MEMORANDUM

hart hickman
SMARTER ENVIRONMENTAL SOLUTIONS

To: Billy Meyer

From: Christie Zawtocki, PE
Timothy Klotz

Date: April 8, 2014

Project: One Hour Martinizing Site, DSCA ID 32-0013
1103 W Club Blvd, Durham, NC

Subject: Monthly Update

Hart & Hickman, PC (H&H) is proceeding with implementation of the Remedial Action Plan (RAP) for the One Hour Martinizing site. The groundwater remedial action, which consisted of injecting EHC into the source area aquifer, was completed at the site between January 8 and 25, 2014. An *EHC Injection Report* was submitted to the DSCA Program on March 31, 2014. Figures 1A and 1B depict the EHC injection locations. A brief summary of recent post-injection sampling activities and upcoming activities is provided below. An updated project calendar is provided in Attachment A.

Post-Injection Groundwater Sampling Activities

In accordance with the RAP, H&H conducted the first post-injection groundwater sampling event in February 2014 to evaluate site conditions approximately one month after the EHC injection. The sampling activities were completed during the week of February 24, 2014. Groundwater samples were collected from the following locations:

- Source property: MW-3R, MW-3I, MW-4R, MW-4I, MW-21, MW-22S, MW-22I, MW-23S, MW-23I
- West of source property: MW-10
- South of source property: MW-15S, MW-15I, MW-18
- East of source property: MW-14S, MW-14I, MW-16S, MW-16I

The samples were analyzed for volatile organic compounds (VOCs), methane, ethane, ethene, total iron, and total organic carbon (TOC). Field measurements of dissolved oxygen (DO), oxidation-reduction potential (ORP), temperature, pH, and conductivity were also collected. Samples from MW-R/I were also analyzed for RCRA metals. The VOC analytical results for the sampled monitoring wells are summarized on the attached Table 1, along with historical site data. The results for the other parameters are summarized on Table 2.

The goal of the EHC injection is to reduce tetrachloroethene (PCE) groundwater concentrations in the source area. Graphs of PCE concentration versus time are provided in Attachment B, and Figures 2A and 2B depict the February 2014 post-injection groundwater PCE concentrations in the shallow and intermediate monitoring zones, respectively. The December 2013 pre-injection groundwater PCE concentration maps for the shallow and intermediate monitoring zones are also included as Figures 2C and 2D.

As shown in the graphs, one-month post-injection, reductions in PCE were observed in the following monitoring wells located within the injection area: MW-15S, MW-22S, MW-22I, MW-23S, and MW-23I. PCE was reduced by between 45% and 93% in these injection area monitoring wells. PCE concentrations were more variable in the remaining monitoring wells with some increases and some decreases observed. The PCE concentrations in the remaining monitoring wells were generally within the range of historical concentrations, except for MW-15S and MW-4R where PCE concentrations increased compared to previous results. PCE concentrations in these monitoring wells are expected to decrease over time as a result of the EHC injection. Future monitoring will further evaluate concentration trends in monitoring wells located outside of the injection area.

The EHC injection promotes abiotic and biotic degradation of PCE. The degradation process results in temporary increases in trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), and vinyl chloride, as the PCE is degraded to the eventual end products of ethene and ethane. As expected, increases in TCE and cis-1,2-DCE were observed in several of the injection area monitoring wells during the one-month post-injection sampling event.

Other notable VOC concentration changes observed one month post-injection include increases in acetone and 2-butanone (MEK). Short-term increases in acetone and MEK are commonly observed after injection of bioremediation products, such as EHC. These constituents are produced during fermentation of the organic carbon matter in the EHC material. Similar increases were observed after placement of the Daramend material in the excavation. Concentrations of acetone and MEK are expected to substantially decrease over time.

The analytical results for the geochemical parameters are summarized in Table 2. The objective of the EHC injection was to distribute organic carbon and iron into the source area aquifer to create anaerobic conditions favorable for biodegradation of PCE. Increases in TOC and iron indicate good distribution of the EHC material in the subsurface. Decreases in DO and ORP and increases in methane are indicative of favorable anaerobic conditions. As shown in Table 2, injection area monitoring wells MW-15S, MW-22S, MW-22I, and MW-23S indicated high concentrations of TOC and iron confirming the EHC was effectively distributed throughout the target injection areas. DO concentrations also decreased in these monitoring wells and some increases in methane were observed suggesting anaerobic conditions favorable for PCE degradation have been achieved.

In summary, the results for the one-month post-injection sampling event completed in February 2014 indicate that the EHC was effectively distributed throughout the target injection areas, conditions favorable for degradation of PCE have been created within the injection area, and

substantial reductions in PCE concentrations have been observed in several monitoring wells. The two-month post-injection sampling event was completed during the week of March 24, 2014, and the results will be presented in the next monthly update. The three-month post-injection sampling event is scheduled for the week of April 21, 2014.

Post-Injection Soil Gas Sampling Activities

H&H conducted the first post-injection soil gas sampling event at the site on February 24 and 25, 2014. The following soil gas sample points were scheduled to be sampled:

- Source property: SV-8S/I, SV-14, SV-55S/I
- West of source property: SV-49S/D, SV-50
- South of source property: SV-27S/D, SV-28S/D
- East of source property: SV-18, SV-19, SV-20S/D, SV-21S/D, SV-25S/D, SV-29S/D, SV-36S/D, SV-43S/D

SV-20S, SV-25D, SV-29D, SV-36D, and SV-55I could not be sampled due to moisture and/or clogging of the sampling points. Samples were collected from the remaining locations and analyzed for PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride using EPA Method TO-15.

The soil gas sample analytical results are summarized in the attached Table 3 and shown on Figure 3. The results for the source property are compared to the Division of Waste Management (DWM) Non-Residential Soil Gas Screening Levels (SGSLs), and the results for the non-source properties to the south and east are compared to the DWM Residential SGSLs. PCE concentrations decreased in fourteen of the sampled soil gas sample points compared to the December 2013 pre-injection sampling event. Additional monitoring is planned to further evaluate the effects of the EHC injection on soil gas concentrations. The two-month post-injection soil gas sampling event was completed during the week of March 24, 2014, and the results will be presented in the next monthly update. The three-month post-injection sampling event is scheduled for the week of April 21, 2014.

Indoor Air Monitoring

In February 2014, H&H collected post-injection indoor air samples at the three structures adjacent to the source property where vapor mitigation systems are in place (1419 Dollar Ave, 1421 Dollar Ave, and 1414 Watts St). On February 23, 2014, H&H collected two 3-hour Summa canister indoor air samples from the Triangle Family Church at 1414 Watts St during the church's Sunday service. H&H also collected two 24-hour Summa canister indoor air samples from the residences at 1419 and 1421 Dollar Ave on February 19-20, 2014 and February 24-25, 2014, respectively. In addition, H&H collected two 14-day indoor air samples from the 1419 and 1421 Dollar Ave residences using passive Radiello sampling devices. The sampling periods for the 14-day samples are shown on the attached calendar. The indoor air samples were submitted for laboratory analysis of PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, and VC. The

analytical results for the indoor air samples are summarized in Table 4 and presented on Figure 4.

PCE was detected in each of the indoor air samples collected at 1414 Watts St at concentrations of 91 $\mu g/m^3$ (1414-Front) and 160 $\mu g/m^3$ (1414-Rear). To evaluate the risk associated with the detected indoor air concentrations, H&H evaluated a residential exposure scenario assuming 6 hours per week of exposure time, which is typical of a Triangle Family Church parishioner. As shown in the worksheets provided in Attachment C, the calculated cumulative carcinogenic risk levels are $3.6x10^{-7}$ and $6.3x10^{-6}$ and the hazard index levels are 0.08 and 0.14 for the 1414-Front and 1414-Rear samples, respectively. These risk levels are within acceptable levels.

PCE was detected in each of the indoor air samples collected from the residences at 1419 Dollar Ave (ranging from 4.8 $\mu g/m^3$ and 9.8 $\mu g/m^3$) and 1421 Dollar Ave (ranging from 1.3 $\mu g/m^3$ and 2.6 $\mu g/m^3$). Only one of the detected PCE concentrations (9.8 µg/m3 in the 24-hr sample collected from the basement at 1419 Dollar) exceeded the DWM Residential Indoor Air Screening Level of 8.34 $\mu g/m^3$. TCE was not detected in any of the 24-hr indoor air samples, but was detected in three of the 14-day samples at concentrations of 1.4 $\mu g/m^3$ (1419-UP), 1.0 $\mu g/m^3$ (1421-UP), and 26 $\mu g/m^3$ (1421-DOWN). The detected TCE concentrations exceed the DWM Residential Indoor Air Screening Level of 0.43 $\mu g/m^3$. H&H calculated the risk associated with the detected indoor air concentrations. As shown in the worksheets in Attachment C, the carcinogenic risk levels are less than $1x10^{-5}$. The hazard index levels are less than 1 in all samples except for the 14-day sample collected from the basement of 1421 Dollar Ave (1421-DOWN). Due to the concentration of TCE in this sample, the hazard index is 12.44 and is above the acceptable level of 1. H&H re-sampled the indoor air in the 1421 Dollar Ave residence in March to further evaluate concentrations at this location. The DSCA Program will evaluate the March results and determine if any additional sampling or mitigation efforts are warranted.

As shown on the attached calendar, the two-month post-injection indoor air sampling event was completed in March 2014, and the three-month post-injection indoor air sampling event is scheduled for April 2014.

Soil Vapor Field Screening

H&H completed a post-injection soil vapor field screening event at the site on March 17, 2014. The event included measuring total volatile organic compounds (VOCs), methane, carbon dioxide, and oxygen in soil vapor, indoor air, and outdoor ambient air. The primary purpose of the sampling is to confirm methane levels are within acceptable standards. Measurements were scheduled to be collected at the following locations:

- Soil Vapor Monitoring Points: SV-8S, SV-8I, SV-18S, SV-19S, SV-20S, SV-20D, SV-29S, SV-55S, SV-55I
- Excavation Vent Exhaust Pipe
- Sub-Slab Depressurization (SSD) System Exhaust and Indoor Air at 1414 Watts St (Triangle Family Church)
- Ambient, Outdoor Air on Source Property

Measurements could not be collected from SV-18 and SV-55I. The tubing for SV-18 was damaged, and SV-55I could not be sampled due to moisture/lack of air flow. The field screening data are summarized in the attached Table 5, and the methane readings collected between March 2013 and March 2014 are shown on the attached Figure 5. Recorded field measurements indicate that methane was detected in one soil vapor monitoring point, SV-55S, at a low level of 0.3% by volume. This methane reading is well within acceptable levels.

Methane was not detected in the vapors from the excavation passive exhaust vent during the March 2014 sampling event. These vapors are exhausted into the atmosphere through the stack installed on the source property where they dissipate into the atmosphere. Ambient air monitoring conducted near ground level in the immediate vicinity of the exhaust vent did not detect any measurable methane. Methane also was not detected in the sub-slab depressurization system exhaust or indoor air at the Triangle Family Church at 1414 Watts St.

VOCs were detected in each of the monitored soil vapor points, except for SV-19. In general, the soil vapor VOC concentrations are lower than the pre-injection concentrations. The highest VOC concentration was detected in soil vapor point SV-8I (265 ppm) located near the southeast corner of the source property.

As indicated on the attached calendar, the next vapor field screening event is scheduled for April 14, 2014.

