor extraction (SVE) system has been installed in P-Building, located above the eastern portion of the northern PSG survey area. Extraction wells installed in areas which had an elevated response during the 2010 PSG survey have been very effective in removing constituents of

Technical Memorandum

concern (COCs) from the subsurface. Consequently, in 2013 a PSG survey was proposed to support the design of a similar system in the southern source area, in order to optimize the number and location of proposed extraction wells.

On January 31, 2014, USEPA provided a response to TPC's September 30, 2013 Supplement to the Human Exposures Under Control Environmental Indicator Report. Among those comments, USEPA identified several discrete areas which, in USEPA's opinion, had the potential to be discrete source areas. TPC agreed to expand the PSG study area to include these areas, specifically the former drum storage areas, tank areas, areas adjacent to former railroad spurs where loading/unloading of materials may have occurred, and the area east/southeast of the southern portion of the building where a number of outbuildings and two hazardous waste storage areas were located. This work was completed as described in the March 27, 2014 Scope of Work.

Summary of Field Activities

Supplemental source area investigation activities, which were conducted in April 2014, are described below^{1,2,3}:

- Between April 21 and April 25, 2014, TRC personnel with the assistance of Beacon Environmental Services, Inc. (Beacon) installed a matrix of PSG samplers throughout the proposed study area.
 - A total of 252 PSG samplers were installed in holes, having a total depth of 30 inches.
 - Samplers were spaced approximately 40 feet apart and were labeled numerically (from 342 to 593) and by grid location (columns x through T from west to east and rows 2 through 43 from north to south). Figure 1 shows PSG sample locations.
 - Following installation, sample holes were covered with an aluminum foil plug and patched with material similar to the existing surfacing (concrete within the building footprint and paved areas, native fill in the unpaved and grassy areas) to limit the influence of ambient air on sample results.
 - Samplers, which contain an adsorbent media to collect VOCs from the soil gas, were left in place for approximately 1 week.

¹ The northern PSG survey was completed in 2010. This survey area included 150 PSG samplers installed in a 40-foot grid. (Sample locations 001 through 150 on Figure 1). The 2010 survey area extends from the office/engineering area in the west through the original footprint of Building Area P in the east.

² The southern PSG survey was performed in July 2013. This survey area included 142 PSG samplers installed in a 40-foot grid. (Sample locations 151 through 292 on Figure 1). The southern survey area includes the southern portion of the building footprint including Building Areas Y, G, G-1, G-2, M, M-1, M-2, MD, V, and V-1.

³ The central PSG survey was performed in September 2013. This survey area included 49 PSG samplers, including 5 locations which overlapped the northern PSG survey area and 5 locations which overlapped the southern PSG survey area to help account for temporal variability in soil gas concentrations. Samplers were installed in a 40-foot grid. (Sample locations 293 through 341 on Figure 1). The central survey area included the remainder of the building footprint between the northern and southern PSG survey areas.

Technical Memorandum

- On April 29 and April 30, 2014, after the designated exposure period, TRC personnel removed the PSG samplers and submitted the samples to Beacon for analysis by EPA Method 8260C.

Results and Data Analysis

As discussed above, PSG samplers were installed in the following study areas at the former TPC site:

- The large majority of the building footprint,
- Former drum storage areas,
- Former tank areas,
- Areas adjacent to former railroad spurs where loading/unloading of materials may have occurred, and
- The area east/southeast of the southern portion of the building where a number of outbuildings and two hazardous waste storage areas were located.

During the PSG sample collection period, VOCs present in the soil gas were absorbed by the media inside the sampler (each sampler contains two media cartridges). Following sample retrieval, one media cartridge (two at duplicate locations) from each sample location was analyzed by Beacon. Analytical results are provided in micrograms (per cartridge). Because results cannot be correlated directly to a soil gas concentration, data are considered semi-quantitative. Analytical results from 2014 can be found in the Beacon Passive Soil Gas Survey – Analytical Report dated May 28, 2014 (Attachment 1). In addition to providing analytical data, Beacon provided compound distribution maps for select constituents. Figure 2 illustrates the distribution of TCE; Figure 3 illustrates the distribution of a combination of TCE and its breakdown products (1,1-dichloroethene [1,1-DCE], cis-1,2-dichloroethene [cis-DCE], trans-1,2-dichloroethene [trans-DCE], and vinyl chloride), and Figure 4 illustrates the distribution of 1,1,1-trichloroethane (TCA).

These distribution maps provide an additional tool in further defining the lateral distribution of COCs at the former TPC site. However, it is important to note that these maps include PSG data collected from each of the four sample events. Therefore, comparison of data from different sample events should consider the expected temporal variability in soil gas concentrations which has been documented at this site. As illustrated on Figure 1, samples were collected at 15 “duplicate” grid locations, five each from the north (C15, D11, D12, E9, E10), central (C18, D20, E19, G20, G21), and south (I34, I36, I37, I38, J31) PSG survey areas. Additionally, during the central PSG survey in September 2013, 10 “duplicate” grid locations, five each from the north (E16, E17, E18, F17, F18) and south (B22, B25, B26, C24, C25) PSG survey areas. Data from these grid locations were compared to assess the temporal variability between the four sample events (Attachment 2). In general data collected in April 2014 are lower than those collected during the previous three sample events. By contrast, data collected in September 2013 were generally higher than those collected during the July 2010 and July 2013 sample events. These trends in temporal variability are consistent with the trends

Technical Memorandum

observed at soil gas sample locations for the site, and indicate that soil gas concentrations typically peak during the mid to late summer months.

In general, the 2014 PSG survey further defined the downgradient boundaries of the two southernmost areas of concern. No new source areas of TCE were identified. As described previously, areas with higher TCE concentrations relative to other areas are highlighted yellow to red on Figure 2. These areas include the following locations:

- A single sample location (080) in the northeast corner of Building Area B;
- Three areas within or near the footprint of Building Area P prior to the building expansion completed in the 1990s (soil vapor extraction wells SVE-05, SVE-06 and SVE-07 have been installed at these locations);
- The corridor between the southern portion of Building Area B (samples 084 and 087) and south through Building Area D (samples 100 and 101);⁴
- A single sample location (144) in the southwest corner of Building Area K;⁵
- The area near sub-slab sample location SV-11 in Building Area E and the northern portion of Building Area F (from sample 107 in the north to 309, 310, 313 and 314 in the south);
- The area between Building Areas F and G (samples 299 and 300);
- The central portion of Building Area G between sample locations 206 and 207;
- The southeast corner of Building Area G (samples 289 and 215) and the area downgradient (including sample locations 214, 160, 175, 174, and 162); and
- The area in the vicinity of the former solvent recovery unit and the area downgradient (from samples 220 to 275 in the west to samples 165 to 546 in the east⁶).

The distribution of TCE with its breakdown products (Figure 3) is similar to the distribution of TCE (Figure 2).

Overall, the concentrations of TCA were lower than the concentrations of TCE, particularly in the north. (Note the color scale on Figure 4 [maximum 175 ug] relative to the color scale on Figures 2 and

⁴ A former chemical stockroom was located in Building Area D. Communications with former on-site TPC staff indicate that plant workers may have transported small quantities of degreasing solvents from the stockroom to their work stations to clean machining equipment. Historically, small amounts of these solvents may have spilled as they were transported by hand from the stockroom. PSG survey results, which indicate the presence of elevated concentrations of TCE throughout the corridor north and south of the stockroom, support this explanation.

⁵ Above ground chemical piping to and from the stockroom in Building Area D was traced to the point of termination. Piping extended to the north into Building Area B. Two chemical lines extended to the south to the approximate location of sub-slab sample point SV-06. From there, the piping turned to the west and followed the corridor into Building Area K. One of the pipes terminated near sample location 144; the end was cut but not capped. The other pipe turned to the south and entered Building Area TD where several above ground chemical storage tanks were located.

⁶ When temporal variability is considered, this higher downgradient area could be considered to include the area highlighted green between the eastern portion of the building and monitoring well MW-35i.

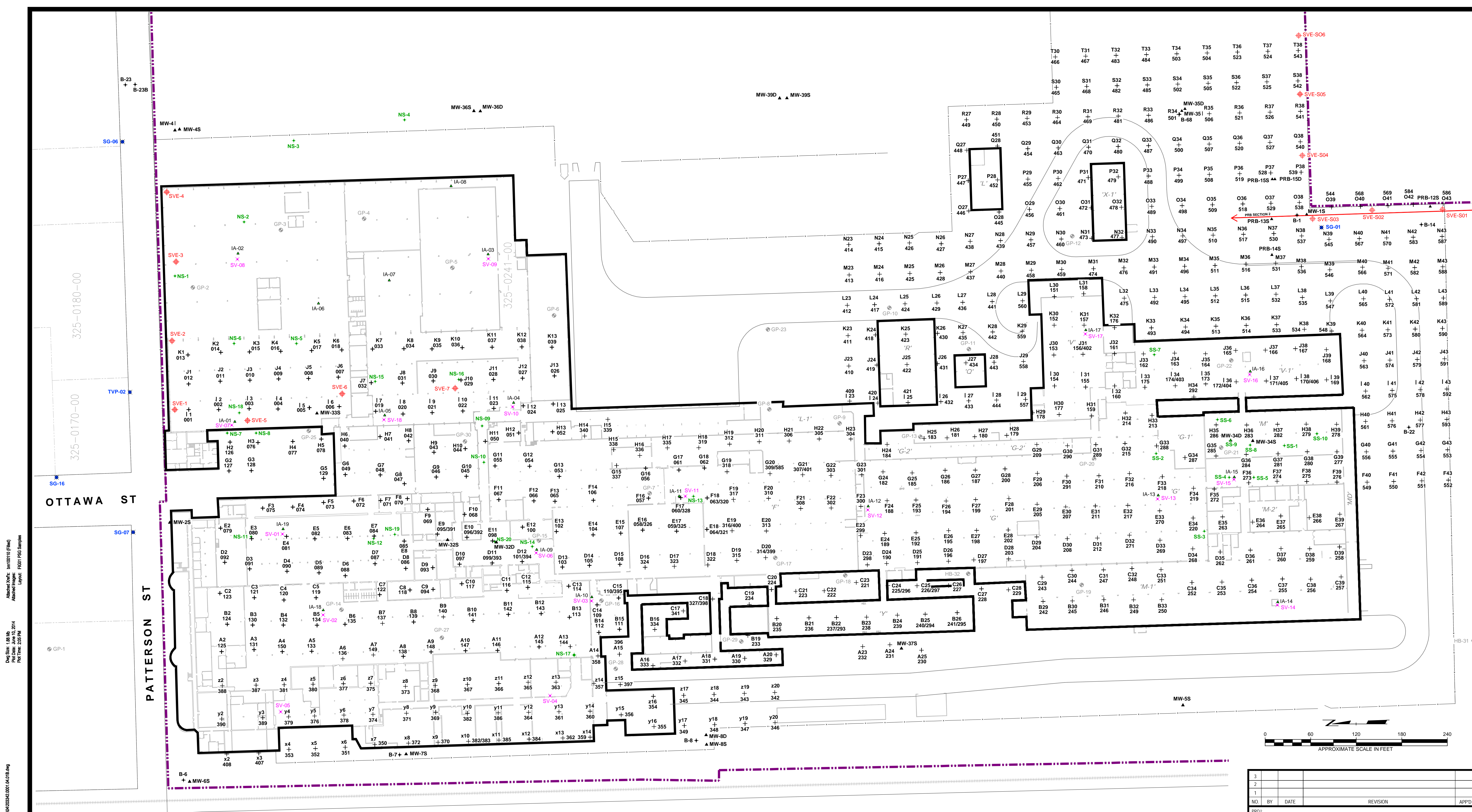
Technical Memorandum

3 [maximum 375 ug and 450 ug respectively]). In the central and southern portions of the former TPC building footprint, the areas with relatively high response for TCA are found in two large areas:

- From Building Area F south through the northern portion of Building Area G (from sample locations 310, 313, and 314 in the north to 299, 188 and 185 in the south); and
- From the central portion of Building Area G through the area in the vicinity of the former solvent recovery unit and downgradient (in the west [up gradient] from sample 187 in the north to samples 275, 280 and 279 in the south, and then east [downgradient] to samples 501, 506 and 521).

A membrane interface probe investigation is scheduled to begin June 16, 2014 to further define the vertical distribution of COCs within these areas of relatively high COC concentrations.

Figures



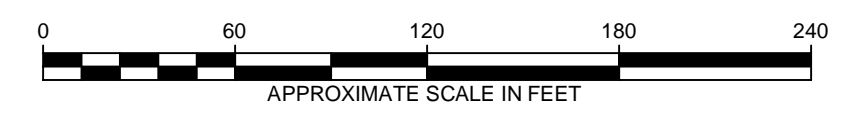
J:\JTC\Tecomseh\Products\MI\203342\0001\04\018.dwg
 Drawing File Name: 038665
 Date: APRIL 2014
 Scale: AS INDICATED
 File No: 203342.0001.04.018.dwg
 Figure 1

LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- FENCE LINE
- PARCEL BOUNDARY
- ↔ PRB LOCATION
- ▲ B-8 + PERIMETER/OFF-SITE INVESTIGATION BORING LOCATION AND NUMBER
- ▲ MW-8D + MONITORING WELL LOCATION AND NUMBER
- ▲ NS/SS-10 + SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
- ▲ GP-23 + ATC PHASE II ESA BORING LOCATION AND NUMBER
- SVE-7 + SOIL VAPOR EXTRACTION WELL LOCATION AND NUMBER
- ▲ SG-01 + SOIL GAS SAMPLE LOCATION AND NUMBER
- ✕ SV-08 + SUB-SLAB SOIL GAS SAMPLE LOCATION AND NUMBER
- ▲ IA-03 + INDOOR AIR SAMPLE LOCATION AND NUMBER
- ▲ J13 + 026 + PASSIVE SOIL GAS SURVEY SAMPLE LOCATION AND NUMBER
- ▲ G20 309/535 + DUPLICATE SAMPLE LOCATION TO ASSESS TEMPORAL VARIABILITY

NOTES

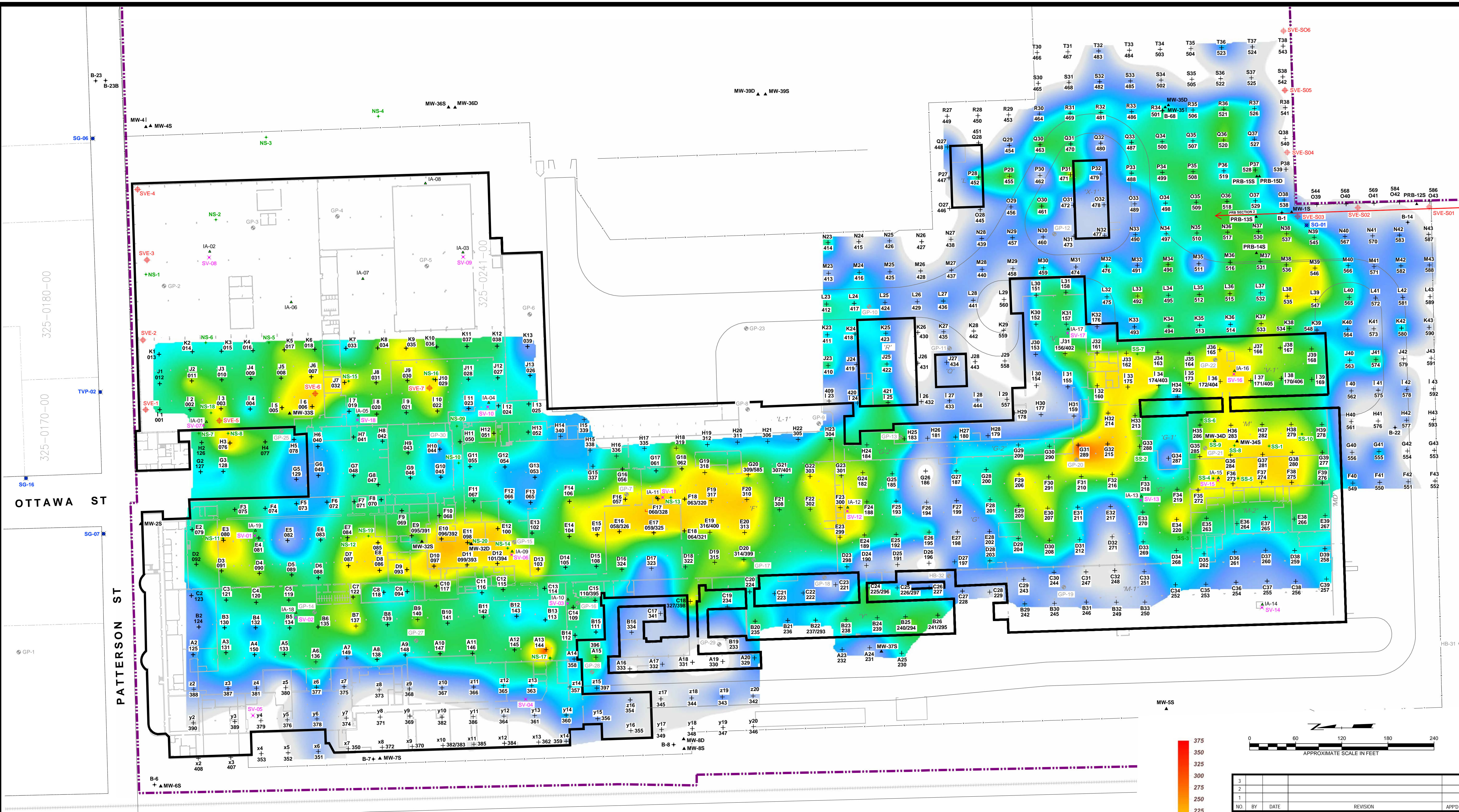
1. PASSIVE SOIL GAS SURVEY COMPLETED IN PHASES:
 - SAMPLE LOCATIONS 001 THROUGH 150 COMPLETED JUNE-JULY 2010.
 - SAMPLE LOCATIONS 151 THROUGH 292 COMPLETED JULY 2013.
 - SAMPLE LOCATIONS 293 THROUGH 341 COMPLETED SEPTEMBER 2013.
 - SAMPLE LOCATIONS 342 THROUGH 593 COMPLETED APRIL 2014.