TABLES

Table 1: Analytical Data for Groundwater **ADT 1**

DSCA ID No.: 32-0013

Groundwater Sampling Point	Sampling Date (mm/dd/yy)	Benzene	cis-1,2-Dichloroethylene	Ethylbenzene	Methyl tert-butyl ether (MTBE)	Naphthalene	Tetrachloroethylene	Toluene	trans-1,2-Dichloroethylene	Trichloroethylene	Vinyl chloride	Xylenes (total)	1,2-Dichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethylene	Acetone	Chloroform	2-Butanone (MEK)	Methylene Chloride
		[mg/L]																		
MW-3R	05/31/07	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.005	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.05	<0.005	<0.01	<0.005
	01/08/08	<0.001	<0.001	<0.001	<0.001	<0.005	**0.063**	<0.005	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.05	<0.005	<0.01	<0.005
	02/24/09	<0.001	<0.001	<0.001	<0.001	<0.005	**0.019**	<0.005	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.05	<0.005	<0.01	<0.005
	05/15/09	<0.001	<0.001	<0.001	<0.001	<0.005	**0.018**	<0.005	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.05	<0.005	<0.01	<0.005
	08/04/09	<0.001	<0.001	<0.001	<0.001	<0.001	**0.0166**	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.005	<0.002
	05/18/12	<0.001	<0.001	<0.001	<0.001	<0.005	**0.019**	<0.005	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.05	<0.005	<0.01	<0.005
	08/20/13	<0.001	<0.001	<0.001	<0.001	<0.005	**0.00762**	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.050	<0.005
	12/16/13	<0.001	<0.001	<0.001	<0.001	<0.005	**0.00711**	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.050	<0.005
	02/26/14	<0.001	<0.001	<0.001	<0.001	<0.005	**0.0104**	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	**0.00105**	<0.050	<0.005
MW-3I	11/09/09	<0.01	<0.01	<0.01	<0.01	<0.01	**0.1761**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	NA	<0.01
	05/18/12	<0.001	0.0019	<0.001	0.0018	<0.005	**0.093**	<0.005	<0.001	**0.0012**	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.05	<0.005	<0.01	<0.005
	08/20/13	<0.001	**0.00428**	<0.001	<0.001	<0.005	**0.179**	<0.001	<0.001	**0.00233**	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.050	<0.005
	12/16/13	<0.001	**0.00464**	<0.001	<0.001	<0.005	**0.275**	<0.001	<0.001	**0.00231**	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.050	<0.005
	02/26/14	<0.001	0.00301	<0.001	<0.001	<0.005	**0.218**	<0.001	<0.001	**0.00218**	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.050	<0.005
MW-4	11/19/93	N/A	N/A	N/A	N/A	N/A	**0.30**	N/A	N/A	**0.0012**	N/A	N/A	BDL	BDL	BDL	N/A	N/A	BDL	N/A	N/A
MW-4R	05/31/07	<0.001	<0.001	<0.001	<0.001	<0.005	**0.51**	<0.005	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.05	<0.005	<0.01	<0.005
	01/08/08	<0.001	<0.001	<0.001	<0.001	<0.005	**0.31**	<0.005	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.05	<0.005	<0.01	<0.005
	02/24/09	<0.001	<0.001	<0.001	<0.001	<0.005	**0.25**	<0.005	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.05	<0.005	<0.01	<0.005
	05/15/09	<0.001	<0.001	<0.001	<0.001	<0.005	**0.19**	<0.005	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.05	<0.005	<0.01	<0.005
	08/04/09	<0.001	<0.001	<0.001	<0.001	<0.001	**0.203**	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.005	<0.002
	05/17/12	<0.005	<0.005	<0.005	<0.005	<0.025	**0.73**	<0.025	<0.005	<0.005	<0.005	<0.015	<0.005	<0.005	<0.005	<0.005	<0.05	<0.025	<0.01	<0.025
	01/03/13	<0.01	<0.01	<0.01	<0.01	<0.01	**0.20**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.10	<0.05
	08/20/13	<0.001	<0.001	<0.001	<0.001	<0.005	**0.880**	<0.001	<0.001	**0.00118**	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.050	<0.005
	12/17/13	<0.001	<0.001	<0.001	<0.005	<0.005	**0.907**	<0.001	<0.001	**0.00143**	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.050	<0.005
	02/26/14	<0.001	<0.001	<0.001	<0.005	<0.005	**1.23**	<0.001	<0.001	**0.00139**	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.050	<0.005
MW-4I	11/09/09	<0.01	<0.01	<0.01	<0.01	<0.01	**0.0492**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	NA	<0.01
	05/17/12	<0.001	<0.001	<0.001	<0.001	<0.005	**0.020**	<0.005	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.05	<0.005	<0.01	<0.005
	01/03/13	<0.001	<0.001	<0.001	<0.001	<0.005	**0.018**	<0.005	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.05	<0.005	<0.01	<0.005
	08/20/13	<0.001	<0.001	<0.001	<0.001	<0.005	**0.0342**	<0.005	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.050	<0.005
	12/17/13	<0.001	<0.001	<0.001	<0.001	<0.005	**0.0271**	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.050	<0.005
	02/26/14	<0.001	<0.001	<0.001	<0.001	<0.005	**0.0293**	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.050	<0.005

Table 1: Analytical Data for Groundwater **ADT 1**

DSCA ID No.: 32-0013

Groundwater Sampling Point	Sampling Date (mm/dd/yy)	Benzene	cis-1,2-Dichloroethylene	Ethylbenzene	Methyl tert-butyl ether (MTBE)	Naphthalene	Tetrachloroethylene	Toluene	trans-1,2-Dichloroethylene	Trichloroethylene	Vinyl chloride	Xylenes (total)	1,2-Dichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethylene	Acetone	Chloroform	2-Butanone (MEK)	Methylene Chloride
		[mg/L]																		
MW-10	09/03/08	**0.0064**	<0.005	**0.22**	<0.005	**0.036**	<0.005	<0.025	<0.005	<0.005	<0.005	**0.20**	<0.005	<0.005	<0.005	<0.005	<0.25	<0.025	<0.05	<0.025
	02/24/09	**0.11**	**0.010**	**0.059**	**0.26**	<0.05	<0.01	<0.05	<0.01	<0.01	<0.01	0.063	<0.01	<0.01	<0.01	<0.01	<0.50	<0.05	<0.10	<0.05
	05/15/09	**0.049**	<0.001	**0.17**	**0.22**	**0.019**	<0.001	0.013	<0.001	<0.001	<0.001	**0.10**	<0.001	<0.001	<0.001	<0.001	0.21	<0.005	<0.01	<0.005
	08/04/09	**0.0120**	<0.002	**0.282**	**0.0234**	**0.0743**	<0.002	0.0102	<0.002	<0.002	<0.002	**0.264**	<0.002	<0.002	<0.002	<0.002	<0.050	<0.002	0.141	<0.004
	05/17/12	**0.0026**	<0.001	**0.021**	<0.001	<0.005	<0.001	<0.005	<0.001	<0.001	<0.001	0.022	<0.001	<0.001	<0.001	<0.001	<0.05	<0.005	<0.01	<0.005
	08/21/13	<0.001	<0.001	**0.0328**	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.00904	<0.001	<0.001	<0.001	<0.001	0.00524	<0.001	<0.05	<0.005
	12/16/13	**0.00391**	<0.001	**0.0112**	<0.001	**0.00662**	<0.001	0.00270	<0.001	<0.001	<0.001	0.00996	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.05	<0.005
	02/28/14	0.000531J	0.000396J	<0.001	0.0136	0.000231J	**0.00239**	0.000959J	<0.001	0.000289J	<0.001	0.0016J	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.05	<0.005
MW-14S	11/10/09	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	NA	<0.01
	05/18/12	<0.001	<0.001	<0.001	<0.001	<0.005	**0.023**	<0.005	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.05	<0.005	<0.01	<0.005
	08/22/13	<0.001	<0.001	<0.001	<0.001	<0.005	**0.112**	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.05	<0.005
	12/20/13	<0.001	<0.001	<0.001	<0.001	<0.005	**0.0312**	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.05	<0.005
	02/27/14	<0.001	<0.001	<0.001	<0.001	<0.005	**0.0706**	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.05	<0.005
MW-14I	11/09/09	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	NA	<0.01
	05/18/12	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.005	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.05	<0.005	<0.01	<0.005
	01/03/13	<0.001	<0.001	<0.001	<0.001	<0.005	**0.0015**	<0.005	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.05	<0.005	<0.01	<0.005
	08/22/13	<0.001	<0.001	<0.001	<0.001	<0.005	**0.00108**	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.05	<0.005
	12/19/13	<0.001	<0.001	<0.001	<0.001	<0.005	**0.00133**	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.05	<0.005
	02/27/14	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.05	<0.005
MW-15S	11/09/09	<0.01	<0.01	<0.01	<0.01	<0.01	**7.05**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	NA	<0.01
	08/19/13	<0.001	<0.001	<0.001	<0.001	<0.005	**15**	<0.001	<0.001	**0.00606**	<0.001	<0.002	<0.001	<0.001	**0.00471**	<0.001	<0.005	<0.001	<0.050	<0.005
	12/20/13	<0.001	<0.001	<0.001	<0.001	<0.005	**13.1**	<0.001	<0.001	**0.00455**	<0.001	<0.003	<0.001	<0.001	**0.00295**	<0.001	<0.005	<0.001	<0.050	<0.005
	02/26/14	<0.001	<0.001	<0.001	<0.001	<0.005	**3.76**	<0.001	<0.001	**0.0249**	<0.001	<0.003	<0.001	<0.001	**0.00179**	0.00109	<0.005	<0.001	**6.25**	<0.005
MW-15I	11/09/09	<0.01	<0.01	<0.01	<0.01	<0.01	**0.00835**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	NA	<0.01
	08/19/13	<0.001	<0.001	<0.001	<0.001	<0.005	**0.00342**	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.050	<0.005
	12/17/13	<0.001	<0.001	<0.001	<0.001	<0.005	**0.00420**	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.050	<0.005
	02/26/14	<0.001	<0.001	<0.001	<0.001	<0.005	**0.0449**	0.00101	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.050	<0.005
MW-16S	11/10/09	<0.01	<0.01	<0.01	<0.01	<0.01	**0.0706**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	NA	<0.01
	05/18/12	<0.001	<0.001	<0.001	<0.001	<0.005	**0.083**	<0.005	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.05	<0.005	<0.01	<0.005
	01/03/13	<0.001	<0.001	<0.001	<0.001	<0.005	**0.096**	<0.005	<0.001	<0.001	<0.001	<0.003	<0.0010	<0.0010	<0.0010	<0.0010	<0.05	<0.005	<0.01	<0.005
	08/21/13	<0.001	<0.001	<0.001	<0.001	<0.005	**0.103**	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.05	<0.005
	12/19/13	<0.001	<0.001	<0.001	<0.001	<0.005	**0.112**	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.05	<0.005
	02/27/14	<0.001	<0.001	<0.001	<0.001	<0.005	**0.0444**	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.05	<0.005