3										
2										
1										
NO.	BY	DATE	REVISION	APPD.						
PROJ: FORMER TECUMSEH PRODUCTS SITE TECUMSEH, MICHIGAN										
TITLE: PSG SURVEY LOCATIONS										
DRAWN BY: DGS		SCALE: AS INDICATED		PROJ. NO: 203342.0001.04						
CHECKED BY: SEM		DATE PRINTED:		FILE NO: 203342.0001.04.018.dwg						
APPROVED BY: GC		DATE: APRIL 2014		FIGURE 1						
						1540 Eisenhower Place Ann Arbor, MI 48108 Phone: 734.971.7080 Fax: 734.971.9022				



J:\TRC\Tecomseh Products\MI\203342\001\04\TCE.dwg
 Drawing File Name: 0386953
 J:\TRC\Tecomseh Products\MI\203342\001\04\TCE.dwg
 Drawing File Name: 0386953
 Date: June 10, 2014
 Plot Time: 1:58 PM
 Dwg Size: 173 Mb
 Plot Date: June 10, 2014
 Plot Time: 1:58 PM
 Attached Xrefs: jmi01010 (P)dwg
 Attached Images: 2840 Backscn TCA - Color Scale; 2840 Backscn TCE - Color Scale; 2840 Backscn TCE - Contour Image; Layout: FIG001 TCE

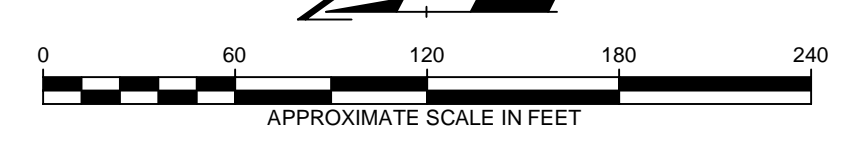
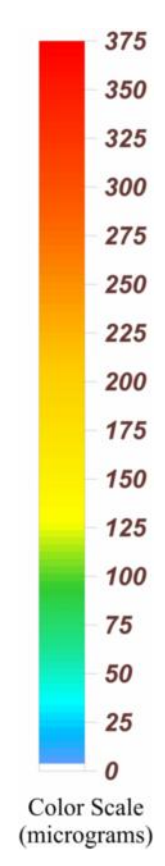


LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- FENCE LINE
- PARCEL BOUNDARY
- PRB LOCATION
- B-8 + PERIMETER/OFF-SITE INVESTIGATION BORING LOCATION AND NUMBER
- MW-8D + MONITORING WELL LOCATION AND NUMBER
- NS/SS-10 + SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
- GP-23 + ATC PHASE II ESA BORING LOCATION AND NUMBER
- SVE-7 + SOIL VAPOR EXTRACTION WELL LOCATION AND NUMBER
- SG-01 + SOIL GAS SAMPLE LOCATION AND NUMBER
- IA-03 + INDOOR AIR SAMPLE LOCATION AND NUMBER
- J13 + 026 + PASSIVE SOIL GAS SURVEY SAMPLE LOCATION AND NUMBER
- G20 309/535 DUPLICATE SAMPLE LOCATION TO ASSESS TEMPORAL VARIABILITY
- SV-08 x SUB-SLAB SOIL GAS SAMPLE LOCATION AND NUMBER
- IA-03 + INDOOR AIR SAMPLE LOCATION AND NUMBER
- J13 + 026 + PASSIVE SOIL GAS SURVEY SAMPLE LOCATION AND NUMBER
- G20 309/535 DUPLICATE SAMPLE LOCATION TO ASSESS TEMPORAL VARIABILITY

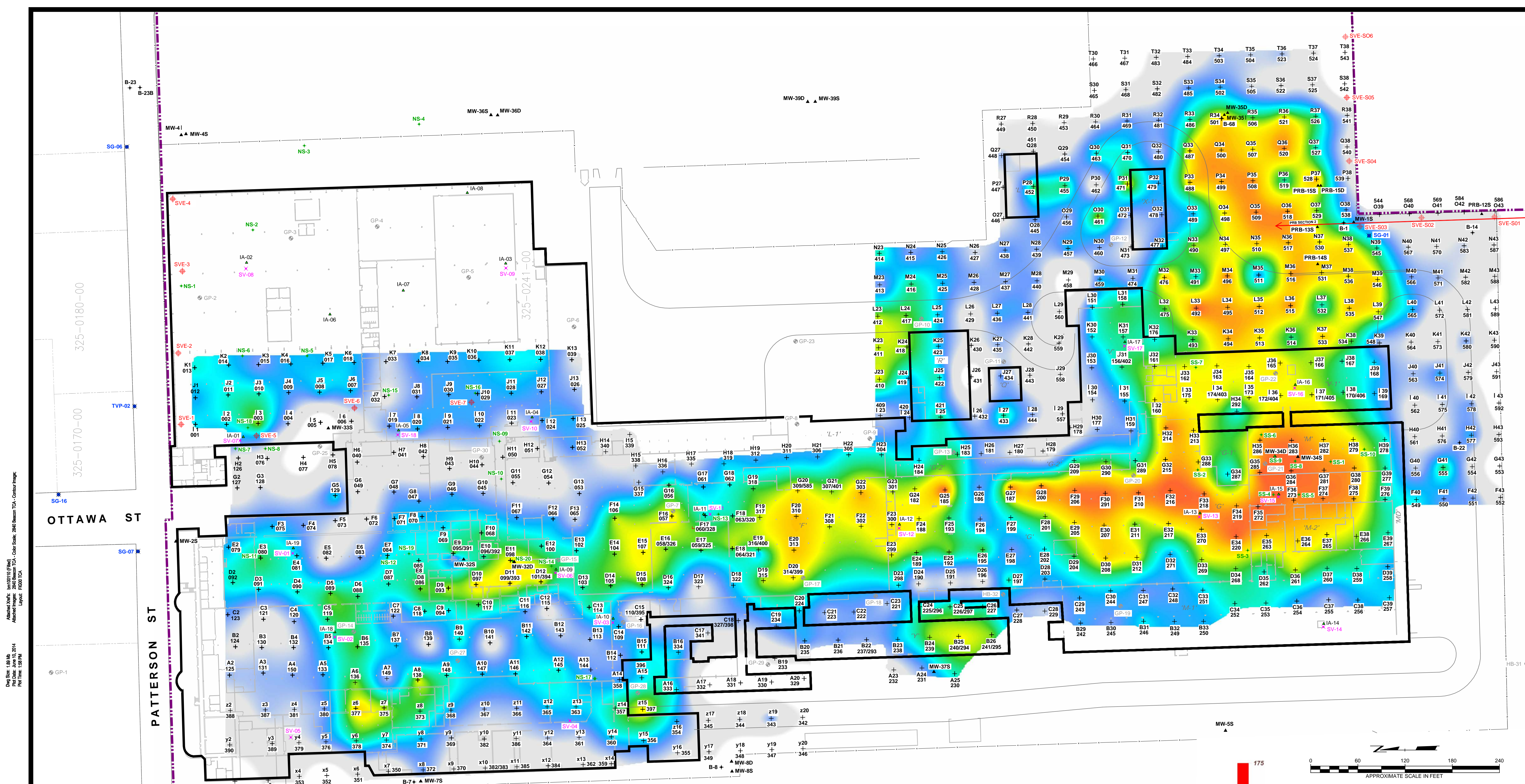
NOTES

1. PASSIVE SOIL GAS SURVEY COMPLETED IN PHASES:
 - SAMPLE LOCATIONS 001 THROUGH 150 COMPLETED JUNE-JULY 2010.
 - SAMPLE LOCATIONS 151 THROUGH 292 COMPLETED JULY 2013.
 - SAMPLE LOCATIONS 293 THROUGH 341 COMPLETED SEPTEMBER 2013.
 - SAMPLE LOCATIONS 342 THROUGH 593 COMPLETED APRIL 2014.



NO.	BY	DATE	REVISION	APPD.
FORMER TECUMSEH PRODUCTS SITE TECUMSEH, MICHIGAN				
PASSIVE SOIL GAS SURVEY LOCATIONS TCE DISTRIBUTION MAP				
DRAWN BY: DGS		SCALE: AS INDICATED		PROJ. NO.: 203342.0001.04
CHECKED BY: SEM		DATE PRINTED: JUNE 2014		FILE NO.: 203342.0001.04.TCE.dwg
APPROVED BY: GC		FIGURE 2		
1540 Eisenhower Place Ann Arbor, MI 48108 Phone: 734.971.7080 Fax: 734.971.9022				





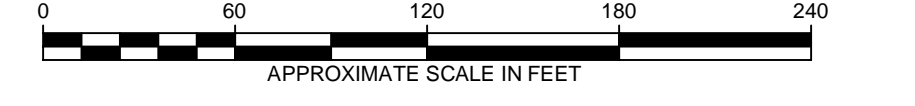
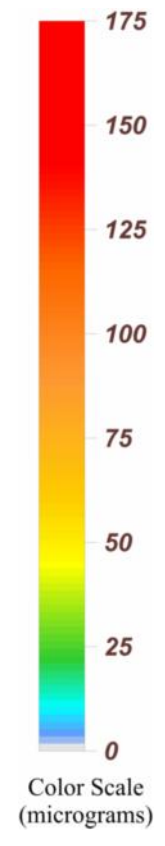
Drawn: J. J. (TTCI) Technical Products, Inc. 10/10/10
 Project Name: Former Tecumseh Products Site, Tecumseh, Michigan
 Date: June 10, 2014
 Scale: 1" = 150 Feet
 Project No.: 203342.0001.04.TCA.dwg
 Author: J. J. (TTCI) Technical Products, Inc. 10/10/10
 Plot Date: June 10, 2014
 Plot Time: 1:58 PM
 Plotter: PLOT01.TGA
 Job No.: 203342.0001.04.TCA.dwg
 Owner: BTL, LLC
 Client: DVAH
 Project No.: 203342.0001.04.TCA.dwg
 Drawing No.: 0389893

LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- FENCE LINE
- PARCEL BOUNDARY
- PRB LOCATION
- B-6 + PERIMETER/OFF-SITE INVESTIGATION BORING LOCATION AND NUMBER
- MW-8D + MONITORING WELL LOCATION AND NUMBER
- NS/SS-10 + SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
- GP-23 + ATC PHASE II ESA BORING LOCATION AND NUMBER
- SVE-7 + SOIL VAPOR EXTRACTION WELL LOCATION AND NUMBER
- SG-01 + SOIL GAS SAMPLE LOCATION AND NUMBER
- B-8 + PERIMETER/OFF-SITE INVESTIGATION BORING LOCATION AND NUMBER
- IA-03 + INDOOR AIR SAMPLE LOCATION AND NUMBER
- J13 + PASSIVE SOIL GAS SURVEY SAMPLE LOCATION AND NUMBER
- G20 DUPLICATE SAMPLE LOCATION TO ASSESS TEMPORAL VARIABILITY
- SV-08 x SUB-SLAB SOIL GAS SAMPLE LOCATION AND NUMBER
- IA-03 + INDOOR AIR SAMPLE LOCATION AND NUMBER
- J13 + PASSIVE SOIL GAS SURVEY SAMPLE LOCATION AND NUMBER
- G20 DUPLICATE SAMPLE LOCATION TO ASSESS TEMPORAL VARIABILITY

NOTES

- PASSIVE SOIL GAS SURVEY COMPLETED IN PHASES:
 - SAMPLE LOCATIONS 001 THROUGH 150 COMPLETED JUNE-JULY 2010.
 - SAMPLE LOCATIONS 151 THROUGH 292 COMPLETED JULY 2013.
 - SAMPLE LOCATIONS 293 THROUGH 341 COMPLETED SEPTEMBER 2013.
 - SAMPLE LOCATIONS 342 THROUGH 593 COMPLETED APRIL 2014.



NO.	BY	DATE	REVISION	APPD.
FORMER TECUMSEH PRODUCTS SITE				
TECUMSEH, MICHIGAN				
PASSIVE SOIL GAS SURVEY LOCATIONS				
TCA DISTRIBUTION MAP				
DRAWN BY: DCS		SCALE: AS INDICATED		PROJ. NO.: 203342.0001.04
CHECKED BY: SEM		DATE PRINTED: JUNE 2014		FILE NO.: 203342.0001.04.TCA.dwg
APPROVED BY: GC		DATE: JUNE 2014		FIGURE 4
1540 Eisenhower Place Ann Arbor, MI 48108 Phone: 734.971.7080 Fax: 734.971.9022				

Attachment 1

Analytical Report

**TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Attn: Ms. Stacy Metz****Beacon Project No. 2840**

Project Reference:	Former Tecumseh Products, Tecumseh, MI
Samplers Installed:	April 21 through 25, 2014
Samplers Retrieved:	April 29 and 30, 2014
Samples Received:	May 1, 2014
Analyses Completed:	May 7, 2014
Laboratory Data Issued:	May 9, 2014

EPA Method 8260C

All samples were successfully analyzed using thermal desorption-gas chromatography/mass spectrometry (TD-GC/MS) instrumentation to target a custom compound list following EPA Method 8260C. Laboratory results are reported in micrograms (μg) of specific compound per sample.

Laboratory QA/QC procedures included internal standards, surrogates, and blanks based on EPA Method 8260C. Analyses and reporting were in accordance with BEACON's Quality Assurance Project Plan.

Reporting limits

The reporting limit (RL) is 0.010 micrograms (μg) for vinyl chloride, 1,1-dichloroethene, trans-1,2-dichloroethene, cis-1,2-dichloroethene, trichloroethene, and tetrachloroethene; and 0.025 μg for the remaining individual compounds. **Table 1** provides survey results in micrograms per sampler by sample-point number and compound name. For the six (6) compounds listed above, measurements below the limit of quantitation (0.010 μg) but above the limit of detection (0.005 μg) are flagged with a "J." The RLs represent a baseline above which results exceed laboratory-determined limits of precision and accuracy. Any field sample measurements above the upper calibration standard are estimated; however, these values are reported without qualifiers because all reported measurements are relative to each other and are appropriate to meet the survey objectives of locating source areas and vapor intrusion pathways and defining the lateral extent of contamination.

Calibration Verification

The continuing calibration verification (CCV) values for the calibration check compounds were all within $\pm 20\%$ of the true values as defined by the initial five-point calibration and met the requirements specified in Beacon Environmental's Quality Assurance Project Plan.

Method Blanks/Trip Blanks

Laboratory method blanks are run with each sample batch to identify contamination present in the laboratory. If contamination is detected on a method blank, measurements of identical compounds in that sample batch are flagged in the laboratory report. The laboratory method blanks analyzed in connection with the present samples revealed no contamination.

The trip blank is a sampler prepared, transported, and analyzed with other samples but intentionally not exposed. Any target compounds identified on the trip blanks are reported in the laboratory data. The analyses of the trip blanks (labeled Trip-1 through Trip-8 in **Table 1**) reported none of the targeted compounds.

Passive Soil-Gas Survey Notes

When sample locations are covered with or near the edge of an artificial surface (*e.g.*, asphalt or concrete), the concentrations of compounds in soil gas are often significantly higher than the concentrations would be if the surfacing were not present. Thus, a reading taken below or near an impermeable surface is much higher than it would be in the absence of such a cap. Therefore, the sample location conditions should be evaluated when comparing results between locations.

Survey findings are exclusive to this project and when the spatial relationships are compared with results of other BEACON Surveys it is necessary to incorporate survey and site information from both investigations (*e.g.*, depth to sources, soil types, porosity, soil moisture, presence of impervious surfacing, sample collection times). BEACON recommends the guidelines stated in **Attachment 1** to establish a relationship between reported soil-gas measurements and actual subsurface contaminant concentrations, which will indicate those measurements representing significant subsurface contamination.

BEACON's passive soil-gas samplers are prepared with two sets of adsorbent cartridges for subsequent duplicate or confirmatory sample analysis. At TRC's request, duplicate analysis was performed for thirteen (13) field samples. The field sample duplicates were designated "dup" following the sample number. When comparing quantitative results, a duplicate correspondence should be considered when the relative percent difference (RPD) between the two samples is less than or equal to 100%. For the purpose of calculating correspondences, all non-detections should be assigned, as a baseline value, the RL for the specific contaminant. Based on these assumptions, a 98% correlation was found between the field sample duplicates and their base samples.

Project Details

Samplers were deployed April 21 through 25, 2014, and were retrieved April 29 and 30, 2014. **Attachment 2** describes standard field procedures. Individual deployment and retrieval times will be found in the Field Deployment Report (**Attachment 3**).

Two hundred fifty-two (252) field samples, thirteen (13) field sample duplicates, and eight (8) trip blanks were received by BEACON on May 1, 2014. Adsorbent cartridges from the passive samplers were thermally desorbed, then analyzed using gas chromatography/mass spectrometry (GC/MS) equipment, in accordance with EPA Method 8260C, as described in **Attachment 4**. BEACON's laboratory analyzed each sample for the targeted compounds; analyses were completed on May 7, 2014. Following a laboratory review, results were provided to TRC on May 9, 2014. The Chain-of-Custody form, which was shipped with the samples for this survey, is supplied as **Attachment 5**.

BEACON samples 400 dup and 519 included high measurements of non-targeted compounds that masked the quantifying ions of the internal standard compounds (Chlorobenzene- d_5 and/or 1,4-Dichlorobenzene- d_4). A manual integration was performed on the quantification ions for these internal standards to ensure that data quality objectives were met, which is in accordance with BEACON's QA/QC program. Internal standards on samples 426 and 552 dup were outside of the acceptance criteria; those samples could not be re-analyzed because samples 426 and 552 were field sample duplicates and the second set of adsorbent cartridges were already analyzed. All data reported for these samples are reported with high confidence.

Sample locations are shown on **Figure 1**. The following table lists frequency of detections based on the number of field samples analyzed in the April 2014 investigation, the reporting limit, and the maximum value for each mapped compound. The table also includes the transformation and interpolation method for the compound distribution maps provided. The figures include results from earlier PSG investigations (Beacon Project 2333, report issued August 26, 2010; and Beacon Project 2704, report issued February 4, 2014) at this site, as well as the investigation in April 2014 (the subject of this report).

Figure No.	2	3	4
Compound	1,1,1-Trichloroethane	Trichloroethene	Trichloroethene and breakdown products
Frequency	236	252	252
Reporting Limit (micrograms)	0.025	0.010	0.010
Max Value (nanograms)	142.445	155.344	163.524
Transformation Method	Log	Log	Log
Interpolation Method	Kriging	Kriging	Kriging

Attachments:

- 1- Applying Results From Passive Soil-Gas Surveys
- 2- Field Procedures
- 3- Field Deployment Report
- 4- Laboratory Procedures
- 5- Chain-of-Custody Form

ALL DATA MEET REQUIREMENTS AS SPECIFIED IN THE BEACON ENVIRONMENTAL SERVICES, INC. QUALITY ASSURANCE PROJECT PLAN AND THE RESULTS RELATE ONLY TO THE SAMPLES REPORTED. BEACON ENVIRONMENTAL SERVICES IS ACCREDITED TO ISO 17025:2005, AND THE WORK PERFORMED WAS IN ACCORDANCE WITH ISO 17025 REQUIREMENTS, WITH THE EXCEPTION THAT SAMPLES WERE ANALYZED WITHIN A 24-HOUR TUNE WINDOW AND FREON 113 IS NOT INCLUDED IN BEACON'S SCOPE OF ACCREDITATION. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY. RELEASE OF THE DATA CONTAINED IN THIS HARDCOPY DATA PACKAGE HAS BEEN AUTHORIZED BY THE LABORATORY DIRECTOR OR HIS SIGNEE, AS VERIFIED BY THE FOLLOWING SIGNATURES:



Steven C. Thornley
 Laboratory Director



Patti J. Riggs
 Quality Manager

Attachments

Table 1

**Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA**

Analysis by EPA Method 8260C

	Client Sample ID:	mb140502s	Trip-1	Trip-2	Trip-3	Trip-4	Trip-5
	Project Number:		2840	2840	2840	2840	2840
	Lab File ID:	S14050203	S14050205	S14050206	S14050207	S14050208	S14050209
	Received Date:		5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
	Analysis Date:	5/2/2014	5/2/2014	5/2/2014	5/2/2014	5/2/2014	5/2/2014
	Analysis Time:	10:55	11:38	12:00	12:22	12:43	13:05
	Matrix:						
	Units:	ug	ug	ug	ug	ug	ug
COMPOUNDS							
Vinyl Chloride		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Trichlorofluoromethane (Freon 11)		<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Methylene Chloride		<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2-Trichlorotrifluoroethane (Fr.113)		<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,1-Dichloroethane		<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
cis-1,2-Dichloroethene		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Chloroform		<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane		<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane		<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Carbon Tetrachloride		<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,1,2-Trichloroethane		<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,1,1,2-Tetrachloroethane		<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene		<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane		<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	Trip-6	Trip-7	Trip-8	342	343	344
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	S14050210	S14050211	S14050212	S14050213	S14050214	S14050215
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/2/2014	5/2/2014	5/2/2014	5/2/2014	5/2/2014	5/2/2014
Analysis Time:	13:26	13:47	14:09	14:31	14:54	15:16
Matrix:				Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug
COMPOUNDS						
Vinyl Chloride	<0.010	<0.010	<0.010	0.053	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	<0.010	<0.010	<0.010	0.168	0.281	0.179
Methylene Chloride	<0.025	<0.025	<0.025	0.151	0.119	0.322
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	<0.010	<0.010	0.161	0.009 J	<0.010
1,1-Dichloroethane	<0.025	<0.025	<0.025	0.066	0.052	<0.025
cis-1,2-Dichloroethene	<0.010	<0.010	<0.010	0.871	0.041	0.006 J
Chloroform	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	<0.025	<0.025	<0.025	0.028	1.440	0.454
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	<0.010	<0.010	<0.010	1.308	5.010	1.063
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	<0.010	<0.010	<0.010	0.034	0.043	0.025
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	345	346	347	348	349	350
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	S14050216	S14050217	S14050218	S14050219	S14050220	S14050221
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/2/2014	5/2/2014	5/2/2014	5/2/2014	5/2/2014	5/2/2014
Analysis Time:	15:39	16:01	16:23	16:45	17:07	17:28
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	0.012	<0.010	<0.010	<0.010	0.015	0.005 J
Methylene Chloride	0.211	0.044	0.070	0.072	0.225	0.121
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,1-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
cis-1,2-Dichloroethene	0.010	<0.010	<0.010	<0.010	0.023	<0.010
Chloroform	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	0.182	<0.025	<0.025	<0.025	0.067	0.032
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	0.461	0.014	0.015	0.259	0.356	0.324
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.107	0.01 J	0.009 J	0.011	0.096	0.009 J
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	351	352	352 dup	353	354	355
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	S14050222	S14050223	S14050224	C14050509	S14050226	S14050227
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/2/2014	5/2/2014	5/2/2014	5/5/2014	5/2/2014	5/2/2014
Analysis Time:	17:49	18:11	18:32	10:53	19:15	19:36
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	0.057	<0.010	<0.010	<0.010	<0.010	0.026
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	0.009 J	<0.010	<0.010	0.011	0.223	0.028
Methylene Chloride	0.058	0.045	0.055	0.266	0.110	0.223
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	0.008 J	<0.010	<0.010	<0.010	<0.010	<0.010
1,1-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	0.117
cis-1,2-Dichloroethene	0.052	<0.010	<0.010	<0.010	<0.010	0.021
Chloroform	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	0.068	<0.025	<0.025	0.039	2.382	0.263
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	2.184	0.218	0.203	0.098	1.072	0.598
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.203	0.017	0.021	0.011	0.092	0.115
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
 2203A Commerce Road, Suite 1
 Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	356	356 dup	357	358	359	360
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	S14050228	S14050229	S14050230	S14050231	S14050232	C14050607
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/2/2014	5/2/2014	5/2/2014	5/2/2014	5/2/2014	5/6/2014
Analysis Time:	19:58	20:19	20:40	21:02	21:23	12:27
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	<0.010	0.013	0.009 J	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	0.549
1,1-Dichloroethene	1.241	0.578	2.845	0.219	0.012	0.992
Methylene Chloride	0.208	0.234	0.111	0.072	<0.025	0.087
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	<0.010	0.014	0.124	<0.010	0.005 J
1,1-Dichloroethane	0.033	0.042	0.512	0.180	<0.025	0.026
cis-1,2-Dichloroethene	0.006 J	0.009 J	0.084	1.404	0.040	0.009 J
Chloroform	<0.025	<0.025	0.029	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	4.414	6.616	16.205	1.890	0.180	5.328
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	2.867	4.138	14.866	5.725	0.629	9.883
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	1.141	2.748	2.214	0.240	0.047	0.811
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
 2203A Commerce Road, Suite 1
 Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	361	362	363	364	365	366
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	S14050234	C14050511	S14050236	S14050237	S14050238	C14050512
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/2/2014	5/5/2014	5/2/2014	5/2/2014	5/2/2014	5/5/2014
Analysis Time:	22:07	11:37	22:50	23:12	23:33	11:59
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	<0.010	0.087	<0.010	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	0.363	<0.025	<0.025	<0.025	0.683
1,1-Dichloroethene	0.262	0.014	2.433	0.113	0.503	0.116
Methylene Chloride	0.064	0.109	0.106	0.158	<0.025	0.454
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,1-Dichloroethane	<0.025	0.036	0.142	0.039	<0.025	<0.025
cis-1,2-Dichloroethene	<0.010	<0.010	0.011	<0.010	<0.010	<0.010
Chloroform	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	0.438	0.168	4.772	0.530	4.393	0.796
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	0.948	0.026	9.674	0.717	13.536	2.154
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.060	0.007 J	0.186	0.021	0.098	0.007 J
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Results in micrograms (ug). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	367	368	369	370	371	372
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050513	S14050241	S14050242	C14050514	S14050244	S14050245
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/5/2014	5/3/2014	5/3/2014	5/5/2014	5/3/2014	5/3/2014
Analysis Time:	12:25	0:37	0:59	12:48	1:43	2:05
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	1.150	<0.025	<0.025	0.278	<0.025	<0.025
1,1-Dichloroethene	0.094	0.391	0.077	0.012	0.497	0.131
Methylene Chloride	0.218	0.067	<0.025	0.186	<0.025	0.165
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,1-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	0.026
cis-1,2-Dichloroethene	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Chloroform	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	0.665	2.874	0.400	0.088	3.525	1.591
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	1.470	0.626	0.047	0.025	0.043	0.083
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.006 J	0.042	0.01 J	0.009 J	0.013	0.014
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
 2203A Commerce Road, Suite 1
 Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	372 dup	373	374	375	376	377
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	S14050246	S14050247	S14050248	S14050249	S14050250	C14050515
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/5/2014
Analysis Time:	2:26	2:47	3:09	3:30	3:51	13:10
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	0.012	0.015	<0.010	<0.010	0.012
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	0.078
1,1-Dichloroethene	0.181	2.345	0.549	0.784	0.061	1.289
Methylene Chloride	0.165	<0.025	0.189	0.347	0.163	0.134
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	<0.010	<0.010	<0.010	<0.010	0.012
1,1-Dichloroethane	0.029	0.045	0.028	0.076	<0.025	0.077
cis-1,2-Dichloroethene	<0.010	<0.010	<0.010	<0.010	<0.010	0.017
Chloroform	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	1.800	16.426	5.586	34.906	1.347	68.078
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	0.085	0.405	0.361	1.296	0.596	11.281
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.012	0.027	0.014	0.041	0.024	0.236
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	378	379	380	381	382	383
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	S14050252	S14050253	S14050254	S14050255	S14050256	C14050516
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/5/2014
Analysis Time:	4:35	4:57	5:19	5:41	6:02	13:32
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	0.208
1,1-Dichloroethene	1.552	0.019	0.061	0.034	0.026	<0.010
Methylene Chloride	0.027	<0.025	0.578	0.207	0.076	0.085
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	<0.010	<0.010	0.01 J	<0.010	<0.010
1,1-Dichloroethane	0.030	<0.025	0.029	<0.025	<0.025	<0.025
cis-1,2-Dichloroethene	<0.010	<0.010	<0.010	0.015	<0.010	<0.010
Chloroform	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	13.529	0.250	1.051	0.399	0.180	0.081
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	2.496	0.118	0.141	2.927	0.077	0.035
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.031	0.013	0.012	0.067	0.010	<0.010
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
 2203A Commerce Road, Suite 1
 Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	384	385	386	387	387 dup	mb140502c
Project Number:	2840	2840	2840	2840	2840	
Lab File ID:	C14050517	S14050259	S14050260	S14050261	S14050262	C14050203
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	
Analysis Date:	5/5/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/2/2014
Analysis Time:	13:55	7:07	7:29	7:51	8:14	14:01
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	0.153	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	<0.010	<0.010	<0.010	0.065	0.025	<0.010
Methylene Chloride	1.260	0.097	0.625	0.669	0.527	<0.025
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,1-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
cis-1,2-Dichloroethene	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Chloroform	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	0.040	0.074	0.294	0.677	0.698	<0.025
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	0.006 J	0.721	0.179	4.365	4.054	<0.010
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	<0.010	0.009 J	0.013	0.101	0.084	<0.010
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Results in micrograms (ug). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	388	389	390	391	392	393
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050205	C14050206	C14050207	C14050208	C14050209	C14050210
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/2/2014	5/2/2014	5/2/2014	5/2/2014	5/2/2014	5/2/2014
Analysis Time:	14:46	15:09	15:31	15:53	16:15	16:37
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	<0.010	<0.010	<0.010	0.036	0.01 J
Trichlorofluoromethane (Freon 11)	0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	0.010	0.011	<0.010	0.040	1.295	0.181
Methylene Chloride	0.226	0.190	0.028	0.113	0.346	0.147
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	0.033	<0.010	<0.010	0.045	0.254	0.023
1,1-Dichloroethane	<0.025	<0.025	<0.025	0.031	0.604	0.060
cis-1,2-Dichloroethene	0.006 J	<0.010	<0.010	0.369	3.661	0.227
Chloroform	<0.025	<0.025	<0.025	0.026	0.293	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	0.088	0.155	0.062	0.860	67.627	8.176
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	2.872	0.068	0.389	20.312	99.792	27.425
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	0.397	0.056
Tetrachloroethene	0.127	0.007 J	0.089	0.081	0.604	0.154
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
 2203A Commerce Road, Suite 1
 Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	394	395	396	397	398	399
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050211	C14050212	C14050213	C14050214	C14050215	C14050216
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/2/2014	5/2/2014	5/2/2014	5/2/2014	5/2/2014	5/2/2014
Analysis Time:	17:00	17:22	17:45	18:07	18:30	18:52
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	0.113	0.105	0.075	0.018	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	0.254	<0.025	0.040	0.354	0.116
1,1-Dichloroethene	0.237	0.050	0.224	0.495	0.096	0.295
Methylene Chloride	0.162	0.328	0.156	0.239	0.545	0.218
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	0.018	1.041	8.294	0.293	0.298	0.015
1,1-Dichloroethane	0.037	0.067	0.726	1.059	0.036	0.034
cis-1,2-Dichloroethene	0.095	13.441	30.655	2.679	1.475	0.013
Chloroform	0.031	<0.025	0.037	<0.025	0.121	0.126
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	3.880	0.407	4.797	53.671	1.282	56.213
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	11.028	17.631	86.702	9.790	98.482	47.832
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.035	0.022	1.954	1.020	14.264	0.078
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
 2203A Commerce Road, Suite 1
 Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	400	400 dup	401	402	403	404
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050217	C14050218	C14050219	C14050220	C14050221	C14050222
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/2/2014	5/2/2014	5/2/2014	5/2/2014	5/2/2014	5/2/2014
Analysis Time:	19:14	19:37	19:59	20:21	20:43	21:06
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	<0.010	0.010	8.729	0.065	0.028
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	0.026	0.105	<0.025	<0.025
1,1-Dichloroethene	0.110	0.126	0.437	2.168	1.956	2.783
Methylene Chloride	0.368	0.378	0.424	0.685	0.277	0.481
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	0.057	0.050	0.064	0.898	0.151	1.306
1,1-Dichloroethane	0.038	0.109	1.739	0.251	0.284	1.275
cis-1,2-Dichloroethene	0.324	0.344	0.121	19.212	0.503	5.073
Chloroform	0.061	0.156	0.097	0.124	0.040	0.153
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	3.100	3.287	27.602	17.313	50.745	94.220
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	63.017	83.574	28.127	25.249	32.495	75.379
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	0.028
Tetrachloroethene	0.163	0.197	0.056	0.011	0.056	0.212
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	405	406	406 dup	407	408	409
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050223	C14050224	C14050225	C14050226	C14050227	C14050228
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/2/2014	5/2/2014	5/2/2014	5/2/2014	5/2/2014	5/2/2014
Analysis Time:	21:28	21:50	22:13	22:36	22:59	23:21
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	0.011	0.014	0.093	<0.010	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	0.067
1,1-Dichloroethene	0.525	0.704	1.815	0.006 J	<0.010	<0.010
Methylene Chloride	0.153	0.149	0.131	0.026	0.084	0.176
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	0.216	0.194	0.208	<0.010	<0.010	<0.010
1,1-Dichloroethane	0.386	0.130	0.167	<0.025	<0.025	<0.025
cis-1,2-Dichloroethene	0.504	1.054	1.079	<0.010	<0.010	0.012
Chloroform	0.094	0.085	0.065	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	52.020	21.459	13.317	0.062	<0.025	0.410
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	51.126	43.620	44.325	0.094	0.049	0.290
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.067	0.071	0.045	0.015	0.012	<0.010
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
 2203A Commerce Road, Suite 1
 Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	410	411	412	413	414	415
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050229	C14050230	C14050231	C14050232	C14050233	C14050234
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/2/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014
Analysis Time:	23:43	0:06	0:28	0:50	1:12	1:35
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	0.480	0.085	<0.010	<0.010	0.292	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	0.059	0.036	<0.025	0.031	<0.025
1,1-Dichloroethene	1.110	0.805	0.537	0.066	1.402	0.007 J
Methylene Chloride	0.459	0.484	0.261	0.059	0.053	0.095
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	0.077	0.039	0.059	0.005 J	0.047	0.007 J
1,1-Dichloroethane	0.210	0.348	0.401	0.027	0.336	0.032
cis-1,2-Dichloroethene	1.732	0.384	0.754	0.033	0.524	0.048
Chloroform	0.026	0.026	0.068	<0.025	0.031	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	44.543	34.958	35.659	0.833	11.793	0.990
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	38.298	12.741	32.113	1.572	34.041	0.276
1,1,2-Trichloroethane	0.048	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.270	0.025	0.016	<0.010	<0.010	<0.010
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
 2203A Commerce Road, Suite 1
 Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	416	417	418	419	420	421
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050235	C14050236	C14050237	C14050238	C14050239	C14050240
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014
Analysis Time:	1:58	2:20	2:42	3:04	3:27	3:49
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	0.062	0.007 J	<0.010	<0.010	0.039	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	0.030	0.181	0.030	0.038
1,1-Dichloroethene	1.069	0.563	0.407	0.020	0.183	0.434
Methylene Chloride	0.291	0.163	0.355	0.088	0.432	1.049
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	0.097	0.036	0.031	0.088	0.021	0.044
1,1-Dichloroethane	0.198	0.268	0.064	0.025	<0.025	0.050
cis-1,2-Dichloroethene	1.115	0.527	0.144	0.528	0.114	0.419
Chloroform	<0.025	0.041	<0.025	<0.025	<0.025	0.050
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	16.323	24.828	28.101	3.621	1.387	14.814
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	12.878	19.887	13.729	2.386	9.811	54.697
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.007 J	0.014	0.034	0.008 J	0.369	0.325
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
 2203A Commerce Road, Suite 1
 Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	422	423	424	425	426	426 dup
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050241	C14050242	C14050243	C14050244	C14050245	C14050246
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014
Analysis Time:	4:11	4:34	4:56	5:18	5:41	6:03
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	0.102	<0.010	0.013	0.230	<0.010
Trichlorofluoromethane (Freon 11)	0.030	<0.025	<0.025	<0.025	0.040	0.028
1,1-Dichloroethene	0.221	0.489	0.133	0.146	5.113	0.055
Methylene Chloride	0.048	0.785	0.191	0.250	0.142	0.074
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	0.055	0.033	0.039	0.200	0.037	<0.010
1,1-Dichloroethane	0.088	0.114	0.068	0.157	0.071	0.073
cis-1,2-Dichloroethene	0.254	0.166	0.349	0.867	0.070	0.027
Chloroform	0.054	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	11.248	3.975	4.477	3.359	2.867	6.713
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	25.175	12.753	6.151	3.616	2.098	1.584
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.026	0.014	0.048	0.071	<0.010	<0.010
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	427	428	429	430	431	432
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050247	C14050248	C14050249	C14050250	C14050251	C14050518
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/5/2014
Analysis Time:	6:26	6:46	7:08	7:30	7:52	14:17
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	0.017	0.008 J	<0.010	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	0.060	<0.025	<0.025	0.027	<0.025	0.036
1,1-Dichloroethene	<0.010	0.112	0.068	<0.010	<0.010	0.041
Methylene Chloride	0.071	0.164	0.195	0.433	0.537	0.780
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	0.045	0.082	<0.010	<0.010	<0.010
1,1-Dichloroethane	0.054	0.398	0.030	<0.025	<0.025	<0.025
cis-1,2-Dichloroethene	<0.010	0.269	0.528	<0.010	<0.010	<0.010
Chloroform	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	0.351	1.149	0.082	0.213	<0.025	0.373
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	0.017	0.606	2.437	0.131	0.027	0.576
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	<0.010	0.006 J	0.125	<0.010	<0.010	<0.010
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	433	434	435	436	436 dup	437
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050253	C14050254	C14050255	C14050256	C14050257	C14050258
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014
Analysis Time:	8:36	8:59	9:22	9:44	10:06	10:28
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	0.012	<0.010	0.060	0.056	0.063	0.007 J
Trichlorofluoromethane (Freon 11)	0.145	0.030	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	0.377	0.092	0.256	0.476	0.257	0.042
Methylene Chloride	0.037	0.402	0.122	0.183	0.197	0.221
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	0.182	0.022	0.009 J	0.512	0.755	0.039
1,1-Dichloroethane	1.377	0.027	0.033	0.170	0.153	0.225
cis-1,2-Dichloroethene	0.285	0.011	0.026	4.617	6.082	0.169
Chloroform	0.073	0.039	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	15.189	1.814	0.856	2.289	3.753	0.891
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	3.234	5.840	1.647	7.172	10.999	1.453
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.006 J	<0.010	<0.010	0.061	0.114	0.006 J
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	438	439	440	441	mb140503c	442
Project Number:	2840	2840	2840	2840		2840
Lab File ID:	C14050259	C14050260	C14050261	C14050262	C14050303	C14050305
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014		5/1/2014
Analysis Date:	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014
Analysis Time:	10:51	11:13	11:35	11:58	16:02	16:47
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas		Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	<0.010	0.014	0.007 J	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	0.039	0.061	0.096	0.065	<0.010	<0.010
Methylene Chloride	0.062	0.079	0.140	0.131	<0.025	0.070
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	0.011	0.263	0.012	<0.010	<0.010
1,1-Dichloroethane	<0.025	0.049	0.156	0.055	<0.025	<0.025
cis-1,2-Dichloroethene	0.005 J	0.030	1.301	0.056	<0.010	0.037
Chloroform	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	1.849	0.846	1.269	1.609	<0.025	0.089
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	0.499	5.025	4.080	2.142	<0.010	0.145
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	<0.010	0.013	0.039	0.006 J	<0.010	<0.010
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	443	444	445	446	447	448
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050306	C14050307	C14050308	C14050309	C14050310	C14050311
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014
Analysis Time:	17:09	17:32	17:55	18:17	18:40	19:00
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	<0.010	<0.010	<0.010	0.009 J	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	0.063	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	<0.010	0.112	0.016	<0.010	0.066	0.047
Methylene Chloride	0.088	0.129	0.050	0.079	0.037	0.049
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	0.007 J	<0.010	<0.010	<0.010	0.005 J
1,1-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
cis-1,2-Dichloroethene	<0.010	0.029	<0.010	<0.010	0.014	0.062
Chloroform	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	0.053	0.904	1.612	0.234	0.111	0.857
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	0.204	1.363	0.790	0.171	0.715	9.665
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	<0.010	0.009 J	0.027	0.006 J	0.008 J	0.044
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	449	450	451	452	453	454
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050312	C14050313	C14050314	C14050315	C14050316	C14050317
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014
Analysis Time:	19:22	19:44	20:06	20:29	20:51	21:14