Table 1: Analytical Data for Groundwater **ADT 1**

DSCA ID No.: 32-0013

Groundwater Sampling Point	Sampling Date (mm/dd/yy)	Benzene	cis-1,2-Dichloroethylene	Ethylbenzene	Methyl tert-butyl ether (MTBE)	Naphthalene	Tetrachloroethylene	Toluene	trans-1,2-Dichloroethylene	Trichloroethylene	Vinyl chloride	Xylenes (total)	1,2-Dichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethylene	Acetone	Chloroform	2-Butanone (MEK)	Methylene Chloride
		[mg/L]																		
MW-16I	11/10/09	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	NA	<0.01
	05/18/12	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.005	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.05	<0.005	<0.01	<0.005
	01/03/13	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.005	<0.001	<0.001	<0.001	<0.003	<0.0010	<0.0010	<0.0010	<0.0010	<0.05	<0.005	<0.01	<0.005
	08/21/13	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.05	<0.005
	12/19/13	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.05	<0.005
	02/27/14	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.05	<0.005
MW-18	11/25/09	<0.025	<0.025	<0.025	<0.025	<0.12	**0.72**	<0.12	<0.025	<0.025	<0.025	<0.075	<0.025	<0.025	<0.025	<0.025	<1.2	<0.12	<0.25	<0.12
	05/18/12	<0.01	<0.01	<0.01	<0.01	<0.05	**0.79**	<0.05	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.50	<0.05	<0.10	<0.05
	08/19/13	<0.001	0.00296	<0.001	<0.001	<0.005	**1.10**	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.050	<0.005
	12/17/13	<0.001	0.00239	<0.001	<0.001	<0.005	**1.18**	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.050	<0.005
	02/26/14	<0.001	0.00267	<0.001	<0.001	<0.005	**0.949**	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.050	<0.005
MW-21	08/20/13	<0.001	<0.001	<0.001	<0.001	<0.005	**0.00114**	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	**0.00108**	<0.050	<0.005
	12/16/13	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.050	<0.005
	02/26/14	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.050	<0.005
MW-22S	01/03/13	<0.005	<0.005	<0.005	<0.005	<0.025	<0.005	0.077	<0.005	<0.005	**0.0065**	<0.015	<0.005	<0.005	<0.005	<0.005	0.54	<0.025	**5.7**	<0.025
	01/09/13	<0.05	0.056	<0.05	<0.05	<0.25	**0.37**	0.34	<0.05	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<2.5	<0.025	**6.9**	<0.025
	08/21/13	<0.001	0.00197	0.00209	<0.001	<0.005	<0.001	0.00197	<0.001	**0.00147**	**0.0239**	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.05	<0.005
	12/17/13	<0.001	**0.216**	<0.001	<0.001	<0.005	**0.00537**	0.00259	0.00384	**0.0639**	**0.254**	<0.003	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.05	<0.005
	02/28/14	<0.01	0.0383	<0.01	<0.01	<0.05	**0.00179J**	**0.950**	<0.01	<0.01	**0.0202**	<0.03	<0.01	<0.01	<0.01	<0.01	1.4	**0.00296J**	0.502	**0.00232J**
MW-22I	01/03/13	<0.1	**2.8**	<0.1	<0.1	<0.1	**67**	<0.5	<0.1	**1.4**	<0.1	<0.3	<0.1	<0.1	<0.1	<0.1	<5.0	<0.5	1.3	<0.5
	01/11/13	<0.5	**4.1**	<0.5	<0.5	<0.5	**70**	<2.5	<0.5	**1.6**	<0.5	<1.5	<0.5	<0.5	<0.5	<0.5	<25	<2.5	<5.0	<2.5
	08/21/13	<0.001	**1.26**	< 0.001	<0.001	<0.005	**57.7**	0.00895	<0.05	**1.04**	**0.0596**	<0.002	<0.001	<0.001	**0.0290**	**0.0138**	0.0558	**0.00852**	<0.05	<0.005
	12/16/13	<0.001	**0.380**	< 0.001	<0.001	<0.005	**70.7**	0.00924	0.00593	**0.451**	**0.0375**	<0.003	<0.001	<0.001	**0.0410**	**0.00983**	0.0435	**0.0107**	<0.05	<0.005
	02/28/14	<0.1	**14.7**	<0.1	<0.1	<0.5	**12.1**	0.0420J	**0.187**	**2.77**	**0.0967J**	<0.3	<0.1	<0.1	<0.1	**0.0826J**	0.617J	**0.0333J**	**4.36J**	**0.0239J**
MW-23S	08/19/13	<0.001	0.00395	0.00133	<0.001	**0.00592**	**80.9**	0.00432	<0.001	**0.0101**	<0.001	0.00488	<0.001	**0.00542**	**0.0545**	<0.001	0.0787	**0.0149**	<0.050	<0.005
	12/17/13	<0.001	0.0191	0.00141	<0.001	**0.0105**	**92.4**	0.00619	<0.001	**0.0144**	<0.001	0.00526	<0.001	**0.00412**	**0.0563**	<0.001	0.180	**0.0163**	0.161	<0.005
	02/28/14	<0.1	0.0390J	<0.1	<0.1	**0.0504J**	**49.4**	<0.1	<0.1	**0.348**	<0.1	<0.3	<0.1	<0.1	0.0399J	<0.1	0.593J	**0.0436J**	0.434J	<0.5
MW-23I	08/19/13	<0.001	<0.001	<0.001	<0.001	<0.005	**1.76**	<0.001	<0.001	**0.00140**	<0.001	<0.002	<0.001	<0.001	**0.00461**	<0.001	<0.005	**0.00147**	<0.050	<0.005
	12/17/13	<0.001	<0.001	<0.001	<0.001	<0.005	**0.659**	<0.001	<0.001	<0.001	<0.001	<0.003	<0.001	<0.001	**0.00180**	<0.001	<0.005	<0.001	<0.050	<0.005
	02/28/14	<0.001	**0.316**	<0.001	<0.001	<0.005	**0.0453**	0.00113	0.00430J	**0.0133**	<0.001	<0.003	0.000236J	<0.001	0.000557J	0.000949J	<0.005	<0.001	<0.050	<0.005
Tier 1 RBSL		0.001	0.07	0.003	0.02	0.004	0.0007	0.6	0.076	0.001	0.00003	0.094	0.0004	0.0002	0.0012	0.007	6.0	0.00073	4.0	0.005

Notes:

1. **Bold** concentration exceeds DSCA Program Tier 1 RBSL (or NC 2L Standard, if no RBSL established).
2. J flag denotes estimated concentration between laboratory reporting limit and method detection limit.
3. NA = Not Analyzed; N/A = Not Available; BDL = Below Detection Limit (detection limits not available); NE = Not Established

Table 1(1): Analytical Data for Groundwater (User Specified Chemicals) **ADT 1(1)**

DSCA ID No.: 32-0013

Groundwater Sampling Point	Sampling Date (mm/dd/yy)	Chlorobenzene	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Diisopropyl ether	Isopropylbenzene	n-Propylbenzene	p-Isopropyltoluene	1,1,1,2-Tetrachloroethane	4-Methyl-2pentanone (MIBK)	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2,3-Trimethylbenzene						
		[mg/L]																		
MW-3R	05/31/07	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001						
	01/08/08	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001						
	02/24/09	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001						
	05/15/09	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001						
	08/04/09	<0.001	NA	NA	NA	<0.001	NA	NA	<0.001	<0.001	<0.005	NA	NA	NA						
	05/18/12	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001						
	08/20/13	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA						
	12/16/13	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA						
	02/26/14	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA						
MW-3I	11/10/09	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	<0.01	NA						
	05/18/12	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001						
	08/20/13	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA						
	12/16/13	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA						
	02/26/14	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA						
MW-4	11/19/93	BDL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						
MW-4R	05/31/07	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	0.0024	<0.001	<0.001						
	01/08/08	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001						
	02/24/09	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001						
	05/15/09	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001						
	08/04/09	<0.001	NA	NA	NA	<0.001	NA	NA	<0.001	<0.001	<0.005	NA	NA	NA						
	05/17/12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005						
	01/03/13	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.10	<0.01	<0.01	<0.01						
	08/20/13	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
	12/17/13	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
	02/26/14	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
MW-4I	11/10/09	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	<0.01	NA						
	05/17/12	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001						
	01/03/13	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.010	<0.001	<0.001	<0.001						
	08/20/13	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA						
	12/17/13	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
	02/26/14	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						

Table 1(1): Analytical Data for Groundwater (User Specified Chemicals) **ADT 1(1)**

DSCA ID No.: 32-0013

Groundwater Sampling Point	Sampling Date (mm/dd/yy)	Chlorobenzene	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Diisopropyl ether	Isopropylbenzene	n-Propylbenzene	p-Isopropyltoluene	1,1,1,2-Tetrachloroethane	4-Methyl-2pentanone (MIBK)	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2,3-Trimethylbenzene						
		[mg/L]																		
MW-10	09/03/08	<0.005	0.0066	0.014	<0.005	<0.005	0.062	**0.12**	<0.005	<0.005	<0.05	**0.25**	0.097	0.046						
	02/24/09	<0.01	<0.01	0.010	<0.01	<0.01	0.029	0.032	<0.01	<0.01	<0.10	**0.035**	0.014	<0.01						
	05/15/09	<0.001	0.0077	0.014	0.0015	0.0036	0.034	0.065	0.0033	<0.001	<0.01	**0.063**	0.021	0.019						
	08/04/09	<0.002	NA	NA	NA	<0.002	NA	NA	<0.002	<0.002	<0.01	NA	NA	NA						
	05/17/12	<0.001	<0.001	0.013	0.0014	<0.001	0.016	0.025	<0.001	<0.001	<0.01	0.0023	0.0017	**0.0045**						
	08/21/13	<0.001	0.00141	0.00777	<0.001	<0.002	0.00867	0.0186	<0.001	<0.001	<0.005	0.00573	0.00517	NA						
	12/16/13	<0.001	<0.001	<0.001	0.00166	<0.002	0.0193	0.0350	0.00103	<0.001	<0.005	0.00307	0.00189	NA						
	02/28/14	<0.001	<0.001	0.00205	0.000405J	0.000207J	0.00182	<0.001	<0.001	<0.001	<0.005	0.000636J	0.000523J	NA						
MW-14S	11/10/09	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	<0.01	NA						
	05/18/12	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001						
	08/22/13	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
	12/20/13	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
	02/27/14	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
MW-14I	11/09/09	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	<0.01	NA						
	05/18/12	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001						
	01/03/13	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001						
	08/22/13	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
	12/19/13	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
	02/27/14	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
MW-15S	11/09/09	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	<0.01	NA						
	08/19/13	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.00799**	<0.001	<0.001	<0.001	NA						
	12/20/13	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	**0.00575**	<0.005	<0.001	<0.001	NA						
	02/26/14	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
MW-15I	11/09/09	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	<0.01	NA						
	08/19/13	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA						
	12/17/13	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
	02/26/14	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
MW-16S	11/10/09	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	<0.01	NA						
	05/18/12	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001						
	01/03/13	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001						
	08/21/13	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
	12/19/13	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
	02/27/14	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						

Table 1(1): Analytical Data for Groundwater (User Specified Chemicals) **ADT 1(1)**

DSCA ID No.: 32-0013

Groundwater Sampling Point	Sampling Date (mm/dd/yy)	Chlorobenzene	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Diisopropyl ether	Isopropylbenzene	n-Propylbenzene	p-Isopropyltoluene	1,1,1,2-Tetrachloroethane	4-Methyl-2pentanone (MIBK)	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	1,2,3-Trimethylbenzene						
		[mg/L]																		
MW-16I	11/10/09	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	<0.01	NA						
	05/18/12	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001						
	01/03/13	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001						
	08/21/13	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
	12/19/13	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
	02/27/14	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
MW-18	11/25/09	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.25	<0.025	<0.025	<0.025						
	05/18/12	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.10	<0.01	<0.01	<0.01						
	08/19/13	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA						
	12/17/13	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
	02/26/14	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
MW-21	08/20/13	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA						
	12/16/13	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA						
	02/26/14	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA						
MW-22S	01/03/13	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001						
	01/09/13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05	<0.05						
	08/21/13	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
	12/17/13	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	NA						
	12/17/13	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.10	<0.01	<0.01	NA						
MW-22I	01/03/13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1						
	01/11/13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5						
	08/21/13	0.00558	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	**0.0742**	0.0124	0.00357	0.00110	NA						
	12/16/13	0.00658	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	**0.0596**	0.0122	0.00432	0.00132	NA						
	02/28/14	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<0.1	NA						
MW-23S	08/19/13	0.00353	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.142**	0.00650	0.00197	0.00100	NA						
	12/17/13	0.00394	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	**0.128**	0.0155	0.00242	0.00113	NA						
	02/28/14	0.00394	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	**0.0334J**	<1.0	<0.1	<0.1	NA						
MW-23I	08/19/13	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.00730**	<0.001	<0.001	<0.001	NA						
	12/17/13	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	**0.00214**	<0.005	<0.001	<0.001	NA						
	02/28/14	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	0.000959J	<0.005	<0.001	<0.001	NA						
Tier 1 RBSL		0.050	0.070	0.070	0.070	0.070	0.070	0.070	0.025	0.0032	0.10	0.0058	0.4	NE						

Notes:

1. **Bold** concentration exceeds DSCA Program Tier 1 RBSL (or NC 2L Standard, if no RBSL established).
2. J flag denotes estimated concentration between laboratory reporting limit and method detection limit.
3. NA = Not Analyzed; N/A = Not Available; BDL = Below Detection Limit (detection limits not available); NE = Not Established

Table 2: Analytical Data for Natural Attenuation Parameters **ADT 2**

DSCA ID No.: 32-0013

Sample ID	Sampling Date (mm/dd/yy)	Dissolved oxygen (DO)	Methane	Oxidation reduction potential (ORP)	Conductivity	pH	Temperature	Total organic carbon (TOC)	Total Iron	Ethane	Ethene	Barium	Chromium	Lead
	Units	mg/L	mg/L	mV	µs/cm^2	std unit	° C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-3R	08/05/11	6.57	<0.00072	44.87	125	5.42	20.36	NA	NA	<0.001	<0.0023	NA	NA	NA
	05/18/12	NA	<0.010	NA	NA	NA	NA	NA	NA	<0.013	<0.013	NA	NA	NA
	08/20/13	2.75	<0.005	196.2	127	5.52	21.07	2.76	1.79	<0.005	<0.005	NA	NA	NA
	12/16/13	2.52	0.0216	68.1	104	5.21	17.06	NA	NA	<0.005	<0.005	NA	NA	NA
	02/26/14	3.91	<0.00500	214.2	138	4.92	16.41	1.19	0.448	<0.005	<0.005	NA	NA	NA
MW-3I	08/05/11	3.02	<0.00072	65.90	413	5.94	20.79	NA	NA	<0.001	<0.0023	NA	NA	NA
	05/18/12	NA	<0.010	NA	NA	NA	NA	NA	NA	<0.013	<0.013	NA	NA	NA
	08/20/13	1.14	<0.005	-38.8	410	6.72	21.38	1.16	0.162	<0.005	<0.005	NA	NA	NA
	12/16/13	1.55	<0.005	60.5	367	6.68	18.28	NA	NA	<0.005	<0.005	NA	NA	NA
	02/26/14	1.39	<0.005	99.3	482	6.76	16.98	1.05	1.51	<0.005	<0.005	NA	NA	NA
MW-4R	05/17/12	NA	0.011	NA	NA	NA	NA	NA	NA	<0.013	<0.013	NA	NA	NA
	08/20/13	0.93	<0.005	157.9	88	5.59	20.46	<1.0	0.814	<0.005	<0.005	NA	NA	NA
	12/17/13	2.47	<0.005	89.1	84	5.59	15.16	NA	NA	<0.005	<0.005	0.150	0.00540	<0.00500
	02/26/14	1.55	<0.005	209.8	105	5.50	16.15	<1.00	1.19	<0.005	<0.005	0.150	0.00540	<0.00500
MW-4I	05/17/12	NA	<0.010	NA	NA	NA	NA	NA	NA	<0.013	<0.013	NA	NA	NA
	08/20/13	4.85	<0.005	171.9	55	5.98	21.74	<1.0	1.16	<0.005	<0.005	NA	NA	NA
	12/17/13	6.12	0.0127	39.6	52	6.22	13.98	NA	NA	<0.005	<0.005	0.0281	<0.00500	0.00720
	02/26/14	5.64	0.0127	39.6	52	6.22	13.98	NA	NA	<0.005	<0.005	0.0281	<0.00500	0.00720
MW-10	05/17/12	NA	0.48	NA	NA	NA	NA	NA	NA	<0.013	<0.013	NA	NA	NA
	08/21/13	0.33	0.393	-58.2	940	6.68	23.12	4.48	9.18	<0.005	<0.005	NA	NA	NA
	12/16/13	1.56	1.55	-82.3	897	6.7	20.05	NA	NA	0.00792	<0.005	NA	NA	NA
	02/28/14	0.94	0.777	77.0	1095	6.65	12.63	3.17	1.41	<0.005	<0.005	NA	NA	NA
MW-14S	05/18/12	NA	<0.010	NA	NA	NA	NA	NA	NA	<0.013	<0.013	NA	NA	NA
	08/22/13	3.39	<0.005	0.4	213	6.54	20.95	1.97	5.23	<0.005	<0.005	NA	NA	NA
	12/20/13	5.13	0.0176	123.8	132	6.26	15.3	NA	NA	0.0441	<0.005	NA	NA	NA
	02/27/14	5.95	0.0189	194.4	102	5.94	12.5	NA	3.71	<0.005	<0.005	NA	NA	NA
MW-14I	05/18/12	NA	<0.010	NA	NA	NA	NA	NA	NA	<0.013	<0.013	NA	NA	NA
	08/22/13	2.77	<0.005	15.1	219	6.62	22.07	<1.0	1.23	<0.005	<0.005	NA	NA	NA
	12/19/13	5.25	<0.005	127.8	54	6.04	16.24	NA	NA	<0.005	<0.005	NA	NA	NA
	02/27/14	7.25	<0.005	194.1	56	5.87	15.12	<1.0	64.7	<0.005	<0.005	NA	NA	NA

Table 2: Analytical Data for Natural Attenuation Parameters **ADT 2**

DSCA ID No.: 32-0013

Sample ID	Sampling Date (mm/dd/yy)	Dissolved oxygen (DO)	Methane	Oxidation reduction potential (ORP)	Conductivity	pH	Temperature	Total organic carbon (TOC)	Total Iron	Ethane	Ethene	Barium	Chromium	Lead
	Units	mg/L	mg/L	mV	µs/cm^2	std unit	° C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-15S	08/19/13	7.22	NA	170.5	62	5.00	19.41	NA	NA	NA	NA	NA	NA	NA
	12/20/13	6.23	<0.005	132.6	87	6.72	15.83	NA	NA	<0.005	<0.005	NA	NA	NA
	02/26/14	1.01	0.00925	67.0	1872	4.39	13.61	2690	345	<0.005	<0.005	NA	NA	NA
MW-15I	08/19/13	2.56	NA	208.6	127	5.64	19.85	NA	NA	NA	NA	NA	NA	NA
	12/17/13	2.6	<0.005	124.1	117	5.65	16.72	NA	NA	<0.005	<0.005	NA	NA	NA
	02/26/14	1.31	<0.005	127.0	262	5.71	13.02	3.16	1.61	<0.005	<0.005	NA	NA	NA
MW-16S	05/18/12	NA	<0.010	NA	NA	NA	NA	NA	NA	<0.013	<0.013	NA	NA	NA
	08/21/13	4.40	<0.005	201.0	80	5.74	20.89	1.35	8.99	<0.005	<0.005	NA	NA	NA
	12/19/13	3.89	<0.005	108.0	82	5.96	15.69	NA	NA	<0.005	<0.005	NA	NA	NA
	02/27/14	8.16	<0.005	278.3	87	6.33	14.30	1.14	107	<0.005	<0.005	NA	NA	NA
MW-16I	05/18/12	NA	<0.010	NA	NA	NA	NA	NA	NA	<0.013	<0.013	NA	NA	NA
	08/21/13	4.69	<0.005	194.1	82	5.90	22.31	<1.0	0.811	<0.005	<0.005	NA	NA	NA
	12/19/13	6.64	<0.005	96.2	41	5.80	15.81	NA	NA	<0.005	<0.005	NA	NA	NA
	02/27/14	7.35	<0.005	215.0	52	5.79	14.17	<1.0	22.5	<0.005	<0.005	NA	NA	NA
MW-18	05/18/12	NA	<0.010	NA	NA	NA	NA	NA	NA	<0.013	<0.013	NA	NA	NA
	08/19/13	4.92	<0.005	155.5	74	5.38	19.09	1.01	13.1	<0.005	<0.005	NA	NA	NA
	12/17/13	5.76	<0.005	109.8	41	5.59	16.70	NA	NA	<0.005	<0.005	NA	NA	NA
	02/26/14	5.81	<0.005	188.4	50	5.29	14.46	<1.00	NA	<0.005	<0.005	NA	NA	NA
MW-21	08/20/13	1.02	<0.005	-183.2	447	6.82	21.32	1.25	4.44	<0.005	<0.005	NA	NA	NA
	12/16/13	1.78	<0.005	13.1	411	6.85	19.63	NA	NA	<0.005	<0.005	NA	NA	NA
	02/26/14	1.57	<0.005	197.0	471	6.55	15.92	1.28	1.79	<0.005	<0.005	NA	NA	NA
MW-22S	08/21/13	0.39	3.61	-57.1	568	6.56	22.78	4.48	9.17	0.160	0.0158	NA	NA	NA
	12/17/13	1.03	2.65	-40.5	302	6.35	15.02	NA	NA	0.293	0.129	NA	NA	NA
	02/28/14	0.75	8.87	-85.0	2286	6.54	12.09	569	344	0.0293	<0.005	NA	NA	NA
MW-22I	08/21/13	1.91	0.0318	28.5	218	6.66	22.91	1.72	0.245	0.0163	0.0192	NA	NA	NA
	12/16/13	2.37	0.0295	18.2	169	6.87	18.49	NA	NA	0.00965	0.00937	NA	NA	NA
	02/28/14	0.98	0.0920	99.6	2438	4.88	10.66	1610	284	0.0770	0.0224	NA	NA	NA
MW-23S	08/19/13	7.40	0.0196	184.4	65	5.87	20.89	1.89	2.05	<0.005	<0.005	NA	NA	NA
	12/17/13	1.41	0.0898	106.8	60	5.77	19.14	NA	NA	<0.005	<0.005	NA	NA	NA
	02/28/14	0.98	0.0545	129.8	1608	4.63	15.05	861	173	0.0136	0.0121	NA	NA	NA

Table 2: Analytical Data for Natural Attenuation Parameters **ADT 2**

DSCA ID No.: 32-0013

Sample ID	Sampling Date (mm/dd/yy)	Dissolved oxygen (DO)	Methane	Oxidation reduction potential (ORP)	Conductivity	pH	Temperature	Total organic carbon (TOC)	Total Iron	Ethane	Ethene	Barium	Chromium	Lead
	Units	mg/L	mg/L	mV	µs/cm^2	std unit	° C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-23I	08/19/13	8.13	<0.005	188.5	75	6.31	21.69	1.01	26.0	<0.005	<0.005	NA	NA	NA
	12/17/13	7.01	<0.005	127.4	54	5.81	17.69	NA	NA	<0.005	<0.005	NA	NA	NA
	02/28/14	1.03	<0.005	76.7	70	6.20	12.46	2.54	7.64	<0.005	<0.005	NA	NA	NA

Note: NA denotes not analyzed.

Table 3: Analytical Data for Soil Gas **ADT 3**

DSCA ID No.: 32-0013

Sample ID	Depth [feet bgs]	Sample Duration[1]	Sampling Date (mm/dd/yy)	cis-1,2-Dichloroethylene	Tetrachloroethylene	trans-1,2-Dichloroethylene	Trichloroethylene	Vinyl chloride
				[µg/m3]				
SV-8S	5	N/A	05/29/09	<6,300	**2,600,000**	<6,300	<8,600	<4,100
		16m	05/16/12	<63	**88,000**	<63	<86	<41
		10m	11/27/12	<7,900	**1,000,000**	<7,900	**12,000**	<5,100
		N/A	01/08/13	<1,600	**1,600,000**	<1,600	<2,100	<1,000
		1h	10/09/13	<4.0	3,400	<4.0	<5.4	<2.6
		1h 20m	12/17/13	<7,900	**5,000,000**	<7,900	<11,000	<5,100
		1h 19m	02/24/14	<7.9	**3,400,000**	<7.9	130	<5.1
SV-8I	17	9m	11/27/12	<63,000	**9,500,000**	<63,000	<86,000	<41,000
		N/A	01/08/13	<32,000	**39,000,000**	<32,000	<43,000	<20,000
		1h	10/09/13	<16,000	**27,000,000**	<16,000	<21,000	<10,000
		1h 18m	12/17/13	<32,000	**36,000,000**	<32,000	<43,000	<20,000
		1h 20m	02/24/14	180	**30,000,000**	70	**3,900**	120
SV-14	5	N/A	07/29/09	<28.94	**227,177**	<28.94	**41.92**	<18.66
		1 hr 29m	12/18/13	<4.0	**250,000**	<4.0	33	<2.6
		1 hr 12m	02/24/14	<7.9	**200,000**	<7.9	27	<5.1
SV-18	5	N/A	09/10/09	<1.6	**105,000**	<1.6	11.3	<1.0
		N/A	11/17/09	<71.7	**21,435**	<138	<97	<45.2
		6m	05/17/12	<1,600	**2,400,000**	<1,600	<2,100	<1,000
		11m	11/27/12	<63	**57,000**	<63	<86	<41
		N/A	01/08/13	<32	**81,000**	<32	<43	<20
		1h 15m	10/09/13	<4.0	**1,200**	<4.0	<5.4	<2.6
		1h 10m	12/18/13	<4.0	**180,000**	<4.0	4.7J	<2.6
		1h 22m	02/24/14	<7.9	**120,000**	<7.9	3.2J	<5.1
SV-19	5	N/A	09/10/09	<13.0	**3,910**	<13.0	<17.6	<8.3
		16m	05/16/12	<1.6	**2,100**	<1.6	<2.1	<1.0
		18m	11/27/12	<6.3	**2,100**	<6.3	<8.6	<4.1
		N/A	01/08/13	<1.6	**2,600**	<1.6	<2.1	<1.0
		1h 10m	10/09/13	<4.0	**15,000**	<4.0	<5.4	<2.6
		1h 21m	12/18/13	<4.0	**9,500**	<4.0	<5.4	<2.6
		1h 16m	02/25/14	<7.9	**5,500**	<7.9	<11	<5.1
SV-20S	8	N/A	11/17/09	<69.4	**257,085**	<133	<94	<43.7
		19m	05/16/12	<63	**140,000**	<63	<86	<41
		10m	11/27/12	<63	**120,000**	<63	<86	<41
		N/A	01/08/13	<63	**210,000**	<63	**100**	<41
		1h	10/09/13	<4.0	**330,000**	<4.0	6.0	<2.6
		1h 15m	12/18/13	<4.0	**230,000**	<4.0	4.0J	<2.6
SV-20D	20	N/A	11/17/09	<71.7	**786.9**	<138	<97.2	<45.2
		14m	05/16/12	<63	**200,000**	<63	<86	<41
		1h 5m	10/09/13	<4.0	**390,000**	<4.0	**17**	<2.6
		1h 5m	12/18/13	<4.0	**350,000**	<4.0	**14**	<2.6
		1h 15m	02/25/14	<0.79	**150,000**	<0.79	<1.1	<0.51