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	<0.010	<0.010	0.014	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	<0.010	<0.010	<0.010	0.681	<0.010	0.053
Methylene Chloride	0.045	0.222	0.173	0.086	0.211	0.120
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	<0.010	0.011	0.047	<0.010	<0.010
1,1-Dichloroethane	<0.025	<0.025	<0.025	0.074	<0.025	<0.025
cis-1,2-Dichloroethene	<0.010	<0.010	0.110	0.127	<0.010	0.008 J
Chloroform	<0.025	<0.025	<0.025	0.044	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	0.028	0.043	0.038	20.997	0.028	0.285
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	0.163	0.074	0.091	49.412	0.129	3.653
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	<0.010	0.005 J	0.005 J	2.143	0.010	0.207
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	455	456	457	458	459	460
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050318	C14050319	C14050320	C14050321	C14050322	C14050323
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014
Analysis Time:	21:36	21:58	22:20	22:43	23:05	23:27
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	0.014	<0.010	0.019	<0.010	<0.010	0.068
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	0.039	<0.025
1,1-Dichloroethene	1.177	0.046	0.191	0.008 J	0.213	0.308
Methylene Chloride	0.440	0.292	0.073	0.372	0.065	0.113
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	0.149	0.017	0.035	0.029	0.052	0.027
1,1-Dichloroethane	0.105	0.044	0.116	<0.025	<0.025	0.060
cis-1,2-Dichloroethene	0.651	0.062	0.318	0.090	0.130	0.185
Chloroform	0.075	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	18.955	0.582	3.507	<0.025	3.458	0.942
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	89.746	3.288	6.133	0.726	18.303	2.360
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	1.136	0.012	0.026	<0.010	0.195	<0.010
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	461	462	463	464	465	466
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050324	C14050325	C14050326	C14050327	C14050328	C14050329
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/3/2014	5/4/2014	5/4/2014	5/4/2014	5/4/2014	5/4/2014
Analysis Time:	23:50	0:12	0:35	0:57	1:19	1:42
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	0.009 J	<0.010	<0.010	<0.010	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	1.072	<0.010	0.681	0.011	<0.010	<0.010
Methylene Chloride	0.111	0.777	0.107	0.093	0.058	0.794
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	0.153	0.027	0.221	0.006 J	<0.010	<0.010
1,1-Dichloroethane	0.250	<0.025	0.076	<0.025	<0.025	<0.025
cis-1,2-Dichloroethene	0.701	0.027	0.610	0.010	<0.010	<0.010
Chloroform	0.128	<0.025	0.077	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	39.603	0.068	9.021	0.403	<0.025	<0.025
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	70.183	0.583	66.541	5.575	0.190	0.027
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.076	<0.010	0.546	0.265	0.024	<0.010
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	466 dup	467	468	469	470	471
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050330	C14050331	C14050332	C14050333	C14050334	C14050335
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/4/2014	5/4/2014	5/4/2014	5/4/2014	5/4/2014	5/4/2014
Analysis Time:	2:04	2:29	2:51	3:14	3:36	3:58
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	<0.010	<0.010	0.019	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	<0.010	<0.010	<0.010	0.184	0.318	1.433
Methylene Chloride	0.724	0.459	0.068	0.080	0.040	0.070
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	<0.010	<0.010	0.120	0.057	0.224
1,1-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	0.089
cis-1,2-Dichloroethene	<0.010	<0.010	<0.010	0.382	0.099	0.606
Chloroform	<0.025	<0.025	<0.025	<0.025	<0.025	0.117
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	<0.025	<0.025	0.057	1.737	7.640	51.296
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	0.041	0.050	0.412	23.286	36.558	112.594
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.005 J	0.045	0.007 J	0.115	0.173	0.368
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
 2203A Commerce Road, Suite 1
 Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	472	473	474	475	476	477
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050336	C14050337	C14050338	C14050339	C14050340	C14050341
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/4/2014	5/4/2014	5/4/2014	5/4/2014	5/4/2014	5/4/2014
Analysis Time:	4:21	4:43	5:05	5:27	5:49	6:12
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	<0.010	<0.010	0.645	0.006 J	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	0.099	0.059	0.026	<0.025
1,1-Dichloroethene	0.051	0.015	0.025	5.989	2.084	0.213
Methylene Chloride	0.437	1.373	0.058	0.576	0.796	0.433
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	0.005 J	<0.010	0.015	0.018	0.027	0.007 J
1,1-Dichloroethane	<0.025	0.040	<0.025	0.483	0.345	0.059
cis-1,2-Dichloroethene	0.012	0.021	0.114	0.103	0.110	0.026
Chloroform	<0.025	<0.025	<0.025	0.027	0.120	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	0.702	0.196	0.691	21.867	82.850	4.329
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	1.112	1.177	1.680	12.349	22.612	1.238
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	<0.010	<0.010	0.045	0.042	0.015	0.016
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	478	479	480	481	482	483
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050342	C14050343	C14050344	C14050345	C14050346	C14050347
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/4/2014	5/4/2014	5/4/2014	5/4/2014	5/4/2014	5/4/2014
Analysis Time:	6:34	6:56	7:18	7:41	8:03	8:25
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	<0.010	<0.010	0.033	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	0.065	0.092	<0.010	0.164	0.013	0.010
Methylene Chloride	1.472	0.479	0.047	0.254	0.294	0.208
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	<0.010	<0.010	2.143	<0.010	<0.010
1,1-Dichloroethane	<0.025	<0.025	<0.025	0.175	<0.025	<0.025
cis-1,2-Dichloroethene	<0.010	<0.010	<0.010	10.741	0.019	<0.010
Chloroform	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	1.309	2.528	0.493	0.994	0.133	0.096
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	1.532	4.762	1.509	24.014	4.010	2.211
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	<0.010	0.007 J	<0.010	0.058	0.053	0.238
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
 2203A Commerce Road, Suite 1
 Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	483 dup	484	485	486	487	488
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050348	C14050349	C14050350	C14050351	C14050352	C14050353
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/4/2014	5/4/2014	5/4/2014	5/4/2014	5/4/2014	5/4/2014
Analysis Time:	8:47	9:09	9:32	9:54	10:16	10:38
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	<0.010	<0.010	0.033	0.036	0.015
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	<0.010	<0.010	0.127	1.271	3.295	1.498
Methylene Chloride	0.264	0.255	0.055	0.060	0.124	3.062
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	<0.010	0.006 J	0.018	0.040	0.054
1,1-Dichloroethane	<0.025	<0.025	<0.025	0.074	0.126	0.373
cis-1,2-Dichloroethene	<0.010	<0.010	0.042	0.064	0.130	0.356
Chloroform	<0.025	<0.025	<0.025	<0.025	0.035	0.070
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	0.105	0.076	1.849	11.289	61.030	74.412
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	2.376	0.053	2.519	11.054	25.874	23.789
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.207	0.006 J	0.043	0.026	0.024	0.014
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
 2203A Commerce Road, Suite 1
 Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	489	490	491	492	493	494
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050354	C14050355	C14050356	C14050357	C14050358	C14050359
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/4/2014	5/4/2014	5/4/2014	5/4/2014	5/4/2014	5/4/2014
Analysis Time:	11:01	11:24	11:46	12:08	12:30	12:53
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	0.006 J	0.012	0.020	<0.010	0.016
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	0.031	0.045	0.045
1,1-Dichloroethene	0.064	0.641	0.583	6.155	0.288	4.831
Methylene Chloride	0.398	0.402	0.046	0.102	0.545	0.169
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	0.016	0.022	0.055	0.119	0.007 J	0.045
1,1-Dichloroethane	0.150	0.276	0.128	0.354	0.030	0.190
cis-1,2-Dichloroethene	0.064	0.110	0.085	0.741	0.019	0.129
Chloroform	<0.025	0.067	<0.025	0.296	<0.025	0.073
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	3.273	31.984	7.025	142.445	16.678	89.786
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	1.848	7.358	4.775	90.123	5.985	39.767
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	0.027	<0.025	<0.025
Tetrachloroethene	<0.010	<0.010	0.005 J	0.033	<0.010	0.012
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	495	496	496 dup	mb140503s	497	498
Project Number:	2840	2840	2840		2840	2840
Lab File ID:	C14050360	C14050361	C14050362	S14050303	C14050519	S14050306
Received Date:	5/1/2014	5/1/2014	5/1/2014		5/1/2014	5/1/2014
Analysis Date:	5/4/2014	5/4/2014	5/4/2014	5/3/2014	5/5/2014	5/3/2014
Analysis Time:	13:15	13:37	13:59	17:49	14:40	18:57
Matrix:	Soil Gas	Soil Gas	Soil Gas		Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	0.011	0.008 J	0.015	<0.010	0.007 J	0.010
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	2.451	4.109	4.146	<0.010	1.626	1.970
Methylene Chloride	0.080	0.175	0.160	<0.025	0.071	<0.025
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	0.057	0.147	0.205	<0.010	0.034	0.042
1,1-Dichloroethane	0.053	0.468	0.275	<0.025	0.100	0.314
cis-1,2-Dichloroethene	0.186	0.713	0.841	<0.010	0.155	0.282
Chloroform	<0.025	0.260	0.148	<0.025	0.060	0.145
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	94.153	117.043	120.043	<0.025	43.266	51.380
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	31.507	74.519	79.838	<0.010	16.964	17.511
1,1,2-Trichloroethane	<0.025	<0.025	0.026	<0.025	<0.025	<0.025
Tetrachloroethene	0.007 J	0.019	0.034	<0.010	0.006 J	<0.010
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
 2203A Commerce Road, Suite 1
 Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	499	500	501	502	503	504
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	S14050307	S14050308	S14050309	S14050310	S14050311	S14050312
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014
Analysis Time:	19:18	19:41	20:03	20:24	20:46	21:08
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	0.008 J	0.006 J	<0.010	<0.010	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	5.227	2.812	1.981	0.030	0.006 J	<0.010
Methylene Chloride	<0.025	0.077	0.045	0.086	0.141	0.087
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	0.217	0.083	0.065	<0.010	<0.010	0.007 J
1,1-Dichloroethane	0.351	0.669	0.307	<0.025	<0.025	<0.025
cis-1,2-Dichloroethene	1.799	0.880	0.597	0.01 J	0.006 J	0.083
Chloroform	0.260	0.272	0.171	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	88.920	82.618	71.896	2.475	0.668	0.495
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	44.256	29.878	30.865	0.663	0.238	0.312
1,1,2-Trichloroethane	0.035	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.021	0.042	0.153	0.006 J	0.005 J	<0.010
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	505	506	507	508	509	510
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	S14050313	S14050314	S14050315	S14050316	S14050317	S14050318
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014	5/3/2014
Analysis Time:	21:29	21:51	22:13	22:35	22:57	23:19
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	0.022	0.006 J	0.120	0.007 J	0.008 J
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	0.006 J	4.011	1.539	12.037	4.284	2.828
Methylene Chloride	0.093	0.067	0.160	0.625	0.110	0.068
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	0.018	0.040	0.242	0.140	0.179
1,1-Dichloroethane	<0.025	0.088	0.239	1.699	1.077	0.187
cis-1,2-Dichloroethene	<0.010	0.168	0.320	2.498	1.166	0.921
Chloroform	<0.025	<0.025	0.068	0.650	0.482	0.111
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	0.352	23.163	51.397	106.191	113.546	71.155
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	0.163	14.218	17.438	53.868	45.046	39.308
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	<0.010	0.268	0.035	0.022	0.01 J	0.024
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	511	512	513	514	515	516
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	S14050319	S14050320	S14050321	S14050322	C14050520	S14050324
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/3/2014	5/4/2014	5/4/2014	5/4/2014	5/5/2014	5/4/2014
Analysis Time:	23:40	0:02	0:23	0:45	15:02	1:30
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	0.027	0.015	0.047	0.008 J	0.030
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	0.075	7.770	4.044	0.852	5.455	12.091
Methylene Chloride	0.033	0.057	0.091	0.181	0.039	0.249
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	0.009 J	0.267	0.048	0.097	0.338	0.816
1,1-Dichloroethane	0.058	0.258	0.348	0.143	0.175	1.439
cis-1,2-Dichloroethene	0.025	1.364	0.163	0.170	0.959	2.775
Chloroform	<0.025	0.262	0.070	<0.025	0.174	0.391
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	2.371	90.193	51.106	13.368	108.387	102.184
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	1.847	60.216	20.698	11.850	82.536	62.437
1,1,2-Trichloroethane	<0.025	0.042	<0.025	<0.025	0.035	<0.025
Tetrachloroethene	<0.010	0.071	0.009 J	0.012	0.107	0.062
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	517	518	519	mb140505c	520	521
Project Number:	2840	2840	2840		2840	2840
Lab File ID:	S14050325	S14050326	S14050327	C14050507	C14050521	C14050522
Received Date:	5/1/2014	5/1/2014	5/1/2014		5/1/2014	5/1/2014
Analysis Date:	5/4/2014	5/4/2014	5/4/2014	5/5/2014	5/5/2014	5/5/2014
Analysis Time:	1:52	2:14	2:36	10:07	15:25	15:47
Matrix:	Soil Gas	Soil Gas	Soil Gas		Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	0.014	0.018	0.115	<0.010	0.009 J	0.031
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	4.033	4.647	1.942	<0.010	2.715	1.637
Methylene Chloride	0.091	0.057	0.185	<0.025	0.174	0.170
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	0.576	0.424	0.017	<0.010	0.120	0.042
1,1-Dichloroethane	0.178	1.272	0.276	<0.025	0.286	0.072
cis-1,2-Dichloroethene	2.605	2.547	0.127	<0.010	1.144	0.260
Chloroform	0.169	0.558	<0.025	<0.025	0.165	0.057
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	83.870	106.123	11.365	<0.025	110.549	53.697
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	66.677	58.989	11.241	<0.010	78.908	51.434
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.250	0.126	0.009 J	<0.010	0.182	0.432
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	522	523	524	525	526	527
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050523	C14050524	C14050525	C14050526	C14050527	C14050528
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/5/2014	5/5/2014	5/5/2014	5/5/2014	5/5/2014	5/5/2014
Analysis Time:	16:09	16:32	16:54	17:16	17:38	18:01
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	0.023	<0.010	<0.010	0.009 J	0.046
Trichlorofluoromethane (Freon 11)	<0.025	0.248	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	0.014	0.200	<0.010	0.012	2.479	1.015
Methylene Chloride	0.546	1.217	1.041	0.086	0.107	0.169
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	0.085	0.006 J	<0.010	0.020	0.136
1,1-Dichloroethane	<0.025	0.104	<0.025	<0.025	0.039	0.116
cis-1,2-Dichloroethene	0.007 J	1.665	0.064	<0.010	0.118	0.803
Chloroform	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	0.129	0.746	0.050	0.135	16.314	9.911
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	0.251	9.949	0.720	0.566	19.031	6.934
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.009 J	0.011	0.007 J	0.012	0.104	0.030
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	528	529	530	531	532	533
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050529	C14050530	C14050531	C14050532	C14050533	C14050534
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/5/2014	5/5/2014	5/5/2014	5/5/2014	5/5/2014	5/5/2014
Analysis Time:	18:24	18:46	19:08	19:31	19:53	20:15
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	0.066	0.015	0.084	0.061	0.013	0.053
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	4.282	0.433	2.532	3.252	0.587	3.102
Methylene Chloride	0.384	0.295	0.243	1.067	0.395	0.140
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	0.148	0.064	0.188	1.138	0.030	0.822
1,1-Dichloroethane	0.481	0.160	0.323	1.085	0.042	0.146
cis-1,2-Dichloroethene	0.926	0.688	0.767	2.524	0.132	4.854
Chloroform	0.147	0.041	0.103	0.166	0.040	0.062
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	90.174	26.323	49.158	58.757	9.135	75.296
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	62.283	13.966	59.746	54.942	17.496	96.404
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.378	0.095	0.341	0.046	0.006 J	0.100
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	533 dup	534	535	536	537	538
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050535	C14050536	C14050537	C14050538	C14050539	C14050540
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/5/2014	5/5/2014	5/5/2014	5/5/2014	5/5/2014	5/5/2014
Analysis Time:	20:38	21:00	21:22	21:44	22:07	22:30
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	0.016	0.036	0.114	0.019	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	0.122	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	2.048	0.624	6.280	0.667	0.492	0.176
Methylene Chloride	0.151	0.324	0.081	0.445	0.625	1.012
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	0.791	4.525	0.281	0.084	0.070	0.028
1,1-Dichloroethane	0.158	0.643	0.174	0.218	0.221	0.033
cis-1,2-Dichloroethene	5.406	19.097	1.505	0.531	0.743	0.213
Chloroform	0.122	0.079	0.184	0.164	0.227	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	85.963	21.918	76.090	54.241	58.656	1.868
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	110.900	57.584	155.344	72.564	78.954	6.910
1,1,2-Trichloroethane	0.026	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.084	0.009 J	0.178	0.093	0.385	0.226
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
 2203A Commerce Road, Suite 1
 Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	539	540	541	542	543	544
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050541	C14050542	C14050543	C14050608	C14050545	C14050546
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/5/2014	5/5/2014	5/5/2014	5/6/2014	5/6/2014	5/6/2014
Analysis Time:	22:52	23:14	23:36	12:49	0:21	0:43
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	<0.010	<0.010	0.005 J	<0.010	<0.010	<0.010
Methylene Chloride	0.787	0.294	0.260	1.071	0.502	1.105
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
1,1-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
cis-1,2-Dichloroethene	<0.010	<0.010	0.010	<0.010	<0.010	<0.010
Chloroform	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	0.305	0.170	0.380	<0.025	<0.025	0.100
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	0.524	0.137	0.319	0.112	0.269	0.213
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.013	0.006 J	0.031	0.011	0.045	0.005 J
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	545	546	547	548	549	550
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050547	C14050548	C14050549	C14050550	C14050551	C14050552
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/6/2014	5/6/2014	5/6/2014	5/6/2014	5/6/2014	5/6/2014
Analysis Time:	1:06	1:29	1:52	2:14	2:37	2:59
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	0.057	0.010	0.013	0.039	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	0.253	<0.025	<0.025
1,1-Dichloroethene	0.881	0.819	0.830	0.375	0.159	0.032
Methylene Chloride	0.178	0.105	0.195	0.485	0.417	0.501
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	0.016	0.766	0.081	0.009 J	<0.010	<0.010
1,1-Dichloroethane	0.075	0.057	0.104	<0.025	0.036	<0.025
cis-1,2-Dichloroethene	0.134	2.882	0.629	0.042	0.026	0.008 J
Chloroform	0.043	0.098	0.163	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	13.250	58.185	43.466	0.495	6.168	1.404
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	33.930	144.336	117.976	5.992	8.611	1.751
1,1,2-Trichloroethane	<0.025	<0.025	0.028	<0.025	<0.025	<0.025
Tetrachloroethene	0.283	1.125	0.181	<0.010	0.029	0.008 J
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	551	552	552 dup	553	554	555
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050553	C14050554	C14050555	C14050609	C14050557	C14050558
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/6/2014	5/6/2014	5/6/2014	5/6/2014	5/6/2014	5/6/2014
Analysis Time:	3:21	3:43	4:05	13:12	4:50	5:12
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	<0.010	<0.010	<0.010	<0.010	0.017
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	0.030	<0.025	<0.025	0.031
1,1-Dichloroethene	0.048	0.017	0.022	<0.010	0.024	2.694
Methylene Chloride	0.479	0.412	0.857	0.356	0.301	0.224
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	<0.010	<0.010	<0.010	<0.010	0.020
1,1-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	0.188
cis-1,2-Dichloroethene	0.005 J	<0.010	<0.010	<0.010	<0.010	0.137
Chloroform	<0.025	<0.025	<0.025	<0.025	<0.025	0.059
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	1.248	0.085	0.222	<0.025	0.140	19.973
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	1.102	0.067	0.108	0.006 J	0.084	15.939
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	<0.010	<0.010	<0.010	<0.010	<0.010	0.020
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
 2203A Commerce Road, Suite 1
 Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	556	557	558	559	560	561
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050559	C14050610	C14050561	C14050562	C14050563	C14050564
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/6/2014	5/6/2014	5/6/2014	5/6/2014	5/6/2014	5/6/2014
Analysis Time:	5:35	13:34	6:19	6:42	7:04	7:26
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	0.061	0.061	0.046	0.060	<0.025
1,1-Dichloroethene	0.046	0.028	0.014	<0.010	<0.010	<0.010
Methylene Chloride	0.047	0.119	1.469	0.341	0.493	0.312
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	<0.010	<0.010	<0.010	0.014	<0.010
1,1-Dichloroethane	<0.025	0.035	0.077	<0.025	<0.025	<0.025
cis-1,2-Dichloroethene	<0.010	0.039	0.011	0.013	0.057	<0.010
Chloroform	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	0.374	0.151	0.250	0.032	0.055	0.159
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	0.775	0.465	0.279	0.260	0.135	0.313
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	<0.010	0.006 J	0.005 J	0.120	0.067	<0.010
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	562	563	mb140506c	564	565	566
Project Number:	2840	2840		2840	2840	2840
Lab File ID:	C14050611	C14050566	C14050605	C14050612	C14050613	C14050614
Received Date:	5/1/2014	5/1/2014		5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/6/2014	5/6/2014	5/6/2014	5/6/2014	5/6/2014	5/6/2014
Analysis Time:	13:56	8:11	11:42	14:18	14:40	15:02
Matrix:	Soil Gas	Soil Gas		Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	<0.010	<0.010	<0.010	0.009 J	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	0.013	0.091	<0.010	0.073	0.189	0.054
Methylene Chloride	0.066	0.176	<0.025	0.153	0.080	0.191
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	<0.010	<0.010	0.018	0.014	0.008 J
1,1-Dichloroethane	<0.025	<0.025	<0.025	<0.025	0.037	<0.025
cis-1,2-Dichloroethene	<0.010	0.019	<0.010	0.052	0.137	0.062
Chloroform	<0.025	<0.025	<0.025	<0.025	0.027	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	0.140	0.738	<0.025	0.240	3.507	1.234
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	1.312	13.733	<0.010	7.328	33.598	11.412
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	<0.010	0.044	<0.010	0.024	0.040	0.014
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	567	568	569	570	571	572
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050615	C14050616	C14050662	C14050618	C14050619	C14050620
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/6/2014	5/6/2014	5/7/2014	5/6/2014	5/6/2014	5/6/2014
Analysis Time:	15:25	15:47	9:27	17:06	17:28	17:51
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	0.006 J	<0.010	<0.010	<0.010	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	0.034	<0.025	<0.025
1,1-Dichloroethene	0.066	0.015	0.005 J	0.016	0.032	0.013
Methylene Chloride	0.249	0.437	0.377	0.095	0.051	0.115
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	<0.010	<0.010	<0.010	<0.010	0.029
1,1-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
cis-1,2-Dichloroethene	0.017	<0.010	0.015	<0.010	0.011	0.060
Chloroform	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	0.329	0.185	0.052	0.249	0.827	0.125
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	5.066	0.787	0.230	1.505	4.105	3.424
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.045	0.015	0.009 J	0.023	0.017	0.007 J
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