Table 3: Analytical Data for Soil Gas **ADT 3**

DSCA ID No.: 32-0013

Sample ID	Depth [feet bgs]	Sample Duration[1]	Sampling Date (mm/dd/yy)	cis-1,2-Dichloroethylene	Tetrachloroethylene	trans-1,2-Dichloroethylene	Trichloroethylene	Vinyl chloride
				[µg/m3]				
SV-21S	8	N/A	11/17/09	<69.4	**79,364**	<133	<94	<43.7
		14m	05/16/12	<16	**39,000**	<16	<21	<10
		1h 5m	10/09/13	<4.0	**90,000**	<4.0	**13**	<2.6
		1 hr 9m	12/18/13	<4.0	**100,000**	<4.0	**14**	<2.6
		1 hr 15m	02/25/14	<7.9	**64,000**	<7.9	8.2 J	<5.1
SV-21D	20	N/A	11/17/09	<11.5	**19,468**	<22	<15.6	<7.4
		11m	05/16/12	<63	**140,000**	<63	<86	<41
		1h	10/09/13	<4.0	**180,000**	<4.0	**27**	<2.6
		1h 15m	12/18/13	<4.0	**170,000**	<4.0	**28**	<2.6
		1h 17m	02/25/14	<7.9	**130,000**	<7.9	**22**	<5.1
SV-25S	8	10m	05/16/12	<1.6	230	<1.6	<2.1	<1.0
		1h 5m	12/18/13	<0.40	140	<0.40	<0.54	<0.26
		1h 14m	02/25/14	<0.40	140	<0.40	<0.54	<0.26
SV-25D	20	10m	05/16/12	<1.6	**460**	<1.6	<2.1	<1.0
		1h 5m	12/18/13	<0.40	**530**	<0.40	<0.54	<0.26
SV-27S	8	1h 17m	12/07/09	<23.4	**419,604**	<23.4	61.3J	<25.7
		12m	05/16/12	<1.6	**2,200,000**	<1,600	<2,100	<1,000
		1h 10m	10/09/13	<4.0	**2,200,000**	1.5	97	<2.6
		1h 9m	12/17/13	<4.0	**1,600,000**	<4.0	81	<2.6
		1h 3m	02/24/14	<7.9	**2,000,000**	2.5J	150	<5.1
SV-27D	20	1h 16m	12/07/09	<33.9	**294,741**	<33.9	117J	<37.3
		18m	05/16/12	<6,300	**1,000,000**	<6,300	<8,600	<4,100
		1h 5m	10/09/13	<16,000	**9,200,000**	<16,000	<21,000	<10,000
		1h 15m	12/17/13	<7,900	**5,500,000**	<7,900	<11,000	<5,100
		2h 3m	02/24/14	74	**3,800,000**	19	**560**	11
SV-28D	20	2 h 15m	01/07/10	<0.186	12.5	<0.186	0.407	<0.205
		2h 20m	05/16/12	<6.3	**18,000**	<6.3	<8.6	<4.1
		1h 45m	10/09/13	5.5	**77,000**	<4.0	8.2	<2.6
		2h 20m	12/17/13	<4.0	**5,600**	<4.0	<5.4	<2.6
		2h 22m	02/24/14	<0.79	**7,600**	<0.79	1.8	<0.51
SV-29S	8	N/A	11/17/09	<69.4	**2,190,984**	<133	<94	<116
		33m	05/17/12	<1,600	**2,200,000**	<1,600	<2,100	<1,000
		10m	11/27/12	<630	**610,000**	<630	<860	<410
		N/A	01/08/13	<630	**810,000**	<630	<860	<410
		1h 25m	10/09/13	<4.0	**1,900,000**	<4.0	**34**	<2.6
		1h 5m	12/18/13	<4.0	**1,500,000**	<4.0	**26**	<2.6
		1h 14m	02/24/14	<7.9	**1,100,000**	<7.9	**31**	<5.1
SV-29D	20	N/A	11/17/09	<2,220	**1,465,178**	<4,280	<3,003	<3,720
		19m	05/17/12	<6,300	**1,200,000**	<6,300	<8,600	<4,100
		1 hr 5m	12/18/13	<7,900	**11,000,000**	<7,900	<11,000	<5,100
SV-36S	8	50m	01/08/10	<4.35	**470,000**	<4.35	**27.6**	<4.79
		9m	05/17/12	<630	**1,200,000**	<630	<860	<410
		1h 32m	02/24/14	28	**750,000**	13	**170**	<5.1
SV-36D	20	1h	01/08/10	15.9J	**308,000**	14.2J	**75.2J**	<4.83
		18m	05/17/12	<630	**1,000,000**	<630	<860	<410

Table 3: Analytical Data for Soil Gas **ADT 3**

DSCA ID No.: 32-0013

Sample ID	Depth [feet bgs]	Sample Duration[1]	Sampling Date (mm/dd/yy)	cis-1,2-Dichloroethylene	Tetrachloroethylene	trans-1,2-Dichloroethylene	Trichloroethylene	Vinyl chloride
				[µg/m3]				
SV-49S	8	45m	01/07/10	20.1	24.1	1.88J	8.33	121
		17m	05/16/12	<1.6	35	<1.6	4.9	<1.0
		1h 2m	12/17/13	<4.0	2,600	<4.0	3.3J	<2.6
		1h 19m	02/24/14	<2.0	3,000	<2.0	1.5J	<1.3
SV-49D	14.5	1h 10m	01/07/10	<0.183	0.493J	0.196J	<0.377	<0.201
		16m	05/16/12	<1.6	26	<1.6	6.4	<1.0
		1h 7m	12/17/13	0.94	150	<0.40	2.4	<0.26
		1h 18m	02/24/14	0.84	13	<0.40	1.1	<0.26
SV-50	7.5	1h 10m	01/07/10	<4.68	9.80J	<4.68	<9.65	<5.15
		14m	05/16/12	<63	**4,900**	<63	<86	<41
		1h 2m	12/17/13	<4.0	2,400	<4.0	<5.4	<2.6
		1h 24m	02/24/13	<0.40	170	<0.40	<0.54	<0.26
SV-55S	5	15m	11/27/12	<630	**1,200,000**	<630	<860	<410
		N/A	01/08/13	<1,600	**2,500,000**	<1,600	<4,100	<1,000
		1h 5m	10/09/13	310	**3,800,000**	1.1 J	**890**	1.4 J
		1h 46m	12/18/13	<4,000	**2,700,000**	<4,000	<5,400	<2,600
		7h 3m	02/24/14	<7.9	**140,000**	<7.9	20	<5.1
SV-55I	17	1h 30m	11/27/12	<6,300	**6,800,000**	<6,300	<8,600	<4,100
		N/A	01/08/13	<6,300	**6,200,000**	<6,300	**9,600**	<4,100
		5h 10m	10/09/13	8.3	**320,000**	1.7 J	33	3.0
		4h 26m	12/18/13	<4.0	**93,000**	<4.0	12	<2.6
DWM Residential Soil Gas Screening Level				NE	250	378	12.6	48.0
DWM Non-Residential Soil Gas Screening Level				NE	3,510	5,200	176	2,800

Notes:

1. NA = Not Analyzed; NE = Not Established; N/A = Not Available
2. **Bold** exceeds Division of Waste Management (DWM) Residential Soil Gas Screening Level or DWM Non-Residential Soil Gas Screening Level.
3. Analytical data for the following sample points compared to DWM Non-Residential Soil Gas Screening Levels: SV-8S/I, SV-14, SV-49S/D, SV-50, and SV-55S/I. Remaining data compared to DWM Residential Soil Gas Screening Levels.
4. J flag denotes estimated concentration between laboratory reporting limit and method detection limit.

Table 4: Analytical Data for Indoor Air **ADT 4**

DSCA ID No.: 32-0013

Sample ID	Sampling Date (mm/dd/yy)	Sample Location [1]	Sampling Method [2]	Sampling Duration [3]	cis-1,2-Dichloroethylene	Tetrachloroethylene	trans-1,2-Dichloroethylene	Trichloroethylene	Vinyl chloride
					[µg/m^3]				
1414 Watts St									
BG-1414	05/07/10		SU	6h	<0.0339	2.11	<0.0339	0.0162J	<0.0129
	05/14/10		P	7d	<0.24	2.1	<0.24	<0.14	<0.38
	03/17/11		P	7d	<0.15	0.36	<0.15	<0.092	<0.24
	11/11/12		SU	3h	<0.079	0.38	<0.079	<0.11	<0.051
1414-South	07/29/09	C	SU	3h	<34	**814**	<34	<45	<22
1414-Chase	03/17/11	C	P	7d	<0.15	31	<0.15	<0.092	<0.24
1414-Front	07/16/09	C	SU	1h	<3.2	**510**	<3.2	<4.3	<2.0
	07/29/09		SU	3h	<32	**692**	<32	<43	<21
	03/15/10		SU	6h	<0.0336	**163**	<95.5	0.0892	<0.0128
	04/09/10		SU	6h	<0.0348	**143**	<0.0348	0.0403J	<0.0132
	05/07/10		SU	6h	<0.0305	**90.4**	0.105	0.0740	<0.0116
	05/14/10		P	7d	<0.24	**89**	<0.24	<0.14	<0.38
	03/17/11		P	7d	<0.15	19	<0.15	<0.091	<0.24
	08/11/11		P	30d	<0.052	**100**	<0.052	<0.031	<0.084
	09/25/11		SU	3h	**1.7**	**55**	0.24	1.3	<0.051
	01/29/12		SU	3h	**0.48**	28	<0.079	0.42	<0.051
	04/22/12		SU	3h	**1.8**	5.4	<0.079	<0.11	<0.051
	11/11/12		SU	3h	<0.079	**320**	<0.079	<0.11	<0.051
	01/13/13		SU	3h	<0.079	**61**	<0.079	<0.11	<0.051
	07/28/13		SU	3h	0.33	**150**	<0.079	<0.11	<0.051
	09/15/13		SU	3h	<0.14	**66**	<0.14	<0.19	<0.090
	12/08/13		SU	3h	<0.14	**120**	<0.14	<0.19	<0.090
	02/23/14		SU	3h	<0.14	**91**	<0.14	<0.19	<0.090
1414-Rear	07/29/09	C	SU	3h	<35	**841**	<35	<47	<22
	12/28/09		SU	6h	<0.191	**99**	<0.20	<0.395	<0.21
	03/15/10		SU	6h	<0.0345	**181**	<0.0345	0.0870	<0.0131
	04/09/10		SU	6h	<0.0336	**213**	<0.0336	0.0785	<0.0128
	05/07/10		SU	6h	<0.0344	**104**	0.0978	0.0717	<0.0131
	05/14/10		P	7d	<0.24	**120**	<0.24	<0.14	<0.38
	03/17/11		P	7d	<0.15	30	<0.15	<0.092	<0.24
	08/11/11		P	30d	<0.052	**110**	<0.052	<0.031	<0.084
	09/25/11		SU	3h	1.4	**95**	<0.079	0.17	<0.051
	01/29/12		SU	3h	2.6	**81**	<0.079	<0.11	<0.051
	04/22/12		SU	3h	1.2	25	<0.079	<0.11	<0.051
	11/11/12		SU	3h	<0.079	**190**	<0.079	<0.11	<0.051
	01/13/13		SU	3h	<0.079	**180**	<0.079	<0.11	<0.051
	07/28/13		SU	3h	0.29	**240**	<0.079	<0.11	<0.051
	09/15/13		SU	3h	<0.14	**210**	<0.14	0.057 J	<0.090
	12/08/13		SU	3h	<0.14	**280**	<0.14	0.068 J	<0.090
	02/23/14		SU	3h 5m	<0.14	**160**	<0.14	<0.19	<0.090

Table 4: Analytical Data for Indoor Air **ADT 4**

DSCA ID No.: 32-0013

Sample ID	Sampling Date (mm/dd/yy)	Sample Location [1]	Sampling Method [2]	Sampling Duration [3]	cis-1,2-Dichloroethylene	Tetrachloroethylene	trans-1,2-Dichloroethylene	Trichloroethylene	Vinyl chloride
					[µg/m^3]				
1419 Dollar Ave									
1419-SUMP	03/30/10	R	SU	24h	<0.0310	0.581	<0.0310	0.0318J	<0.0142
BG-1419	03/30/10		SU	24h	<0.0332	0.369	<0.0332	0.0198J	<0.0126
	01/07/11		SU	24h	<0.079	1.0	<0.079	<0.11	<0.051
	01/07/11		P	24h	<1.7 C	<1.2	<1.7	<1.0	<2.7
	03/14/11		P	30d	<0.060 C	0.35	<0.060 C	<0.036	<0.096 C
	04/14/11		P	28d	<0.060 C	0.42	<0.060 C	<0.036	<0.096 C
	12/05/12		P	30d	<0.077 C	1.2	<0.080 C	<0.035	<0.11 C
	02/01/13		P	30d	<0.074 C	0.49	<0.077 C	<0.034	<0.10 C
1419-UP	10/15/09	R	SU	24h	<1.1	1.2J	<1.1	<1.5	<0.7
	11/10/09		SU	24h	3.73	**16.3**	<5.15	**7.52**	<1.74
	11/16/09		SU	24h	0.276	**9.15**	<0.04	0.07J	<0.0153
	11/24/09		SU	24h	4.36	**21.69**	<5.15	**5.91**	<1.74
	12/28/09		SU	24h	<0.040	3.13	<0.0749	0.193J	<0.0141
	03/30/10		SU	24h	0.512	2.71	<0.0324	0.0501	<0.0123
	01/07/11		SU	24h	<0.079	4.8	<0.079	<0.11	<0.051
	01/07/11		P	24h	<1.7 C	5.2	<1.7 C	<1.0	<2.7 C
	03/14/11		P	30d	<0.060 C	3.1	<0.060 C	<0.036	<0.096 C
	04/14/11		P	28d	<0.060 C	4.8	<0.060 C	<0.036	<0.096 C
	10/05/11		P	34d	<0.049 C	5.8	<0.049 C	<0.029	<0.079 C
	02/13/12		P	30d	<0.060 C	6.7	<0.060 C	<0.036	<0.096 C
	05/16/12		SU	24h	<0.079	**17.0**	<0.079	<0.11	<0.051
	05/21/12		P	30d	<0.051 C	5.4	<0.051 C	<0.030	<0.082 C
	12/05/12		P	30d	<0.077 C	6.0	<0.080 C	<0.035	<0.11 C
	02/01/13		P	30d	<0.074 C	4.7	<0.077 C	<0.034	<0.10 C
	10/01/13		P	14d	<0.16 C	5.1	<0.17 C	<0.072	<0.22 C
	12/17/13		P	14d	<0.16 C	5.2	<0.17 C	<0.072	<0.22 C
	02/20/14		SU	24h	<0.14	4.8	<0.14	<0.19	<0.090
	03/06/14		P	14d	<0.12 C	5.7	<0.60 C	**1.4**	<0.077 C
1419-DOWN	10/15/09	R	SU	24h	<1.1	6.1	<1.1	<1.5	<0.7
	11/10/09		SU	24h	<55.09	**54.2**	<106.21	**63.39J**	<35.006
	11/16/09		SU	24h	0.165	**8.47**	<0.0346	0.0468J	<0.014
	11/24/09		SU	24h	4.4	**18**	<5.15	**5.9**	<1.74
	12/28/09		SU	24h	<0.03	1.78	<0.030	0.021J	<0.0114
	03/30/10		SU	24h	<0.0347	2.83	<0.0347	0.0219J	<0.0132
	01/07/11		SU	24h	<0.079	5.2	<0.079	<0.11	<0.051
	01/07/11		P	24h	<1.7 C	5.7	<1.7 C	<1.0	<2.7 C
	03/14/11		P	30d	<0.060 C	6.6	<0.060 C	<0.036	<0.096 C
	04/14/11		P	28d	<0.060 C	**8.6**	<0.060 C	<0.036	<0.096 C
	10/05/11		P	34d	<0.049 C	**12**	<0.049 C	<0.029	<0.079 C
	02/13/12		P	30d	<0.060 C	5.1	<0.060 C	<0.036	<0.096 C
	05/16/12		SU	24h	<0.079	**12**	<0.079	<0.11	<0.051
	05/21/12		P	30d	<0.051 C	**10**	<0.051 C	<0.030	<0.082 C
	12/05/12		P	30d	<0.077 C	7.3	<0.080 C	<0.035	<0.11 C
	02/01/13		P	30d	<0.074 C	6.3	<0.077 C	<0.034	<0.10 C
	10/01/13		P	14d	<0.16 C	6.1	<0.17 C	<0.072	<0.22 C
	12/17/13		P	14d	<0.16 C	6.2	<0.17 C	<0.072	<0.22 C
	02/20/14		SU	24h	<0.14	**9.8**	<0.14	<0.19	<0.090
	03/06/14		P	14d	<0.12 C	7.7	<0.60 C	<0.14	<0.077 C

Table 4: Analytical Data for Indoor Air **ADT 4**

DSCA ID No.: 32-0013

Sample ID	Sampling Date (mm/dd/yy)	Sample Location [1]	Sampling Method [2]	Sampling Duration [3]	cis-1,2-Dichloroethylene	Tetrachloroethylene	trans-1,2-Dichloroethylene	Trichloroethylene	Vinyl chloride
					[µg/m^3]				
1421 Dollar Ave									
BG-1421	03/02/10		SU	24h	<0.0270	0.0626	<0.0270	0.0109J	<0.0103
1421-UP	10/06/09	R	SU	24h	<1.1	4.70	<1.1	<1.5	<1.8653
	11/10/09		SU	24h	<2.93	6.24	<5.55	**8.59**	<1.8653
	11/16/09		SU	24h	0.14	2.23	<0.03	0.045J	<0.01265
	11/24/09		SU	24h	4.76	**10.85**	<5.15	**8.06**	<1.738
	12/28/09		SU	24h	<0.0345	0.64	<0.0345	0.03J	0.01661J
	01/13/10		SU	24h	<0.029	0.98	<0.029	0.0334J	<0.011
	03/02/10		SU	24h	<0.0297	0.564	<0.0297	0.0125J	<0.0113
	06/03/10		SU	24h	<0.0352	1.07	<0.0352	0.0302J	<0.0134
	01/07/11		SU	24h	0.36	2.2	<0.079	<0.11	<0.051
	01/07/11		P	24h	<1.7 C	2.3	<1.7 C	<1.0	<2.7 C
	04/14/11		P	28d	<0.049 C	3.7	<0.049 C	<0.029	<0.079 C
	02/13/12		P	30d	<0.060 C	1.1	<0.060 C	<0.036	<0.096 C
	05/16/12		SU	24h	0.75	2.5	<0.079	<0.11	<0.051
	05/21/12		P	30d	<0.054 C	1.6	<0.054 C	<0.032	<0.087 C
	12/05/12		P	30d	<0.077 C	6.7	<0.080 C	<0.035	<0.110 C
	02/01/13		P	30d	<0.074 C	2.1	<0.077 C	<0.034	<0.100 C
	09/19/13		P	13.3 d	<0.17 C	7.2	<0.17 C	<0.076	<0.23 C
	12/17/13		P	14 d	<0.16 C	**13**	<0.17 C	<0.072	<0.22 C
	02/25/14		SU	24h	<0.14	1.3	<0.14	<0.19	<0.090
	03/11/14		P	14d	<0.12 C	1.7	<0.60 C	**1.0**	<0.077 C
1421-DOWN	10/06/09	R	SU	24h	<21.7	**86.4**	<21.7	**18.9J**	<13.9
	11/10/09		SU	24h	<2.77	**9.5**	<5.15	<3.8	<1.738
	11/16/09		SU	24h	0.07	3.32	<0.03	0.0430J	<0.0128
	11/24/09		SU	24h	3.84	**11.53**	<5.15	**7.0**	<1.738
	12/28/09		SU	24h	<0.033	0.71	<0.033	0.0215J	0.01536J
	01/13/10		SU	24h	<0.0298	1.32	<0.030	0.0327J	<0.01132
	03/02/10		SU	24h	<0.0279	0.927	<0.0279	0.0119J	<0.0106
	06/03/10		SU	24h	<0.0348	2.44	<0.035	0.0184	<0.01324
	01/07/11		SU	24h	0.11	2.9	<0.079	<0.11	<0.051
	01/07/11		P	24h	<1.7 C	3.5	<1.7	<1.0	<2.7
	04/14/11		P	28d	<0.049 C	7.0	<0.049 C	<0.029	<0.079 C
	02/13/12		P	30d	<0.060 C	1.9	<0.060 C	<0.036	<0.096 C
	05/16/12		SU	24h	0.21	5.6	<0.079	<0.11	<0.051
	05/21/12		P	30d	<0.054 C	4.3	<0.054 C	<0.032	<0.087 C
	12/05/12		P	30d	<0.077 C	**11**	<0.080 C	<0.035	<0.110 C
	02/01/13		P	30d	<0.074 C	3.5	<0.077 C	<0.034	<0.100 C
	09/19/13		P	13.3 d	<0.17 C	**13**	<0.17 C	<0.076	<0.23 C
	12/17/13		P	14 d	<0.16 C	**27**	<0.17 C	<0.072	<0.22 C
	02/25/14		SU	24h	<0.14	1.9	<0.14	<0.19	<0.090
	03/11/14		P	14d	<0.12 C	2.6	<0.60 C	**26**	<0.077 C
DWM Residential IASLs					NE	8.34	12.6	0.43	0.16
DWM Non-Residential IASLs					NE	35.1	52	1.76	2.8

Notes:
1. "C" denotes commercial space; "R" denotes residence.
2. "SU" denotes Summa canister. "P" denotes passive sampler.
3. **Bold** exceeds DWM Non-Residential Indoor Air Screening Levels (IASLs) for 1414 Watts St samples and Residential IASLs for 1419 and 1421 Dollar Ave samples.
4. NA = Not Analyzed; NE = Not Established
5. J denotes estimated concentration between laboratory reporting limit and method detection limit.