Beacon Environmental Services, Inc.
 2203A Commerce Road, Suite 1
 Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	573	574	575	576	577	578
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050621	C14050622	C14050623	C14050624	C14050625	C14050626
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/6/2014	5/6/2014	5/6/2014	5/6/2014	5/6/2014	5/6/2014
Analysis Time:	18:13	18:36	18:58	19:20	19:43	20:05
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	<0.010	0.156	0.024	<0.010	0.201	0.041
Methylene Chloride	0.429	0.045	0.358	0.319	0.465	0.106
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	0.005 J	<0.010	<0.010	<0.010	<0.010
1,1-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
cis-1,2-Dichloroethene	<0.010	0.044	<0.010	<0.010	0.006 J	<0.010
Chloroform	<0.025	0.026	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	0.035	2.912	0.367	0.204	2.771	1.344
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	0.549	44.179	1.064	0.190	2.193	3.696
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	<0.010	0.519	<0.010	<0.010	<0.010	0.016
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Results in micrograms (ug). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
 2203A Commerce Road, Suite 1
 Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	579	580	581	582	583	584
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050627	C14050628	C14050629	C14050630	C14050631	C14050632
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/6/2014	5/6/2014	5/6/2014	5/6/2014	5/6/2014	5/6/2014
Analysis Time:	20:28	20:51	21:13	21:35	21:57	22:20
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	0.024	<0.010	<0.010	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	0.007 J	0.247	0.010	0.068	0.083	0.006 J
Methylene Chloride	0.369	0.142	0.134	0.095	0.128	0.126
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	0.008 J	<0.010	<0.010	<0.010	<0.010
1,1-Dichloroethane	<0.025	0.032	<0.025	<0.025	<0.025	<0.025
cis-1,2-Dichloroethene	0.008 J	0.054	<0.010	0.044	0.008 J	<0.010
Chloroform	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	0.045	1.205	0.244	0.258	0.454	0.200
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	0.189	20.823	3.662	6.455	6.259	0.308
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	<0.010	0.670	0.040	0.100	0.130	0.020
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Results in micrograms (ug). J = Values below limit of quantitation (LOQ) but above limit of detection (LOD). B = Detected in method blank.

Table 1

Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	585	586	587	588	589	590
Project Number:	2840	2840	2840	2840	2840	2840
Lab File ID:	C14050633	C14050634	C14050635	C14050636	C14050637	C14050638
Received Date:	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/6/2014	5/6/2014	5/6/2014	5/6/2014	5/7/2014	5/7/2014
Analysis Time:	22:42	23:04	23:26	23:51	0:14	0:36
Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug	ug	ug	ug

COMPOUNDS

Vinyl Chloride	0.020	<0.010	<0.010	<0.010	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	0.070	<0.025	<0.025	<0.025	<0.025	<0.025
1,1-Dichloroethene	0.330	<0.010	<0.010	0.013	<0.010	<0.010
Methylene Chloride	0.235	0.163	0.194	0.081	0.655	0.557
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	0.144	<0.010	<0.010	<0.010	<0.010	<0.010
1,1-Dichloroethane	9.609	<0.025	<0.025	<0.025	<0.025	<0.025
cis-1,2-Dichloroethene	0.522	<0.010	<0.010	<0.010	<0.010	<0.010
Chloroform	0.189	<0.025	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	50.093	0.042	0.025	0.097	<0.025	0.037
Carbon Tetrachloride	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trichloroethene	60.829	0.082	0.320	3.412	0.092	0.882
1,1,2-Trichloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Tetrachloroethene	0.011	<0.010	0.008 J	0.125	0.006 J	0.056
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025

Table 1

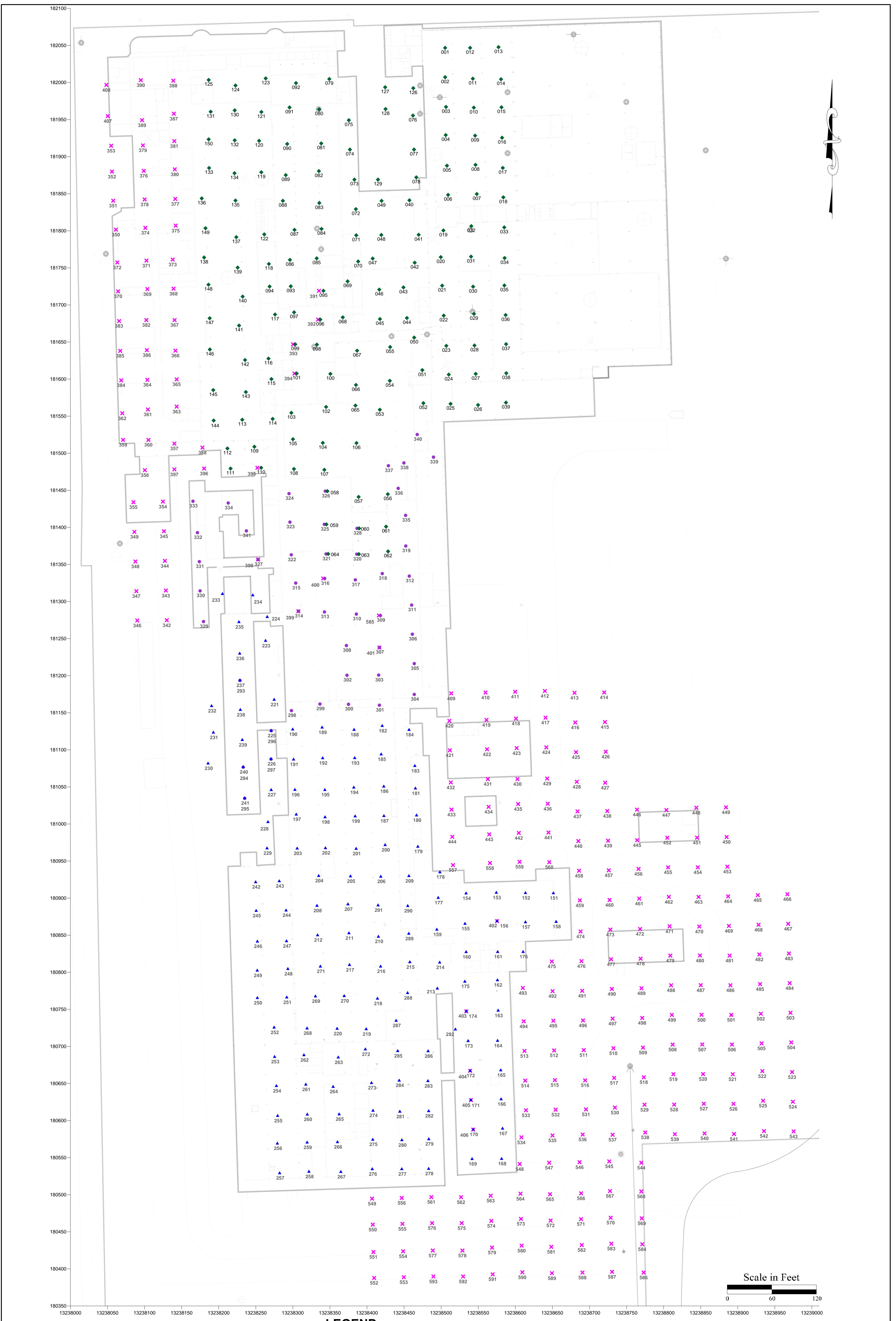
Beacon Environmental Services, Inc.
2203A Commerce Road, Suite 1
Forest Hill, MD 21050 USA

Analysis by EPA Method 8260C

Client Sample ID:	591	592	593
Project Number:	2840	2840	2840
Lab File ID:	C14050639	C14050640	C14050641
Received Date:	5/1/2014	5/1/2014	5/1/2014
Analysis Date:	5/7/2014	5/7/2014	5/7/2014
Analysis Time:	0:58	1:20	1:43
Matrix:	Soil Gas	Soil Gas	Soil Gas
Units:	ug	ug	ug

COMPOUNDS

Vinyl Chloride	<0.010	<0.010	<0.010
Trichlorofluoromethane (Freon 11)	<0.025	<0.025	<0.025
1,1-Dichloroethene	<0.010	<0.010	<0.010
Methylene Chloride	0.592	0.254	0.150
1,1,2-Trichlorotrifluoroethane (Fr.113)	<0.025	<0.025	<0.025
trans-1,2-Dichloroethene	<0.010	<0.010	<0.010
1,1-Dichloroethane	<0.025	<0.025	<0.025
cis-1,2-Dichloroethene	<0.010	<0.010	<0.010
Chloroform	<0.025	<0.025	<0.025
1,2-Dichloroethane	<0.025	<0.025	<0.025
1,1,1-Trichloroethane	<0.025	<0.025	0.035
Carbon Tetrachloride	<0.025	<0.025	<0.025
Trichloroethene	0.227	0.033	0.011
1,1,2-Trichloroethane	<0.025	<0.025	<0.025
Tetrachloroethene	0.006 J	<0.010	<0.010
1,1,1,2-Tetrachloroethane	<0.025	<0.025	<0.025
Chlorobenzene	<0.025	<0.025	<0.025
1,1,2,2-Tetrachloroethane	<0.025	<0.025	<0.025



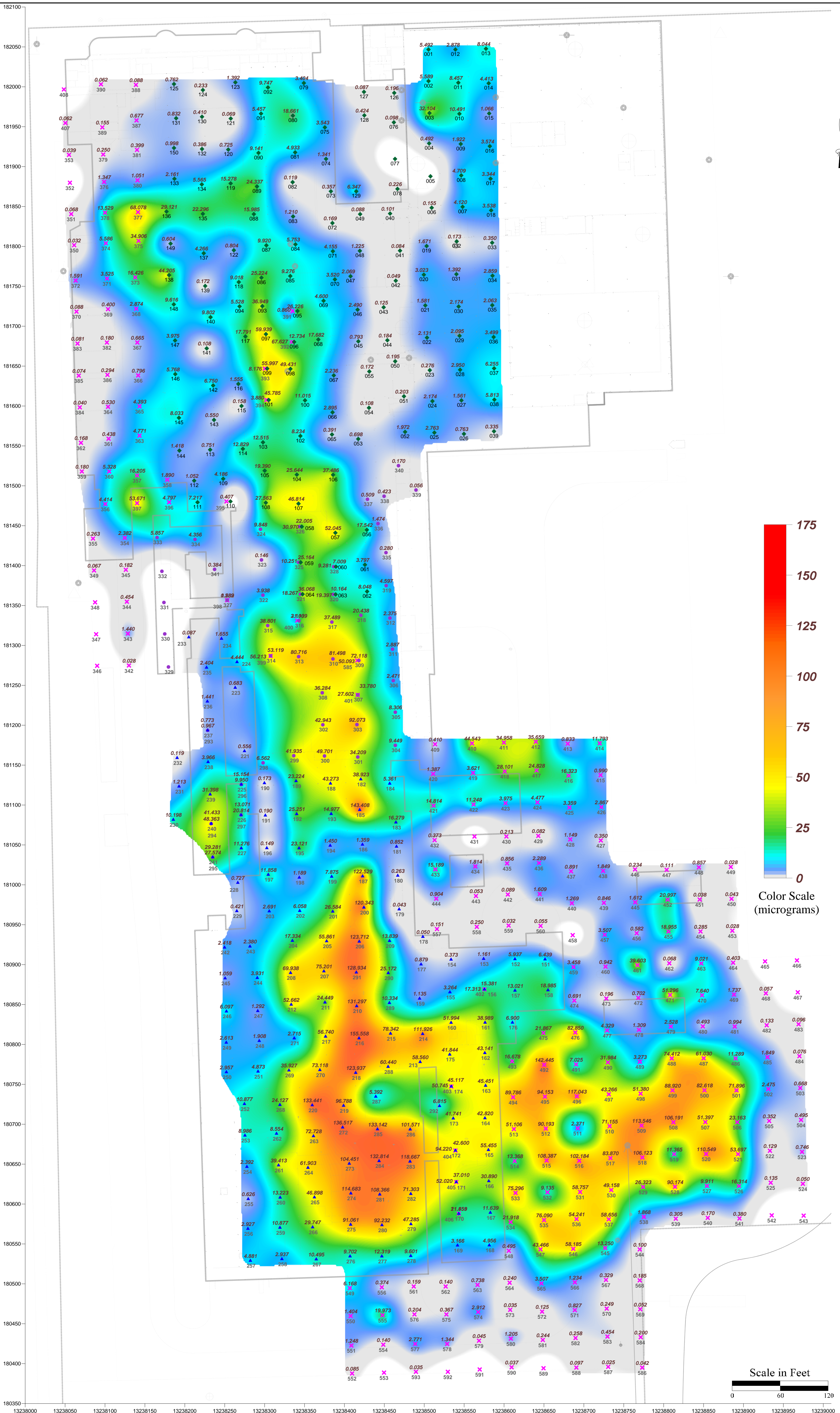
LEGEND

- ◆ 001 PASSIVE SOIL-GAS SAMPLE LOCATION (July 2010)
- ▲ 267 PASSIVE SOIL-GAS SAMPLE LOCATION (July 2013)
- 311 PASSIVE SOIL-GAS SAMPLE LOCATION (September 2013)
- × 567 PASSIVE SOIL-GAS SAMPLE LOCATION (May 2014)

Figure 1
Passive Soil-Gas Survey
Sample Locations

Former Tecumseh Products
Tecumseh, MI

BEACON ENVIRONMENTAL SERVICES, INC.
 2203A Commerce Road, Suite 1, Forest Hill, MD 21050 USA
 www.Beacon-USA.com 1-410-838-8780
 Beacon Project No. 2840, May 2014



LEGEND

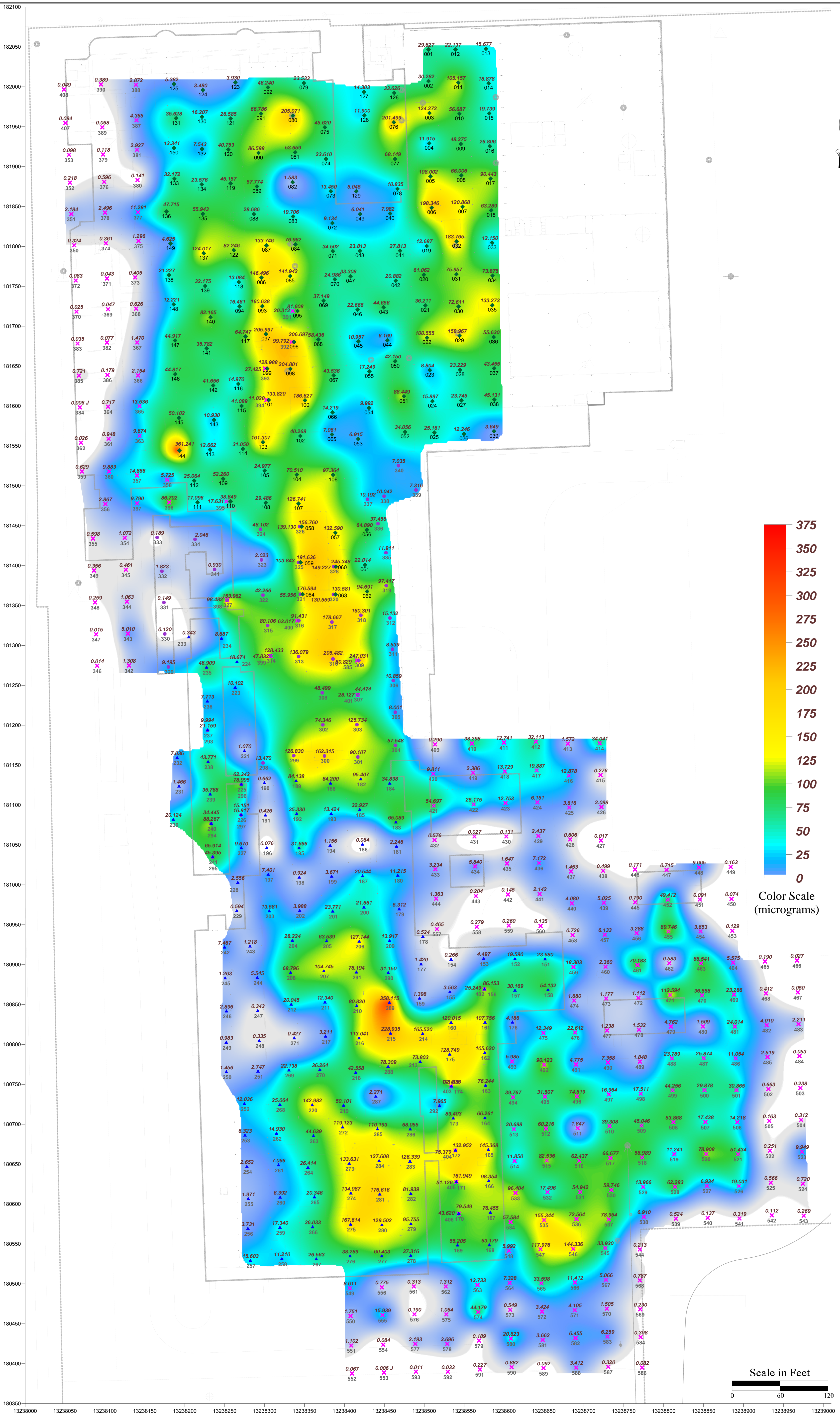
- 1.000 MICROGRAMS/SAMPLER
- PASSIVE SOIL-GAS SAMPLE LOCATION (July 2010)
- ▲ PASSIVE SOIL-GAS SAMPLE LOCATION (July 2013)
- PASSIVE SOIL-GAS SAMPLE LOCATION (September 2013)
- ✕ PASSIVE SOIL-GAS SAMPLE LOCATION (May 2014)