Table 5: Soil Vapor Point and Indoor/Outdoor Air Field Measurements **ADT 5**

DSCA ID No.: 32-0013

Sample ID	Depth [feet bgs]	Sampling Date (mm/dd/yy)	Total Volatile Organic Compounds (VOC)	Methane	Carbon Dioxide	Oxygen
			ppm	%	%	%
SV-8S	5.00	11/27/12	427	0.1	1.7	20.0
		01/08/13	1,833	0.8	2.2	18.7
		02/07/13	NA	0.1	2.0	19.2
		03/08/13	NA	0.0	2.4	18.8
		04/08/13	465	0.0	2.4	17.7
		05/08/13	473	0.0	4.1	15.7
		06/13/13	360	0.0	5.7	13.7
		07/08/13	349	0.0	5.8	13.4
		08/14/13	427	0.1	5.4	15.6
		09/11/13	423	0.2	4.1	15.1
		10/09/13	313	0.3	3.0	18.0
		11/13/13	385	0.2	3.4	16.2
		12/19/13	390	0.2	3.1	16.1
		01/08/14	492	0.2	3.8	18.4
		02/03/14	50.8	0.1	1.5	19.5
		02/17/14	140	0.0	1.5	18.8
		03/17/14	109	0.0	2.0	18.4
SV-8I	17.00	11/27/12	>9,999	0.0	2.5	18.8
		01/08/13	2222	1.3	2.8	18.3
		02/07/13	NM	0.2	2.2	18.6
		03/08/13	NM	0.1	2.4	17.9
		04/08/13	4,098	0.2	1.8	17.6
		05/08/13	1,720	0.2	3.9	13.3
		06/13/13	248	0.2	1.8	16.5
		07/08/13	305	0.2	2.3	15.9
		08/14/13	165	0.3	2.1	15.6
		09/11/13	3,056	0.2	1.2	11.2
		10/09/13	119	0.5	2.5	15.9
		11/13/13	310	0.3	1.8	12.4
		12/19/13	320	0.4	2.1	13.4
		01/08/14	534	0.2	2.4	19.4
		02/03/14	NM	NM	NM	NM
		02/17/14	317	0.0	3.8	19.1
		03/17/14	265	0.0	4.1	19.5
SV-18	5.00	11/27/12	22.3	0.0	2.5	19.2
		01/08/13	51.1	0.4	0.0	21.5
		02/07/13	NM	0.0	2.3	18.6
		03/08/13	NM	0.0	4.1	16.9
		04/08/13	2.1	0.0	2.5	18.1
		05/08/13	14.9	0.0	4.9	15.9
		06/13/13	20.7	0.0	4.7	16.2
		08/14/13	26.1	0.1	3.0	18.2
		09/11/13	84.5	0.1	2.9	16.5
		10/09/13	201	0.0	3.5	17.5
		11/13/13	102	0.0	3.1	16.8
		12/19/13	100	0.0	3.2	15.8
		01/08/14	52.5	0.0	3.6	18.5
		02/03/14	25.7	0.2	1.3	20.8
		02/17/14	22.1	0.1	0.9	20.8
		03/17/14	NM	NM	NM	NM

Table 5: Soil Vapor Point and Indoor/Outdoor Air Field Measurements						ADT 5
DSCA ID No.: 32-0013						
Sample ID	Depth [feet bgs]	Sampling Date (mm/dd/yy)	Total Volatile Organic Compounds (VOC)	Methane	Carbon Dioxide	Oxygen
			ppm	%	%	%
SV-19	5.00	11/27/12	2.25	0.0	10.8	11.5
		01/08/13	4.50	0.6	9.1	13.3
		02/07/13	NM	0.0	8.6	13.9
		03/08/13	NM	0.0	8.3	13.5
		04/08/13	1.2	0.0	8.3	13.7
		05/08/13	0.9	0.0	9.1	13.0
		06/13/13	6.2	0.0	9.7	11.7
		08/15/13	4.4	0.0	9.2	12.1
		09/11/13	22.9	0.0	10.1	9.3
		10/09/13	156	0.0	11.9	9.8
		11/13/13	86.4	0.0	9.8	10.4
		12/19/13	92.6	0.0	8.7	13.4
		01/08/14	91.6	0.0	9.8	13.5
		02/03/14	16.4	0.2	3.3	18.8
		02/17/14	19.7	0.0	2.8	19.4
		03/17/14	0.0	0.0	2.8	20.2
SV-20S	5.00	11/27/12	75.5	0.0	6.3	16.1
		01/08/13	15.0	1.3	5.0	16.9
		02/07/13	NM	0.1	6.4	15.5
		03/08/13	NM	0.0	5.0	16.0
		04/08/13	47.4	0.0	5.2	15.3
		05/08/13	62.5	0.0	6.3	14.6
		06/13/13	64.0	0.0	7.7	13.1
		08/15/13	61.8	0.0	6.8	13.6
		09/11/13	60.4	0.1	5.1	15.3
		10/09/13	89.7	0.1	7.0	15.3
		11/13/13	78.1	0.0	6.8	14.4
		12/19/13	84.1	0.0	7.2	14.8
		01/08/14	104.0	0.0	7.3	15.5
		02/03/14	20.8	0.2	2.5	19.3
		02/17/14	28.4	0.0	3.4	18.4
		03/17/14	7.6	0.0	4.7	18.8
SV-20D	20.00	01/08/13	11.10	0.4	7.6	15.2
		02/07/13	NM	0.1	6.7	15.6
		03/08/13	NM	0.0	6.8	14.9
		04/08/13	46.8	0.0	6.7	15.2
		05/08/13	61.4	0.0	5.8	15.1
		06/13/13	58.9	0.0	7.1	13.5
		08/15/13	60.1	0.0	6.6	14.1
		09/11/13	93.1	0.1	7.6	12.5
		10/09/13	113	0.1	8.8	13.4
		11/13/13	101	0.0	8.2	12.8
		12/19/13	98.6	0.0	8.6	11.4
		01/08/14	115	0.0	8.6	15.3
		02/03/14	31.9	0.2	1.9	20.1
		02/17/14	34.4	0.0	2.5	19.5
		03/17/14	11.4	0.0	2.7	19.7

Table 5: Soil Vapor Point and Indoor/Outdoor Air Field Measurements **ADT 5**

DSCA ID No.: 32-0013

Sample ID	Depth [feet bgs]	Sampling Date (mm/dd/yy)	Total Volatile Organic Compounds (VOC)	Methane	Carbon Dioxide	Oxygen
			ppm	%	%	%
SV-29S	5.00	11/27/12	344	0.0	1.9	19.9
		01/08/13	96.3	0.3	2.0	19.8
		02/07/13	NM	0.1	2.3	18.6
		03/08/13	NM	0.0	2.8	17.6
		04/08/13	235	0.0	2.6	17.2
		05/08/13	151	0.0	3.3	16.7
		06/13/13	197	0.0	3.6	16.2
		08/14/13	317	0.1	3.4	17.7
		09/11/13	268	0.1	2.2	17.6
		10/09/13	356	0.0	3.2	18.0
		11/13/13	294	0.0	2.8	17.8
		12/19/13	264	0.0	3.1	15.4
		01/08/14	475	0.0	3.4	18.8
		02/03/14	266	0.2	1.2	20.6
		02/17/14	104	0.0	1.0	20.6
		03/27/14	56.4	0.0	0.7	20.6
SV-55S	5.00	11/27/12	430	0.2	0.2	21.1
		01/08/13	295	4.1	3.0	14.7
		02/07/13	NM	2.1	2.8	14.6
		03/08/13	NM	1.8	3.1	14.0
		04/08/13	311	1.4	3.0	14.3
		05/08/13	290	1.1	3.9	13.3
		06/13/13	295	0.8	4.5	11.8
		07/08/13	258	0.7	4.9	11.1
		08/14/13	133	0.2	1.8	17.8
		09/11/13	229	0.9	5.5	10.6
		10/09/13	501	0.8	5.4	13.6
		11/13/13	444	0.4	4.8	11.1
		12/19/13	421	0.6	4.2	16.2
		01/08/14	191	0.6	5.2	14.0
		02/03/14	58.3	0.4	3.6	18.1
		02/17/14	NM	NM	NM	NM
		03/17/14	7.3	0.3	1.4	19
SV-55I	17.00	11/27/12	12	4.1	0.6	12.4
		01/08/13	442	3.6	2.0	12.1
		02/07/13	NM	1.4	2.9	14.8
		03/08/13	NM	1.6	3.5	14.6
		04/08/13	NM	NM	NM	NM
		05/08/13	NM	1.6	2.7	10.7
		06/13/13	86.5	1.5	1.6	11.0
		07/08/13	NM	1.5	2.1	10.6
		08/14/13	26.7	0.3	0.2	16.5
		09/11/13	31.3	0.3	1.9	15.4
		10/09/13	4.9	0.1	0.0	21.2
		11/13/13	17.4	0.2	1.0	16.5
		12/19/13	19.4	0.4	1.0	18.1
		01/08/14	127	0.7	3.2	16.9
		02/03/14	NM	NM	NM	NM
		02/17/14	NM	NM	NM	NM
		03/17/14	NM	NM	NM	NM

Table 5: Soil Vapor Point and Indoor/Outdoor Air Field Measurements **ADT 5**

DSCA ID No.: 32-0013

Sample ID	Depth [feet bgs]	Sampling Date (mm/dd/yy)	Total Volatile Organic Compounds (VOC)	Methane	Carbon Dioxide	Oxygen
			ppm	%	%	%
Vent Exhaust Pipe		11/27/12	38.0	12.5	11.1	9.7
		01/08/13	173	11.0	9.3	10.6
		02/07/13	NM	17.3	15.9	1.5
		03/08/13	NM	16.4	15.0	1.7
		04/08/13	6.5	12.6	11.7	4.9
		05/08/13	10.8	15.0	14.4	1.9
		06/13/13	9.6	14.9	13.4	0.7
		07/08/13	9.6	14.5	13.0	0.8
		08/14/13	17.7	15.2	14.5	1.7
		09/11/13	14.7	15.7	13.4	1.5
		10/09/13	16.0	13.8	10.4	6.7
		11/13/13	15.8	12.9	11.1	4.4
		12/19/13	12.8	10.9	10.0	3.8
		01/08/14	9.2	8.7	12.0	5.1
		02/03/14	7.5	0.2	0.0	21.9
		02/17/14	30.7	23.2	16.2	6.1
		03/17/14	0.0	0.0	0.0	21.6
SSD System Triangle Family Church 1414 Watts Street		11/27/12	2.4	0.1	0.0	21.0
		01/08/13	159	1.0	0.0	21.1
		02/07/13	NM	0.2	0.0	21.4
		03/08/13	NM	0.0	0.0	20.8
		04/08/13	0.0	0.0	0.0	20.8
		05/08/13	0.0	0.0	0.0	20.6
		06/13/13	0.0	0.0	0.0	20.4
		07/08/13	0.0	0.0	0.0	20.5
		08/14/13	4.4	0.1	0.0	20.5
		09/18/13	0.5	0.1	0.0	20.2
		10/09/13	6.1	0.1	0.1	21.1
		11/13/13	4.6	0.0	0.0	20.8
		12/19/13	5.2	0.0	0.0	21.4
		01/08/14	NM	NM	NM	NM
		02/03/14	NM	NM	NM	NM
		02/19/14	0.0	0.0	0.1	21.1
		03/17/14	0.0	0.0	0.0	21.4
Indoor Air Triangle Family Church 1414 Watts Street		11/27/12	0.0	0.0	0.0	21.0
		01/08/13	0.0	0.0	0.0	20.9
		02/07/13	NM	0.0	0.0	20.8
		03/08/13	NM	0.0	0.0	21.0
		04/08/13	0.0	0.0	0.0	20.9
		05/08/13	0.0	0.0	0.0	20.5
		06/13/13	0.0	0.0	0.0	20.5
		07/08/13	0.0	0.0	0.0	20.5
		08/14/13	0.0	0.1	0.0	20.6
		09/18/13	0.0	0.0	0.0	20.3
		10/09/13	0.0	0.1	0.0	21.2
		11/13/13	0.0	0.0	0.0	20.8
		12/19/13	0.0	0.0	0.0	21.2
		01/08/14	NM	NM	NM	NM
		02/03/14	NM	NM	NM	NM
		02/17/14	0.0	0.0	0.1	21.1
		03/17/14	0.0	0.0	0.0	21.6

Table 5: Soil Vapor Point and Indoor/Outdoor Air Field Measurements **ADT 5**

DSCA ID No.: 32-0013

Sample ID	Depth [feet bgs]	Sampling Date (mm/dd/yy)	Total Volatile Organic Compounds (VOC)	Methane	Carbon Dioxide	Oxygen
			ppm	%	%	%
Ambient, Outdoor Air (near excavation area on subject site)		11/27/12	0.0	0.0	0.0	20.9
		01/08/13	0.0	0.0	0.0	20.9
		02/07/13	NM	0.0	0.0	21.5
		03/08/13	NM	0.0	0.0	20.9
		04/08/13	0.0	0.0	0.0	20.9
		05/08/13	0.0	0.0	0.0	20.4
		06/13/13	0.0	0.0	0.0	20.4
		07/08/13	0.0	0.0	0.0	20.4
		08/14/13	0.0	0.0	0.0	20.6
		09/11/13	0.0	0.0	0.0	20.3
		10/09/13	0.0	0.3	0.0	21.3
		11/13/13	0.0	0.0	0.0	22.1
		12/19/13	0.0	0.0	0.0	22.4
		01/08/14	0.0	0.2	0.2	20.6
		02/03/14	0.5	0.1	0.0	21.3
		02/17/14	0.0	0.0	0.1	21.3
		03/17/14	0.0	0.0	0.0	21.3

Notes:
1. VOC concentrations measured using a photoionization detector (PID)
2. Methane, carbon dioxide, and oxygen concentrations measured using GEM 2000 multi-gas meter.
3. NM denotes not measured; NA denotes not available.
4. J flag denotes estimated concentration between laboratory reporting limit and method detection limit.