Figure 2
Passive Soil-Gas Survey
1,1,1-Trichloroethane

Former Tecumseh Products
Tecumseh, MI



BEACON ENVIRONMENTAL SERVICES, INC.
 2203A Commerce Road, Suite 1, Forest Hill, MD 21050 USA
 www.Beacon-USA.com 1-410-838-8780
 Beacon Project No. 2840, May 2014



LEGEND

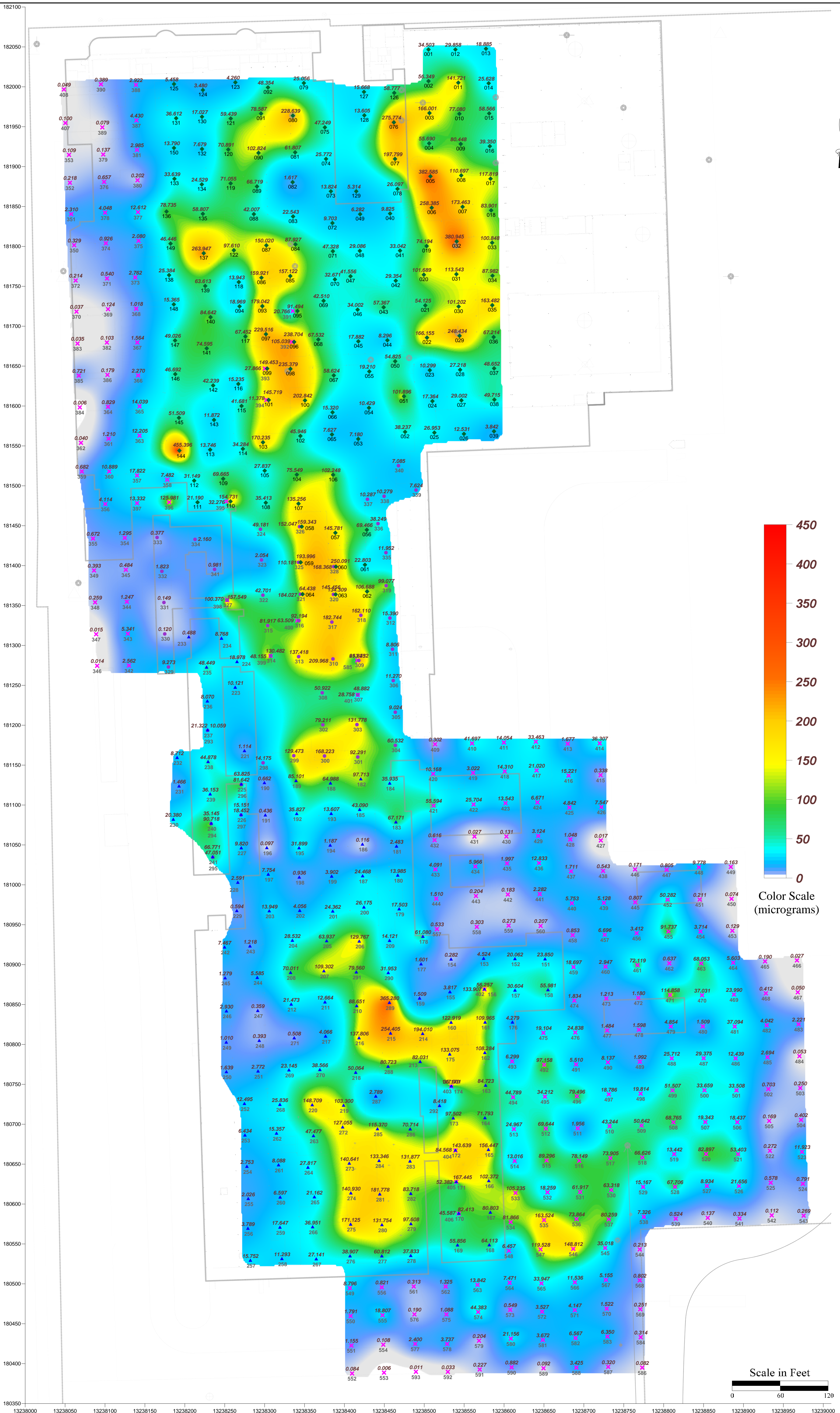
- 1.000 MICROGRAMS/SAMPLER
- ◆ PASSIVE SOIL-GAS SAMPLE LOCATION (July 2010)
- ▲ PASSIVE SOIL-GAS SAMPLE LOCATION (July 2013)
- PASSIVE SOIL-GAS SAMPLE LOCATION (September 2013)
- ✕ PASSIVE SOIL-GAS SAMPLE LOCATION (May 2014)

Figure 3
Passive Soil-Gas Survey
Trichloroethene

Former Tecumseh Products
Tecumseh, MI

BEACON ENVIRONMENTAL SERVICES, INC.

2203A Commerce Road, Suite 1, Forest Hill, MD 21050 USA
 www.Beacon-USA.com 1-410-838-8780
 Beacon Project No. 2840, May 2014



LEGEND

- 1.000 MICROGRAMS/SAMPLER
- ◆ PASSIVE SOIL-GAS SAMPLE LOCATION (July 2010)
- ▲ PASSIVE SOIL-GAS SAMPLE LOCATION (July 2013)
- PASSIVE SOIL-GAS SAMPLE LOCATION (September 2013)
- ✕ PASSIVE SOIL-GAS SAMPLE LOCATION (May 2014)

Figure 4
Passive Soil-Gas Survey
TCE and Breakdown Products

Former Tecumseh Products
Tecumseh, MI

BEACON ENVIRONMENTAL SERVICES, INC.

2203A Commerce Road, Suite 1, Forest Hill, MD 21050 USA
 www.Beacon-USA.com 1-410-838-8780
 Beacon Project No. 2840, May 2014

Attachment 1

APPLYING RESULTS FROM PASSIVE SOIL-GAS SURVEYS

The utility of soil-gas surveys is directly proportional to their accuracy in reflecting and representing changes in the subsurface concentrations of source compounds. Passive soil-gas survey results are the mass collected from the vapor-phase emanating from the source(s). The vapor-phase is merely a fractional trace of the source(s) and, as a matter of convenience, the units used in reporting detection values from passive soil-gas surveys are smaller than those employed for source-compound concentrations.

Passive soil gas data are reported in mass of compounds identified per sample location (e.g., nanograms (ng) or micrograms (μg) per sampler). Results from a passive soil gas survey typically are then used to guide where follow-on intrusive samples should be collected to obtain corresponding concentrations of the contaminants in soil, soil gas, and/or groundwater, as well as eliminate those areas where intrusive samples are not required. It is not practical to report passive soil gas data as concentration because the sampler's uptake rates of the compounds are often greater than the replenishment rates of the compounds around the sampler, which results in low bias measurements, and the replenishment rates will be dependent on several factors that include, at a minimum, soil gas concentrations, soil porosity and permeability, and soil moisture level.

Whatever the relative concentrations of source and associated soil gas, best results are realized when the ratio of soil-gas measurements to actual subsurface concentrations remains as close to constant as the real world permits. It is the reliability and consistency of this ratio, not the particular units of mass (e.g., nanograms) that determine usefulness. Thus, BEACON emphasizes the necessity of conducting — at minimum — follow-on intrusive sampling in areas that show relatively high soil-gas measurements to obtain corresponding concentrations of soil and groundwater contaminants. These correspondent values furnish the basis for approximating a relationship. For extrapolating passive soil gas results to vapor intrusion evaluations, we recommend a minimum of three passive soil gas locations be converted to a shallow vapor well then sampled using an active soil gas method. Once a relationship is established, it can be used in conjunction with the remaining soil-gas measurements to estimate subsurface contaminant concentrations across the survey field. (See www.beacon-usa.com/passivesoilgas.html, Publication 1: *Mass to Concentration Tie-In for PSG Surveys* and Publication 4: *Groundwater and PSG Correlation*.) It is important to keep in mind, however, that specific conditions at individual sample points, including soil porosity and permeability, depth to contamination, and perched ground water, can have an impact on soil-gas measurements at those locations.

When passive soil-gas surveys are utilized as described above, the data provide information that can yield substantial savings in drilling costs and in time. They furnish, among other things, a checklist of compounds expected at each survey location and help to determine how and where drilling budgets can most effectively be spent. Passive soil-gas surveys can also be used as a remediation or general site monitoring tool that can be implemented on a quarterly, semi-annual or annual basis.

Attachment 2

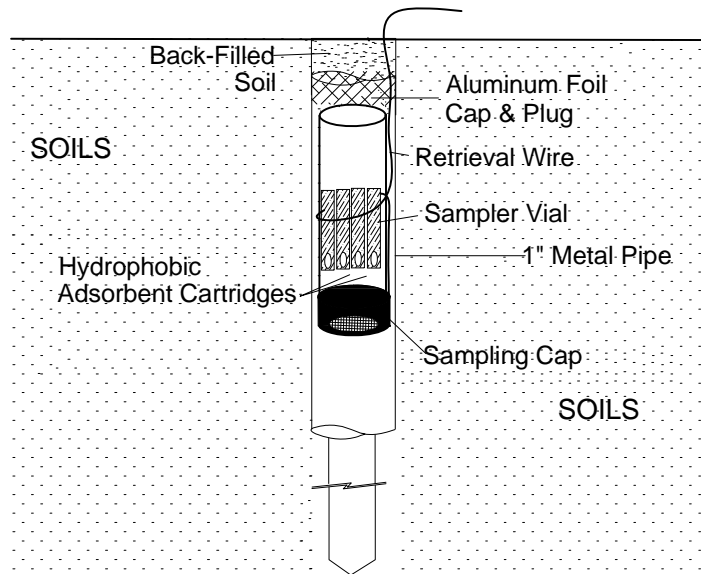
FIELD PROCEDURES FOR PASSIVE SOIL-GAS SURVEYS

The following field procedures are routinely used during a BEACON Passive Soil-Gas Survey. Modifications can be and are incorporated from time to time in response to individual project requirements. In all instances, BEACON adheres to EPA-approved Quality Assurance and Quality Control practices.

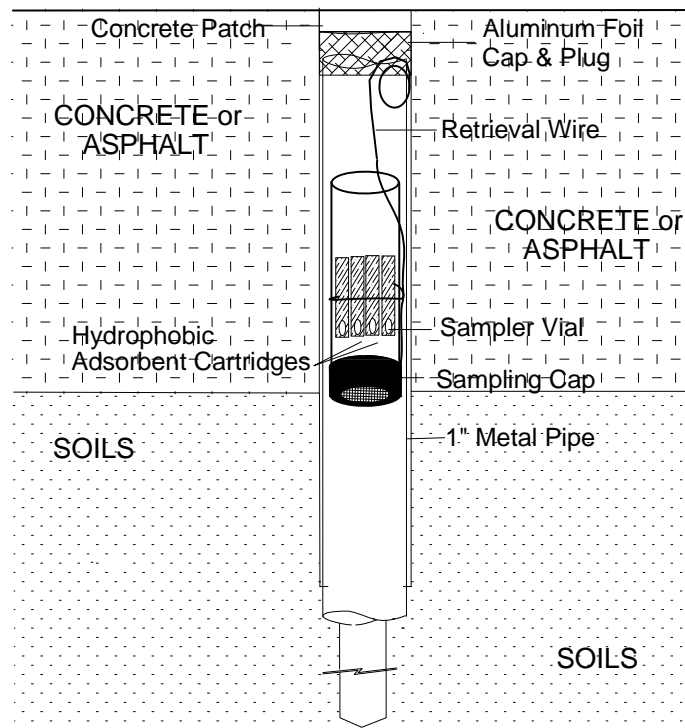
- A. Field personnel carry a BESURE Sample Collection Kit™ and support equipment to the site and deploy the passive samplers in a prearranged survey pattern. A passive sampler consists of a borosilicate glass vial containing hydrophobic adsorbent cartridges with a length of wire attached to the vial for retrieval. Although samplers require only one person for emplacement and retrieval, the specific number of field personnel required depends upon the scope and schedule of the project. Each Sampler emplacement generally takes less than two minutes.
- B. At each survey point a field technician clears vegetation as needed and, using a hammer drill with a 1"- to 1½"-diameter bit, creates a hole 12 to 14 inches deep. [Note: For locations covered with asphalt, concrete, or gravel surfacing, the field technician drills a 1"- to 1½"-diameter hole through the surfacing to the soils beneath]. The technician then, using a hammer drill with a ½" diameter bit, creates a hole three-feet deep. The hole is then sleeved with a 1"-diameter metal sleeve.
- C. The technician then removes the solid plastic cap from a sampler and replaces it with a Sampling Cap (a plastic cap with a hole covered by screen meshing). The technician inserts the sampler, with the Sampling Cap end facing down, into the hole (**see attached figure**). The sampler is then covered with an aluminum foil plug and soils for uncapped locations or, for capped locations, an aluminum foil plug and a concrete patch. The sampler's location, time and date of emplacement, and other relevant information are recorded on the Field Deployment Form.
- D. One or more trip blanks are included as part of the quality-control procedures.
- E. Once all the samplers have been deployed, field personnel schedule sampler recovery and depart, taking all other equipment and materials with them.
- F. Field personnel retrieve the samplers at the end of the exposure period. At each location, a field technician withdraws the sampler from its hole, removes the retrieval wire, and wipes the outside of the vial clean using gauze cloth; following removal of the Sampling Cap, the threads of the vial are also cleaned. A solid plastic cap is screwed onto the vial and the sample location number is written on the label. The technician then records sample-point location, date, time, etc. on the Field Deployment Form.
- G. Sampling holes are refilled with soil, sand, or other suitable material. If samplers have been installed through asphalt or concrete, the hole is filled to grade with a plug of cold patch or cement.
- H. Following retrieval, field personnel ship or transport the passive samplers to BEACON's laboratory.

BEACON'S PASSIVE SOIL-GAS SAMPLER

DEPLOYMENT THROUGH SOILS



DEPLOYMENT THROUGH AN ASPHALT/CONCRETE CAP



Attachment 3
Field Deployment Report

Passive Soil Gas Survey
 Tecumseh Products
 Tecumseh, MI
 April 2014

Sample ID	Grid Location	Boring Depth (inches)	PID Reading (ppm)	Installation		Removal		Label	Additional Notes
				Date	Time	Date	Time		
342	Z20	32	NA	4/21/14	1310	4/29/14	0819	✓	concrete asphalt, water over borehole (2 of 13)
343	Z19				1324		0831	✓	
344	Z18				1329		0835	✓	
345	Z17				1335		0840	✓	
346	Y20				1340		0848	✓	
347	Y19				1343		0851	✓	
348	Y18				1340		0859	✓	
349	Y17				1350		0902	✓	
350	X7				1356		0906	✓	
351	X6				1359		0910	✓	
352	X5				1402		0915	✓	Duplicate (1 of 13)
353	X4				1405		0918	✓	
354	Z16				1452		0938	✓	
355	Y16				1455		0942	✓	
356	Y15				1500		0948	✓	Duplicate (2 of 13)
357	Z14				1505		0954	✓	
358	A14				1508		0959	✓	
359	X14				1513		1000	✓	
360	Y14				1510		1012	✓	
361	Y13				1519		1010	✓	
362	X13				1523		1020	✓	
363	Z13				1527		1024	✓	
364	Y12				1531		1033	✓	
365	Z12				1538		1037	✓	
366	Z11				1542		1042	✓	

Passive Soil Gas Survey
 Tecumseh Products
 Tecumseh, MI
 April 2014

Sample ID	Grid Location	Boring Depth (inches)	PID Reading (ppm)	Installation		Removal		Label	Additional Notes
				Date	Time	Date	Time		
367	Z-10	32	NA	4/21/14	1545	4/29/14	1046	✓	Concrete
368	Z-9				1548		1051	✓	
369	Y-9			4/23/14*	1550		1055	✓	
370	X-9				1554		1059	✓	
371	Y-8			4/23/14*	1557		1104	✓	
372	X-8				1601		1109	✓	Duplicate (3 of 13)
373	Z-8			4/23/14*	1605		1114	✓	
374	Y-7				1610		1118	✓	
375	Z-7				1613		1123	✓	
376	Z-5 Y-5				1617		1128	✓	
377	Z-6				1625		1132	✓	
378	Y-6				1628		1140	✓	
379	Y-4			4/23/14*	1632		1144	✓	
380	Z-5				1638		1149	✓	
381	Z-4				1654		1153	✓	
382	Y-10				1707		1320	✓	
383	X-10				1710		1324	✓	
384	X-12			4/22/14	0820		1338	✓	
385	X-11				0829		1342	✓	
386	Y-11				0833		1347	✓	
387	Z-3				0839		1352	✓	Duplicate (4 of 13)
388	Z-2				0844		1358	✓	
389	Y-3				0850		1403	✓	
390	Y-2				0858		1408	✓	
391	E-9				0908		1420	✓	

* = Installed w/ white cap, fixed out specified time + date

Passive Soil Gas Survey
 Tecumseh Products
 Tecumseh, MI
 April 2014

Sample ID	Grid Location	Boring Depth (Inches)	PID Reading (ppm)	Installation		Removal		Label	Additional Notes
				Date	Time	Date	Time		
392	E-10	32	NA	4/22/14	0911	4/29/14	1426	✓	Concrete
393	D-11				0915		1430	✓	
394	D-12				0919		1432	✓	
395	C-15				0928		1437	✓	
396	A-15				0934		1441	✓	
397	Z-15				0936		1444	✓	
398	C-18				0940		1448	✓	
399	D-20				0950		1452	✓	
400	E-19				0953		1456	✓	Duplicate (5 of 13)
401	G-21				0957		1459	✓	
+ 402	J-31				1000		1510	✓	
403	I-34				1010		1513	✓	
404	I-36				1014		1515	✓	
405	I-37				1016		1517	✓	
+ 406	I-38				1020		1520	✓	Duplicate (6 of 13)
x 407	X-3				1042		1520	✓	
x 408	X-2				1040		1534	✓	
409	I-23				1110		1545	✓	
410	J-23				1120		1549	✓	
411	K-23				1123		1552	✓	
412	L-23				1126		1554	✓	
413	M-23				1130		1556	✓	gravel
414	N-23				1134		1558	✓	Soil/gravel mix
415	N-24				1138		1602	✓	Soil/gravel mix
416	M-24				1142		1604	✓	Concrete - Water in hole Bottle not met

Passive Soil Gas Survey
 Tecumseh Products
 Tecumseh, MI
 April 2014

Sample ID	Grid Location	Boring Depth (inches)	PID Reading (ppm)	Installation		Removal		Label	Additional Notes
				Date	Time	Date	Time		
417	L-24	32	NA	4/22/14	1146	4/29/14	1607	✓	concrete
418	K-24				1150		1610	✓	
419	J-24				1154		1612	✓	
420	I-24				1158		1614	✓	
421	I-25				1317		1619	✓	water on borehole
422	J-25				1321		1621	✓	" wet
423	K-25				1326		1623	✓	" "
424	L-25				1331		1626	✓	
425	M-25				1335		1629	✓	
426	N-25			4/23/14	1340		1632	✓	Soil/gravel mix DUPLICATE (POF 13)
427	N-26				1345		1640	✓	Soil/gravel mix
428	M-26				1350		1643	✓	concrete
429	L-26				1355		1646	✓	wet in hole @ 3" BGS
430	K-26				1403		1650	✓	
431	J-26				1408		1652	✓	
432	I-26				1413		1655	✓	
433	T-27				1417	4/30/14	0758	✓	
434	J-27				1421		0800	✓	
435	K-27				1426		0803	✓	
436	L-27				1433		0805	✓	DUPLICATE (8 of 13)
437	M-27				1441		0807	✓	brakes - submerged in water, but filled w/ water.
438	N-27				1446		0809	✓	Soil/gravel mix
439	N-28				1451		0812	✓	Soil/gravel mix
440	M-28				1456		0814	✓	brakes
441	L-28				1502		0816	✓	concrete

* = installed w/white cap. & fixed at specified date + time

Passive Soil Gas Survey
 Tecumseh Products
 Tecumseh, MI
 April 2014

4/21: 2142
 4/22: 09
 4/23: 66
 177

Sample ID	Grid Location	Boring Depth (inches)	PID Reading (ppm)	Installation		Removal		Label	Additional Notes
				Date	Time	Date	Time		
442	K-28	32	NA	4/22/14	1507	4/22/14	0818	✓	concrete
443	F-28				1514		0821	✓	
444	F-28				1520		0824	✓	
445	O-28				1545		0827	✓	
446	O-27				1548		0829	✓	Soil/gravel mix
447	P-27				1550		0831	✓	
448	Q-27				1552		0832	✓	
449	R-27				1555		0834	✓	
450	R-28				1558		0837	✓	
451	Q-28				1600		0838	✓	
452	P-28				1610		0841	✓	
453	R-29			4/23/14	0808		0843	✓	
454	Q-29				0812		0845	✓	
455	P-29				0810		0846	✓	
456	O-29				0832		0848	✓	*concrete under layer
457	N-29				0835		0850	✓	Water in bore hole - west in side
458	M-29				0840		0853	✓	* Crumbled concrete in patch in vial
459	N-30				0845		0856	✓	
460	N-30				0851		0858	✓	gravel water in vial
461	O-30				0850		0900	✓	concrete
462	P-30				0900		0907	✓	crumbled concrete in the patch
463	Q-30				0914		0908	✓	concrete
464	R-30				0919		0910	✓	Soil/gravel mix
465	S-30				0922		0912	✓	Soil
466	F-30				0925		0914	✓	Duplicate (90F13)

Passive Soil Gas Survey
 Tecumseh Products
 Tecumseh, MI
 April 2014

Sample ID	Grid Location	Boring Depth (inches)	PID Reading (ppm)	Installation		Removal		Label	Additional Notes
				Date	Time	Date	Time		
467	T-31	32	NA	4/23/14	0927	4/30/14	0917	✓	Soil
468	S-31				0930		0918	✓	concrete - water in vial -
469	R-31				0930		0921	✓	soil
470	Q-31				0940		0924	✓	soil/gravel mix
471	P-31				0940		0926	✓	concrete
472	O-31				0957		0930	✓	water in hole, not in vial -
473	N-31				1004		0931	✓	gravel
474	M-31				1011		0934	✓	
475	L-32				1017		0936	✓	
476	M-32				1024		0938	✓	concrete
477	N-32				1050		0940	✓	Water in hole, not in vial -
478	O-32				1057		0943	✓	
479	P-32				1102		0947	✓	
480	Q-32				1108		0948	✓	broken concrete - no patch
481	R-32				1113		0951	✓	concrete
482	S-32				1117		0953	✓	soil
483	T-32				1120		0954	✓	Duplicate (10 of 13)
484	T-33				1123		0956	✓	
485	S-33				1131		1007	✓	soil/gravel mix
486	R-33				1130		1010	✓	gravel
487	Q-33				1142		1013	✓	concrete
488	P-33				1150		1014	✓	
489	O-33				1154		1017	✓	
490	N-33				1054		1019	✓	
491	M-33				1058		1020	✓	gravel

Passive Soil Gas Survey
 Tecumseh Products
 Tecumseh, MI
 April 2014

Sample ID	Grid Location	Boring Depth (Inches)	PID Reading (ppm)	Installation		Removal		Label	Additional Notes
				Date	Time	Date	Time		
492	L-33	32	NA	4/23/14	1700	4/30/14	1023	✓	Gravel Concrete
493	K-33				1702		1026	✓	
494	K-34				1704		1029	✓	Gravel Concrete
495	L-34				1706		1031	✓	Gravel Concrete
496	M-34				1708		1032	✓	Duplicate (110F13)
497	N-34				1710		1035	✓	Gravel - wet in vial
498	O-34				1712		1036	✓	Soil/Gravel Mix
499	P-34				1713		1038	✓	
500	Q-34				1714		1039	✓	
501	R-34				1715		1041	✓	
502	S-34				1716		1042	✓	Soil
503	T-34				1717		1044	✓	
504	T-35				1718		1047	✓	
505	S-35				1719		1049	✓	Foil laying next to sample pipe.
506	R-35				1720		1051	✓	
507	Q-35				1721		1053	✓	Gravel + Soil Mix
508	P-35				1722		1055	✓	
509	O-35				1723		1057	✓	Gravel
510	N-35				1724		1058	✓	Water in hole
511	M-35				1725		1102	✓	Concrete
512	L-35				1726		1106	✓	Gravel
513	K-35				1727		1107	✓	In a puddle
514	K-36				1728		1109	✓	Concrete
515	L-36				1729		1112	✓	Gravel
516	M-36				1730		1113	✓	Concrete

Passive Soil Gas Survey
 Tecumseh Products
 Tecumseh, MI
 April 2014

Sample ID	Grid Location	Boring Depth (inches)	PID Reading (ppm)	Installation		Removal		Label	Additional Notes
				Date	Time	Date	Time		
517	N-36	32	NA	4/23/14	1731	4/30/14	1116	✓	Gravel
518	O-36				1732		1117	✓	
519	P-36			4/24/14	0803		1119	✓	Soil
520	Q-36				0808		1120	✓	
521	R-36				0815		1121	✓	
522	S-36				0818		1123	✓	
523	R-37				0821		1124	✓	
524	T-37				0826		1126	✓	
525	S-37				0830		1130	✓	
526	R-37				0833		1131	✓	
527	Q-37				0836		1132	✓	
528	P-37				0844		1133	✓	
529	O-37				0849		1135	✓	
530	N-37				0857		1136	✓	
531	M-37				0915		1139	✓	Gravel
532	L-37				0919		1141	✓	
533	K-37				0929		1143	✓	Concrete Dupl. (12.0 F13)
534	K-38				0931		1245	✓	Concrete
535	L-38				0935		1248	✓	Gravel
536	M-38				0941		1249	✓	
537	N-38				0946		1252	✓	
538	O-38				0950		1254	✓	Soil
539	P-38				0954		1255	✓	
540	Q-38				0957		1256	✓	
541	R-38				1000		1258	✓	

Passive Soil Gas Survey
 Tecumseh Products
 Tecumseh, MI
 April 2014

= 207

Sample ID	Grid Location	Boring Depth (inches)	PID Reading (ppm)	Installation		Removal		Label	Additional Notes
				Date	Time	Date	Time		
542	S-28	32	NA	4/24/14	1003	4/30/14	1302	✓	SOIL
543	F-28				1000		1302	✓	
544	D-39				1010		1305	✓	
545	N-39				1010		1306	✓	Gravel
546	M-39				1023		1307	✓	
547	L-39				1029		1309	✓	concrete
548	K-39				1035		1312	✓	
549	F-40				1114		1320	✓	Gravel
550	F-41				1118		1322	✓	concrete
551	F-42				1120		1324	✓	
552	F-43				1124		1326	✓	SOIL
553	G-43				1128		1327	✓	Duplicate (13 OF 13)
554	G-42				1132		1328	✓	concrete
555	G-41				1135		1330	✓	
556	G-40				1138		1331	✓	SOIL
557	F-29				1152		1338	✓	concrete
558	J-29				1154		1340	✓	concrete
559	K-29				1158		1341	✓	SOIL
560	L-29				1201		1343	✓	SOIL
561	H-40				1331		1348	✓	SOIL
562	F-40				1334		1350	✓	SOIL
563	J-40				1337		1351	✓	SOIL
564	K-40				1341		1354	✓	SOIL
565	L-40				1344		1350	✓	Gravel
566	M-40				1347		1357	✓	ASPHALT - water in sample vial

Passive Soil Gas Survey
 Tecumseh Products
 Tecumseh, MI
 April 2014

Sample ID	Grid Location	Boring Depth (Inches)	PID Reading (ppm)	Installation		Removal		Label	Additional Notes
				Date	Time	Date	Time		
567	N-40	32	NA	4/24/14	1349	4/30/14	1350	✓	Soil
568	N-40				1351		1402	✓	Water in sample vial
569	O-41				1354		1403	✓	
570	N-41				1357		1405	✓	
571	M-41				1359		1406	✓	
572	L-41				1403		1408	✓	Gravel/concrete water in hole & water in sample vial
573	K-41				1405		1410	✓	Water in sample hole & vial
574	J-41				1408		1412	✓	Water in hole, vial dry
575	I-41				1411		1414	✓	for 574.
576	H-41				1413		1416	✓	
577	N-42				1449		1418	✓	
578	I-42				1450		1420	✓	
579	J-42				1452		1422	✓	
580	K-42				1454		1424	✓	
581	L-42				1457		1428	✓	
582	M-42				1459		1429	✓	Soil
583	N-42				1502		1431	✓	
584	O-42				1505		1434	✓	
585	G-20				1515		1443	✓	Collocated Boring overlapped on 4122 (Concrete)
586	O-43			4/25/14	0740		1446	✓	Soil
587	N-43				0743		1449	✓	
588	M-43				0747		1450	✓	
589	L-43				0749		1451	✓	
590	K-43				0752		1452	✓	
591	J-43				0755		1453	✓	

Passive Soil Gas Survey
 Tecumseh Products
 Tecumseh, MI
 April 2014

Sample ID	Grid Location	Boring Depth (inches)	PID Reading (ppm)	Installation		Removal		Label	Additional Notes
				Date	Time	Date	Time		
592	I-43	32	NA	4/25/14	0759	4/30/14	1456	✓	Soil
593	H-43	↓	↓	↓	0801		1458	✓	
594									
595									
596									
597									
598									
599									
600									
601									
602									
603									
604									
605									
606									
607									
608									
609									
610									
611									
612									
613									
614									
615									
616									

Attachment 4

LABORATORY PROCEDURES FOR PASSIVE SOIL-GAS SAMPLES

Following are laboratory procedures used with BEACON Passive Soil-Gas Surveys, a screening technology for expedited site investigation. After exposure, adsorbent cartridges from the passive samplers are analyzed using U.S. EPA Method 8260C as a guidance document, a capillary gas chromatographic/mass spectrometric method, modified to accommodate high temperature thermal desorption of the adsorbent cartridges and to meet the objectives of reporting semi-quantitative data. This procedure is summarized as follows:

- A. The adsorbent cartridges are loaded with internal standards and surrogates prior to loading the autosampler with the cartridges. The loaded cartridges are purged in a helium flow. Then the cartridges are thermally desorbed in a helium flow onto a focusing trap. Any analytes in the helium stream are adsorbed onto a focusing trap.
- B. Following trap focusing, the trap is thermally desorbed onto a Rxi-624Sil MS 20m, 0.18 mm ID, 1.00 micron filament thickness capillary column.
- C. The GC/MS is scanned between 35 and 270 Atomic Mass Units (AMU) at 3.12 scans per second.
- D. BFB tuning criteria and the initial five-point calibration procedures are those stated in method SW846-8260C. System performance and calibration check criteria are met prior to analysis of samples. A laboratory method blank is analyzed after the daily standard to determine that the system is contaminant-free.
- E. The instrumentation used for these analyses includes:
 - Agilent 7890-5975c Gas Chromatograph/Mass Spectrometer;
 - Markes Unity2 thermal desorber;
 - Markes Ultra2 autosampler; and
 - Markes Mass Flow Controller Modules.

 - Agilent 7890-5975c Gas Chromatograph/Mass Spectrometer; and
 - Markes TD100 thermal desorption system.

Attachment 5
Chain-of-Custody Form

CHAIN-OF-CUSTODY PASSIVE SOIL-GAS SAMPLES



Project Information		Client Information	
Beacon Project No.:	2840	Company Name:	TRC
Site Name:	Former Tecumseh Products	Office Location:	Ann Arbor, MI
Site Location:	Tecumseh, MI	Samples Submitted By:	
Analytical Method:	EPA Method 8260C	Contact Phone No.:	
Target Compounds:	Beacon Project Number 2840 Target Compound List		

Field Sample ID	Comments (only necessary if problem or discrepancy)		Date	Time	Initial
	Notes				
TRIP 1			4/29/14	0818	JB
342				0819	JB
343				0831	JB
344				0835	JB
345				0840	JB
346				0848	JB
347				0851	JB
348				0859	JB
349				0902	JB
350				0906	JB
351				0910	JB
352				0915	JB
353				0915	JB
354				0918	JB
355				0938	JB
356				0942	JB
357				0948	JB
358				0948	JB
				0954	JB
				0959	JB

Shipment of Field Kit to Site — Custody Seal #	3531829	Intact?	<input checked="" type="radio"/> Y <input type="radio"/> N
Relinquished by:	<i>Kenny D'Arco</i>	Courier	FedEx
Date/Time	04-15-2014 / 1700 Hours	Received by:	<i>Agn Selt</i>
		Date/Time	04-21-14 / 1300

Shipment of Field Kit to Laboratory — Custody Seal #		Intact?	<input type="radio"/> Y <input type="radio"/> N
Relinquished by:	<i>[Signature]</i>	Courier	Fedex
Date/Time	4/29/14 - 1800	Received by:	<i>Steven Thornley</i>
		Date/Time	5.1.14 / 1109

CHAIN-OF-CUSTODY PASSIVE SOIL-GAS SAMPLES



Project Information		Client Information	
Beacon Project No.:	2840	Company Name:	TRC
Site Name:	Former Tecumseh Products	Office Location:	Ann Arbor, MI
Site Location:	Tecumseh, MI	Samples Submitted By:	
Analytical Method:	EPA Method 8260C	Contact Phone No.:	
Target Compounds:	Beacon Project Number 2840 Target Compound List		

Field Sample ID	Notes	Comments (only necessary if problem or discrepancy)		
		Date	Time	Initial
359		4/29/14	1004	JB
360			1012	JB
361			1016	JB
362			1020	JB
363			1024	JB
364			1033	JB
365			1037	JB
366			1042	JB
367			1046	JB
368			1051	JB
369			1055	JB
370			1059	JB
371			1104	JB
372			1109	JB
373			1109	JB
374			1114	JB
375			1118	JB
376			1123	JB
377			1128	JB
378			1132	JB

Shipment of Field Kit to Site — Custody Seal # 3531829

Relinquished by:	Date/Time	Received by:	Date/Time
<i>Keamy Deach</i>	04-15-2014 / 1700 Hours		
Courier	FedEx		

Shipment of Field Kit to Laboratory — Custody Seal #

Relinquished by:	Date/Time	Received by:	Date/Time
<i>[Signature]</i>	4/29/14 - 1800	<i>Steven Thornberry</i>	5.1.14 / 1109
Courier	FedEx		

CHAIN-OF-CUSTODY PASSIVE SOIL-GAS SAMPLES



Project Information		Client Information	
Beacon Project No.:	2840	Company Name:	TRC
Site Name:	Former Tecumseh Products	Office Location:	Ann Arbor, MI
Site Location:	Tecumseh, MI	Samples Submitted By:	
Analytical Method:	EPA Method 8260C	Contact Phone No.:	
Target Compounds:	Beacon Project Number 2840 Target Compound List		

Field Sample ID	Notes	Comments (only necessary if problem or discrepancy)		
		Date	Time	Initial
378		4/29/14	1140	JB
379			1144	JB
380			1149	JB
381			1153	JB
382			1320	JB
383			1324	JB
TAP 2			1327	JB
384			1338	JB
385			1342	JB
386			1347	JB
387			1353	JB
387 DUP			1353	JB
388			1358	JB
389			1403	JB
390			1408	JB
391			1420	JB
392			1426	JB
393			1430	JB
394			1432	JB
395			1437	JB

Shipment of Field Kit to Site		Custody Seal #	3531829
Relinquished by:	Date/Time	Received by:	Date/Time
<i>Kenny Drecko</i>	04-15-2014 / 1700 Hours		
Shipment of Field Kit to Laboratory		Courier	Intact? Y N
Relinquished by:	Date/Time	FedEx	Received by:
	4/29/14 1800	Courier	Steven Thornley
		FEDEX	5,114 / 11209

CHAIN-OF-CUSTODY PASSIVE SOIL-GAS SAMPLES



Project Information		Client Information	
Beacon Project No.:	2840	Company Name:	TRC
Site Name:	Former Tecumseh Products	Office Location:	Ann Arbor, MI
Site Location:	Tecumseh, MI	Samples Submitted By:	
Analytical Method:	EPA Method 8260C	Contact Phone No.:	
Target Compounds:	Beacon Project Number 2840 Target Compound List		

Field Sample ID	Notes	Comments (only necessary if problem or discrepancy)		
		Date	Time	Initial
396		4/29/14	1441	JB
397			1444	JB
398			1448	JB
399			1452	JB
400			1456	JB
400 DUP			1456 ⁵³	JB
401			1459	JB
402			1510	JB
403			1513	JB
404			1515	JB
405			1517	JB
406			1520	JB
406 DUP			1520	JB
407			1530	JB
408			1534	JB
409			1545	JB
410			1549	JB
411			1552	JB
412			1554	JB
413			1556	JB

Shipment of Field Kit to Site — Custody Seal # 3531829		Intact?	Y	N
Relinquished by:	Date/Time	Received by:	Date/Time	
<i>Kenny Deach</i>	04-15-2014 / 1700 Hours			
Courier	FedEx			
Shipment of Field Kit to Laboratory — Custody Seal #		Intact?	Y	N
Relinquished by:	Date/Time	Received by:	Date/Time	
		<i>Steven Thornley</i>	5.1.14 / 11:09	

CHAIN-OF-CUSTODY PASSIVE SOIL-GAS SAMPLES

Project Information		Client Information	
Beacon Project No.:	2840	Company Name:	TRC
Site Name:	Former Tecumseh Products	Office Location:	Ann Arbor, MI
Site Location:	Tecumseh, MI	Samples Submitted By:	
Analytical Method:	EPA Method 8260C	Contact Phone No.:	
Target Compounds:	Beacon Project Number 2840 Target Compound List		



Field Sample ID	Notes		Comments (only necessary if problem or discrepancy)	
	Date	Time	Date	Initial
414		1558	4/29/14	JB
415		1602		JB
416		1604		JB
TRAP BANK 3		1605		JB
417		1607		JB
418		1610		JB
419		1612		JB
420		1614		JB
421		1619		JB
422		1621		JB
423		1623		JB
424		1626		JB
425		1629		JB
426		1632		JB
426 DUP		1632		JB
427		1640		JB
428		1643		JB
429		1646		JB
430		1650		JB
431		1653		JB

Shipment of Field Kit to Site — Custody Seal # 3531829		Intact? Y N
Relinquished by:	Date/Time	Received by:
Kenny Dreacho	04-15-2014 / 1700 Hours	
	Courier	
	FedEx	
Shipment of Field Kit to Laboratory — Custody Seal #		Intact? Y N
Relinquished by:	Date/Time	Received by:
		Kenny Dreacho
		05-01-2014 / 1109 hrs

CHAIN-OF-CUSTODY PASSIVE SOIL-GAS SAMPLES



Project Information		Client Information	
Beacon Project No.:	2840	Company Name:	TRC
Site Name:	Former Tecumseh Products	Office Location:	Ann Arbor, MI
Site Location:	Tecumseh, MI	Samples Submitted By:	
Analytical Method:	EPA Method 8260C	Contact Phone No.:	
Target Compounds:	Beacon Project Number 2840 Target Compound List		

Field Sample ID	Notes	Date	Time	Initial	Comments (only necessary if problem or discrepancy)
450		4/30/14	0837	JB	
451			0838	JB	
452			0841	JB	
453			0843	JB	
454			0845	JB	
455			0846	JB	
456			0848	JB	
457			0850	JB	
458			0853	JB	
459			0856	JB	
460			0858	JB	
461			0900	JB	
462			0907	JB	
463			0908	JB	
464			0910	JB	
465			0912	JB	
466			0914	JB	
466 DUP			0914	JB	
467			0917	JB	
468			0918	JB	

Shipment of Field Kit to Site — Custody Seal #	3531829	Intact?	Y	N
Relinquished by:	Kenny Decho	Courier	FedEx	Received by:
Date/Time	04-15-2014 / 1700 Hours			Date/Time

Shipment of Field Kit to Laboratory — Custody Seal #		Intact?	Y	N
Relinquished by:		Courier		Received by:
Date/Time	4/30/14 1802			Date/Time
				5.1.14 / 11:09

CHAIN-OF-CUSTODY PASSIVE SOIL-GAS SAMPLES



Project Information		Client Information	
Beacon Project No.:	2840	Company Name:	TRC
Site Name:	Former Tecumseh Products	Office Location:	Ann Arbor, MI
Site Location:	Tecumseh, MI	Samples Submitted By:	
Analytical Method:	EPA Method 8260C	Contact Phone No.:	
Target Compounds:	Beacon Project Number 2840 Target Compound List		

Field Sample ID	Comments (only necessary if problem or discrepancy)		Date	Time	Initial
	Notes				
432			4/29/14	1655	JB
433			4/30/14	0758	JB
434				0800	JB
435				0803	JB
436	DUP			0805	JB
437				0807	JB
438				0809	JB
439				0812	JB
440				0814	JB
441				0816	JB
442				0818	JB
443				0821	JB
TRIP 4				0822	JB
444				0824	JB
445				0827	JB
446				0829	JB
447				0831	JB
448				0832	JB
449				0834	JB

Shipment of Field Kit to Site — Custody Seal #	3531829	Intact? Y N	Received by:	Date/Time
Relinquished by:	04-15-2014 / 1700 Hours		<i>[Signature]</i> JB	4-17-14
<i>Kenny Treabo</i>				
Shipment of Field Kit to Laboratory — Custody Seal #		Intact? Y N	Received by:	Date/Time
Relinquished by:	4/30/14 1800		<i>[Signature]</i>	5.1.14 / 11:09
<i>[Signature]</i>			Steven Thornley	

CHAIN-OF-CUSTODY PASSIVE SOIL-GAS SAMPLES



Project Information		Client Information	
Beacon Project No.:	2840	Company Name:	TRC
Site Name:	Former Tecumseh Products	Office Location:	Ann Arbor, MI
Site Location:	Tecumseh, MI	Samples Submitted By:	
Analytical Method:	EPA Method 8260C	Contact Phone No.:	
Target Compounds:	Beacon Project Number 2840 Target Compound List		

Field Sample ID	Notes	Comments (only necessary if problem or discrepancy)		
		Date	Time	Initial
469		4/30/14	0921	JB
470			0924	JB
471			0926	JB
472			0930	JB
473			0931	JB
TRIP 5			0932	JB
474			0934	JB
475			0936	JB
476			0938	JB
477			0940	JB
478			0943	JB
479			0947	JB
480			0948	JB
481			0951	JB
482			0953	JB
483			0954	JB
483 Dup			0954	JB
484			0956	JB
485			1007	JB
486			1010	JB

Shipment of Field Kit to Site — Custody Seal # 3531829		Intact?	Y	N
Relinquished by:	Date/Time	Received by:	Date/Time	
Kenny Dpeachis	04-15-2014 / 1700 Hours			
Courier	FedEx			

Shipment of Field Kit to Laboratory — Custody Seal #		Intact?	Y	N
Relinquished by:	Date/Time	Received by:	Date/Time	
		Kenny Dpeachis	05.01.2014/1109 hrs	
Courier	FedEx			

CHAIN-OF-CUSTODY PASSIVE SOIL-GAS SAMPLES



Project Information		Client Information	
Beacon Project No.:	2840	Company Name:	TRC
Site Name:	Former Tecumseh Products	Office Location:	Ann Arbor, MI
Site Location:	Tecumseh, MI	Samples Submitted By:	
Analytical Method:	EPA Method 8260C	Contact Phone No.:	
Target Compounds:	Beacon Project Number 2840 Target Compound List		

Field Sample ID	Notes	Comments (only necessary if problem or discrepancy)		
		Date	Time	Initial
487		4/30/14	1013	JB
488			1014	JB
489			1017	JB
490			1019	JB
491			1020	JB
492			1023	JB
493			1026	JB
494			1029	JB
495			1031	JB
496	DUP		1032	JB
497			1032	JB
498			1035	JB
499			1036	JB
500			1038	JB
501			1039	JB
502			1041	JB
503			1042	JB
TRAP			1044	JB
504			1045	JB
			1047	JB

Shipment of Field Kit to Site — Custody Seal #	3531829	Intact? Y N	
Relinquished by:	Date/Time	Courier	Received by:
Kenny Dreacho	04-15-2014 / 1700 Hours	FedEx	

Shipment of Field Kit to Laboratory — Custody Seal #		Intact? Y N	
Relinquished by:	Date/Time	Courier	Received by:
		FedEx	Kenny Dreacho
			Date/Time
			05-07-2014 / 1109 hrs

CHAIN-OF-CUSTODY PASSIVE SOIL-GAS SAMPLES



Project Information		Client Information	
Beacon Project No.:	2840	Company Name:	TRC
Site Name:	Former Tecumseh Products	Office Location:	Ann Arbor, MI
Site Location:	Tecumseh, MI	Samples Submitted By:	
Analytical Method:	EPA Method 8260C	Contact Phone No.:	
Target Compounds:	Beacon Project Number 2840 Target Compound List		

Field Sample ID	Notes	Comments (only necessary if problem or discrepancy)		
		Date	Time	Initial
505		4/20/14	1049	JB
506			1051	JB
507			1053	JB
508			1055	JB
509			1057	JB
510			1058	JB
511			1102	JS
512			1106	JB
513			1107	JB
514			1109	JR
515			1112	JB
516			1113	JB
517			1116	JB
518			1117	JB
519			1119	JB
520			1120	JB
521			1121	JB
522			1123+128	JB
523			1124	JB
524			1126	JB

Shipment of Field Kit to Site — Custody Seal # 3531829		Intact?	Y	N
Relinquished by:	Date/Time	Courier	Received by:	Date/Time
Kenny Ipeacho	04-15-2014 / 1700 Hours	FedEx		
Shipment of Field Kit to Laboratory — Custody Seal #		Intact?	Y	N
Relinquished by:	Date/Time	Courier	Received by:	Date/Time
		FedEx	Kenny Ipeacho	05.01.2014 / 1109 hM

CHAIN-OF-CUSTODY PASSIVE SOIL-GAS SAMPLES



Project Information		Client Information	
Beacon Project No.:	2840	Company Name:	TRC
Site Name:	Former Tecumseh Products	Office Location:	Ann Arbor, MI
Site Location:	Tecumseh, MI	Samples Submitted By:	
Analytical Method:	EPA Method 8260C	Contact Phone No.:	
Target Compounds:	Beacon Project Number 2840 Target Compound List		

Field Sample ID	Notes	Comments (only necessary if problem or discrepancy)		
		Date	Time	Initial
S25		4/30/14	1130	JB
S26			1131	JB
S27			1132	JB
S28			1133	JB
S29			1135	JB
S30			1136	JB
S31			1139	JB
S32			1141	JB
S33			1143	JB
S33 DUF			1143	JB
S34			1245	JB
TRIP 7			1246	JB
S35			1248	JB
S36			1249	JB
S37			1252	JB
S38			1254	JB
S39			1255	JB
S40			1256	JB
S41			1258	JB
S42			1300	JB

Shipment of Field Kit to Site — Custody Seal # 3531829		Intact?	Y	N
Relinquished by:	Date/Time	Received by:	Date/Time	
Kenny Ipechlo	04-15-2014 / 1700 Hours			
Shipment of Field Kit to Laboratory — Custody Seal #		Intact?	Y <td>N </td>	N
Relinquished by:	Date/Time	Received by:	Date/Time	
	4/30/14 1800	Kenny Ipechlo	05-01-2014 1109 hrs	

CHAIN-OF-CUSTODY PASSIVE SOIL-GAS SAMPLES



Project Information		Client Information	
Beacon Project No.:	2840	Company Name:	TRC
Site Name:	Former Tecumseh Products	Office Location:	Ann Arbor, MI
Site Location:	Tecumseh, MI	Samples Submitted By:	
Analytical Method:	EPA Method 8260C	Contact Phone No.:	
Target Compounds:	Beacon Project Number 2840 Target Compound List		

Field Sample ID	Comments (only necessary if problem or discrepancy)		Date	Time	Initial
	Notes				
543			4/30/14	1302	JB
544				1305	JB
545				1306	JB
546				1307	JB
547				1309	JB
548				1312	JB
549				1320	JB
550				1322	JB
551				1324	JB
552				1324	JB
552 DUP				1326	JB
553				1327	JB
554				1328	JB
555				1330	JB
556				1331	JB
557				1338	JB
558				1340	JB
559				1341	JB
560				1343	JB
561				1348	JB

Shipment of Field Kit to Site — Custody Seal # 3531829		Intact?	Y	N
Relinquished by:	Date/Time	Courier	Received by:	Date/Time
<i>Kenny Peach</i>	04-15-2014 / 1700 Hours	FedEx		
Shipment of Field Kit to Laboratory — Custody Seal #				
Relinquished by:	Date/Time	Courier	Received by:	Date/Time
<i>[Signature]</i>	4/30/14 1800	FedEx	<i>Kenny Peach</i>	05-07-2014 1109 hrs

CHAIN-OF-CUSTODY PASSIVE SOIL-GAS SAMPLES



Project Information		Client Information	
Beacon Project No.:	2840	Company Name:	TRC
Site Name:	Former Tecumseh Products	Office Location:	Ann Arbor, MI
Site Location:	Tecumseh, MI	Samples Submitted By:	
Analytical Method:	EPA Method 8260C	Contact Phone No.:	
Target Compounds:	Beacon Project Number 2840 Target Compound List		

Field Sample ID	Notes	Comments (only necessary if problem or discrepancy)		
		Date	Time	Initial
562		4/30/14	1350	JB
563			1351	JB
564			1354	JB
TRIP BANK 8			1355	JB
565			1356	JB
566			1357	JB
567			1358	JB
568			1402	JB
569			1403	JB
570			1405	JB
571			1406	JB
572			1408	JB
573			1410	JB
574			1412	JB
575			1414	JB
576			1416	JB
577			1418	JB
578			1420	JB
579			1422	JB
580			1424	JB

Shipment of Field Kit to Site — Custody Seal # 3531829		Intact? Y N	Received by:	Date/Time
Relinquished by:	Date/Time	Courier		
<i>Kenny Ipeach</i>	04-15-2014 / 1700 Hours	FedEx		
Shipment of Field Kit to Laboratory — Custody Seal #		Intact? Y N	Received by:	Date/Time
Relinquished by:	Date/Time	Courier		
<i>[Signature]</i>	4/30/14 1800	FedEx	<i>Steven Dowling</i>	5.1.14 / 11:09

CHAIN-OF-CUSTODY PASSIVE SOIL-GAS SAMPLES



Project Information		Client Information	
Beacon Project No.:	2840	Company Name:	TRC
Site Name:	Former Tecumseh Products	Office Location:	Ann Arbor, MI
Site Location:	Tecumseh, MI	Samples Submitted By:	
Analytical Method:	EPA Method 8260C	Contact Phone No.:	
Target Compounds:	Beacon Project Number 2840 Target Compound List		

Field Sample ID	Notes	Comments (only necessary if problem or discrepancy)		
		Date	Time	Initial
581		4/30/14	1426	JB
582			1448	JB
583			1429	JB
585			1431	JB
586			1443	JB
587			1446	JB
588			1449	JB
589			1450	JB
590			1451	JB
591			1452	JB
592			1453	JB
593			1456	JB
			1458	JD

Shipment of Field Kit to Site — Custody Seal # 3531829		Intact? Y N
Relinquished by:	Date/Time	Received by:
<i>Kenny Ipecho</i>	04-15-2014 / 1700 Hours	
		Courier
		FedEx
Shipment of Field Kit to Laboratory — Custody Seal #		Intact? Y N
Relinquished by:	Date/Time	Received by:
<i>[Signature]</i>	4/30/14 1800	<i>Steven Tomley</i>
		Date/Time
		5.1.14 / 11:07

Attachment 2
Assessment of Temporal Variability

Table A2-1
 Evaluation of Temporal Variability in Passive Soil Gas Survey Data
 Former Tecumseh Products Site
 Tecumseh, Michigan

Grid Location	Sample Number	Sample Date	Trichloroethene	TCE + Breakdown Products	1,1,1-Trichloroethane	TCE + Breakdown Products and TCA
			ug	ug	ug	ug
North/2014 Supplemental Comparison						
C15	110	7/8/2010	38.649	154.731	<0.025	154.731
	395	4/29/2014	17.631	32.276	0.407	32.683
	2014:2010 North Ratio		0.46	0.21	16.27	0.21
D11	099	7/8/2010	128.988	149.453	55.997	205.450
	393	4/29/2014	27.425	27.866	8.176	36.042
	2014:2010 North Ratio		0.21	0.19	0.15	0.18
D12	101	7/8/2010	133.820	145.719	45.785	191.505
	394	4/29/2014	11.028	11.378	3.880	15.259
	2014:2010 North Ratio		0.08	0.08	0.08	0.08
E9	095	7/8/2010	81.608	91.494	26.226	117.720
	391	4/29/2014	20.312	20.766	0.860	21.626
	2014:2010 North Ratio		0.25	0.23	0.03	0.18
E10	096	7/8/2010	206.698	238.704	12.734	251.438
	392	4/29/2014	99.792	105.039	67.627	172.665
	2014:2010 North Ratio		0.48	0.44	5.31	0.69
Average			0.30	0.23	4.37	0.27
Central/2014 Supplemental Comparison						
C18	327	9/11/2013	153.962	157.549	0.589	158.138
	398	4/29/2014	98.482	100.370	1.282	101.652
	2014:2013 Central Ratio		0.64	0.64	2.18	0.64
D20	314	9/11/2013	128.433	130.482	53.119	183.601
	399	4/29/2014	47.832	48.155	56.213	104.367
	2014:2013 Central Ratio		0.37	0.37	1.06	0.57
E19	316	9/11/2013	91.431	92.194	21.139	113.332
	400	4/29/2014	63.017	63.509	3.100	66.609
	2014:2013 Central Ratio		0.69	0.69	0.15	0.59
G20	309	9/11/2013	247.031	253.232	72.118	325.350
	585	4/30/2014	60.829	61.845	50.093	111.938
	2014:2013 Central Ratio		0.25	0.24	0.69	0.34
G21	307	9/11/2013	44.474	48.882	33.780	82.662
	401	4/29/2014	28.127	28.758	27.602	56.360
	2014:2013 Central Ratio		0.63	0.59	0.82	0.68
Average			0.52	0.51	0.98	0.56

Notes:
 ug - micrograms

Table A2-1
 Evaluation of Temporal Variability in Passive Soil Gas Survey Data
 Former Tecumseh Products Site
 Tecumseh, Michigan

Grid Location	Sample Number	Sample Date	Trichloroethene	TCE + Breakdown Products	1,1,1-Trichloroethane	TCE + Breakdown Products and TCA
			ug	ug	ug	ug
South/2014 Supplemental Comparison						
I34	174	7/8/2013	141.536	147.901	45.117	193.018
	403	4/29/2014	32.495	35.170	50.745	85.915
	2014:2013 South Ratio		0.23	0.24	1.12	0.45
I36	172	7/8/2013	132.952	143.639	42.600	186.239
	404	4/29/2014	75.379	84.568	94.220	178.788
	2014:2013 South Ratio		0.57	0.59	2.21	0.96
I37	171	7/8/2013	161.949	167.445	37.010	204.454
	405	4/29/2014	51.126	52.382	52.020	104.402
	2014:2013 South Ratio		0.32	0.31	1.41	0.51
I38	170	7/8/2013	79.549	82.413	11.555	93.968
	406	4/29/2014	43.620	45.587	21.459	67.046
	2014:2013 South Ratio		0.55	0.55	1.86	0.71
J31	156	7/8/2013	86.153	133.907	15.381	149.288
	402	4/29/2014	25.249	56.257	17.313	73.570
	2014:2013 South Ratio		0.29	0.42	1.13	0.49
Average			0.39	0.42	1.54	0.62
North/Central Comparison						
E16	058	7/8/2010	139.130	152.046	30.970	183.016
	326	9/11/2013	156.760	159.343	22.005	181.348
	Central:North Ratio		1.13	1.05	0.71	0.99
E17	059	7/8/2010	103.843	110.181	10.251	120.432
	325	9/11/2013	191.636	193.995	25.164	219.159
	Central:North Ratio		1.85	1.76	2.45	1.82
E18	064	7/8/2010	55.956	64.439	18.267	82.706
	321	9/11/2013	176.594	184.028	36.068	220.096
	Central:North Ratio		3.16	2.86	1.97	2.66
F17	060	7/8/2010	149.227	168.368	9.281	177.649
	328	9/11/2013	245.348	250.092	7.009	257.101
	Central:North Ratio		1.64	1.49	0.76	1.45
F18	063	7/8/2010	130.559	145.455	19.397	164.852
	320	9/11/2013	130.581	134.309	10.164	144.473
	Central:North Ratio		1.00	0.92	0.52	0.88
Average			1.75	1.61	1.28	1.56

Notes:
 ug - micrograms

Table A2-1
 Evaluation of Temporal Variability in Passive Soil Gas Survey Data
 Former Tecumseh Products Site
 Tecumseh, Michigan

Grid Location	Sample Number	Sample Date	Trichloroethene	TCE + Breakdown Products	1,1,1-Trichloroethane	TCE + Breakdown Products and TCA
			ug	ug	ug	ug
South/Central Comparison						
B22	237	7/8/2013	9.994	10.059	0.773	10.832
	293	9/11/2013	21.159	21.322	0.967	22.289
	Central:South Ratio		2.12	2.12	1.25	2.06
B25	240	7/8/2013	34.445	35.145	41.433	76.578
	294	9/11/2013	88.267	90.718	48.363	139.081
	Central:South Ratio		2.56	2.58	1.17	1.82
B26	241	7/8/2013	65.914	66.771	29.281	96.052
	295	9/11/2013	45.395	47.049	27.574	74.623
	Central:South Ratio		0.69	0.70	0.94	0.78
C24	225	7/8/2013	62.343	63.825	15.154	78.979
	296	9/11/2013	78.995	81.641	9.950	91.591
	Central:South Ratio		1.27	1.28	0.66	1.16
C25	226	7/8/2013	15.151	15.151	13.071	28.222
	297	9/11/2013	16.917	18.452	20.814	39.266
	Central:South Ratio		1.12	1.22	1.59	1.39
Average			1.55	1.58	1.12	1.44

Notes:
 ug - micrograms