FIGURES

FORMER ONE HOUR
MARTINIZING FACILITY

TRIANGLE FAMILY CHURCH
(1414 WATTS)

RESIDENCE
(1423/1425 DOLLAR)

RESIDENCE
(1421 DOLLAR)

RESIDENCE
(1419 DOLLAR)

RESIDENCE
(1417 DOLLAR)

MW-4R
MW-4I
MW-22I
MW-22S
MW-21
MW-23S
MW-23I
MW-14I
MW-14S
MW-16I
MW-16S
MW-15I
MW-15S
MW-19
MW-6
MW-18
MW-17I
MW-17S

IP-1S
IP-2S
IP-3S
IP-4S
IP-5S
IP-6S
IP-7S
IP-8S
IP-9S
IP-10S
IP-11S
IP-12S
IP-13S
IP-14S
IP-15S
IP-16S
IP-17S
IP-18S
IP-19S
IP-20S
IP-21S
IP-22S
IP-23S
IP-24S
IP-25S
IP-26S
IP-27S
IP-28S
IP-29S
IP-30S

LEGEND

- SOURCE PROPERTY BOUNDARY
- PROPERTY PARCEL LINE
- TYPE II MONITORING WELL
- INJECTION POINT
- EXCAVATION AREA

N

APPROXIMATE
0 20 40
SCALE IN FEET

TITLE
SHALLOW INJECTION POINT
LOCATION MAP

PROJECT
ONE HOUR MARTINIZING
DSCA ID NO: 32-0013
1103 WEST CLUB BLVD
DURHAM, NORTH CAROLINA

hart hickman
SMARTER ENVIRONMENTAL SOLUTIONS
2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)
License # C-1269 / #C-245 Geology

DATE: 04/04/14 | REVISION NO. 0

JOB NO. DS0-84 | FIGURE. 1A

S:\AAA-Master Projects\DSCA - DS0\DS0-84 One Hr Martinizing (former BB&T)\Website Updates\2014 Website Updates\April 2014\DC320013_20140404_InjectionPoints.dwg, FIG1A Shallow Injection, 4/4/2014 12:45:33 PM,

S:\AAA-Master Projects\DSCA - DS0\DS0-84 One Hr Martinizing (former BB&T)\Website Updates\2014 Website Updates\April 2014\DC320013_20140404_InjectionPoints.dwg, FIG1B Int Injection, 4/4/2014 12:44:45 PM,

TITLE

INTERMEDIATE INJECTION POINT LOCATION MAP

PROJECT

ONE HOUR MARTINIZING
DSCA ID NO: 32-0013
1103 WEST CLUB BLVD
DURHAM, NORTH CAROLINA

hart hickman
SMARTER ENVIRONMENTAL SOLUTIONS
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704-586-0007(p) 704-586-0373(f)
License # C-1269 / #C-245 Geology

DATE: 04/04/14	REVISION NO. 0
JOB NO. DS0-84	FIGURE. 1B

W. CLUB BOULEVARD

FORMER ONE HOUR MARTINIZING FACILITY

MW-10
0.00239

RESTAURANT (1129 W. CLUB)

MW-3I

MW-3R
0.0104

MW-4I

MW-4R
1.23

MW-22S
0.00179 J

MW-22I

MW-23S
49.4

MW-23I

MW-21
<0.001

MW-14I

MW-14S
0.0706

MW-7
NS

RESIDENCE (1423/1425 DOLLAR)

RESIDENCE (1421 DOLLAR)

TRIANGLE FAMILY CHURCH (1414 WATTS)

MW-16I

MW-16S
0.0444

RESIDENCE (1419 DOLLAR)

MW-15S
3.76

MW-15I

MW-19
NS

RESIDENCE (1417 DOLLAR)

MW-17I

MW-17S
NS

MW-6
NS

MW-18
0.949

RESIDENCE (1413 DOLLAR)

RESIDENCE (1411 DOLLAR)

MW-8
NS

WATTS STREET

DOLLAR AVENUE

0.0007

0.007

0.07

0.7

7

LEGEND

- SITE PROPERTY BOUNDARY
- PROPERTY PARCEL
- TYPE II MONITORING WELL
- 1.23 PCE CONCENTRATION IN mg/L
- 0.07 PCE ISOCONTOUR LINE IN mg/L (DASHED WHERE INFERRED)
- EXCAVATION AREA

NOTES:
1. SAMPLES WERE COLLECTED ON 2/26/14 - 2/28/14.
2. NS = NOT SAMPLED

N

APPROXIMATE
0 40 80
SCALE IN FEET

TITLE: POST-INJECTION SHALLOW GROUNDWATER PCE ISOCONCENTRATION MAP (FEBRUARY 2014)

PROJECT: ONE HOUR MARTINIZING
DSCA ID NO: 32-0013
1103 WEST CLUB BLVD
DURHAM, NORTH CAROLINA

hart hickman
SMARTER ENVIRONMENTAL SOLUTIONS
2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)
License # C-1269 / #C-245 Geology

DATE: 4-4-14 | REVISION NO. 0

JOB NO. DS0-84 | FIGURE. 2A

S:\AAA-Master Projects\DSCA - DS0\DS0-84 One Hr Martinizing (former BB&T)\Reports (H&H)\2014-02_Post-Injection Soil Gas & GW Sampling\DC320013_20140404_FebFigures.dwg, FIG2A ShallowPCE feb, 4/8/2014 8:09:05 AM.

W. CLUB BOULEVARD

FORMER ONE HOUR MARTINIZING FACILITY

WATTS STREET

DOLLAR AVENUE

0.0007

0.007

0.07

0.7

MW-10

RESTAURANT (1129 W. CLUB)

MW-3R

MW-3I
0.218

MW-4R

MW-4I
0.0293

MW-22S

MW-22I
12.1

MW-23S

MW-23I
0.0453

MW-21

MW-14I
<0.001

MW-14S

MW-7

RESIDENCE (1423/1425 DOLLAR)

RESIDENCE (1421 DOLLAR)

TRIANGLE FAMILY CHURCH (1414 WATTS)

MW-16I
<0.001

MW-16S

RESIDENCE (1419 DOLLAR)

MW-15S

MW-15I
0.0449

MW-19

RESIDENCE (1417 DOLLAR)

MW-17I
NS

MW-17S

MW-6

MW-18

RESIDENCE (1413 DOLLAR)

RESIDENCE (1411 DOLLAR)

MW-8

LEGEND

- SITE PROPERTY BOUNDARY
- PROPERTY PARCEL
- TYPE II MONITORING WELL
- 0.0449 PCE CONCENTRATION IN mg/L
- 0.07 PCE ISOCONTOUR LINE IN mg/L (DASHED WHERE INFERRED)
- EXCAVATION AREA

NOTES:
1. SAMPLES WERE COLLECTED ON 2/26/14 - 2/28/14.
2. NS = NOT SAMPLED

N

APPROXIMATE
0 40 80
SCALE IN FEET

TITLE
POST-INJECTION INTERMEDIATE GROUNDWATER PCE ISOCONCENTRATION MAP (FEBRUARY 2014)

PROJECT
ONE HOUR MARTINIZING
DSCA ID NO: 32-0013
1103 WEST CLUB BLVD
DURHAM, NORTH CAROLINA

hart hickman
SMARTER ENVIRONMENTAL SOLUTIONS
2923 South Tryon Street-Suite 100
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704-586-0007(p) 704-586-0373(f)
License # C-1269 / #C-245 Geology

DATE: 4-4-14 | REVISION NO. 0

JOB NO. DS0-84 | FIGURE. 2B

S:\AAA-Master Projects\DSCA - DS0\DS0-84 One Hr Martinizing (former BB&T)\Reports (H&H)\2014-02_Post-Injection Soil Gas & GW Sampling\DC320013_20140404_FebFigures.dwg, FIG2B INT-PCE feb, 4/8/2014 8:08:30 AM,

W. CLUB BOULEVARD

FORMER ONE HOUR MARTINIZING FACILITY

WATTS STREET

DOLLAR AVENUE

MW-10 <0.001

RESTAURANT (1129 W. CLUB)

MW-3R 0.00711

MW-3I

MW-4R 0.907

MW-4I

MW-22S 0.00537

MW-22I

MW-23S 92.4

MW-23I

MW-21 <0.001

MW-14I

MW-14S 0.0312

MW-7 NS

RESIDENCE (1423/1425 DOLLAR)

RESIDENCE (1421 DOLLAR)

TRIANGLE FAMILY CHURCH (1414 WATTS)

MW-16I

MW-16S 0.112

RESIDENCE (1419 DOLLAR)

MW-15S 13.1

MW-15I

MW-19 NS

RESIDENCE (1417 DOLLAR)

MW-17I

MW-17S NS

MW-6 NS

MW-18 1.18

RESIDENCE (1413 DOLLAR)

RESIDENCE (1411 DOLLAR)

MW-8 NS

0.0007

0.007

0.07

0.7

1

LEGEND

- SITE PROPERTY BOUNDARY
- PROPERTY PARCEL
- TYPE II MONITORING WELL
- 0.907 PCE CONCENTRATION IN mg/L
- 0.07 PCE ISOCONTOUR LINE IN mg/L (DASHED WHERE INFERRED)
- EXCAVATION AREA

NOTES:
1. SAMPLES WERE COLLECTED ON 12/16/13 - 12/20/13.
2. NS = NOT SAMPLED

N

APPROXIMATE
0 40 80
SCALE IN FEET

TITLE
PRE-INJECTION SHALLOW GROUNDWATER PCE ISOCONCENTRATION MAP (DECEMBER 2013)

PROJECT
ONE HOUR MARTINIZING
DSCA ID NO: 32-0013
1103 WEST CLUB BLVD
DURHAM, NORTH CAROLINA

hart hickman
SMARTER ENVIRONMENTAL SOLUTIONS
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License # C-1269 / #C-245 Geology

DATE: 03/31/14 | REVISION NO. 0

JOB NO. DS0-84 | FIGURE. 2C

S:\AAA-Master Projects\DSCA - DS0\DS0-84 One Hr Martinizing (former BB&T)\Reports (H&H)\2014-02_Post-Injection Soil Gas & GW Sampling\DC320013_20140404_FebFigures.dwg, FIG2C ShallowPCE, 4/8/2014 8:07:46 AM.

W. CLUB BOULEVARD

FORMER ONE HOUR MARTINIZING FACILITY

WATTS STREET

DOLLAR AVENUE

MW-10

RESTAURANT (1129 W. CLUB)

MW-3R

MW-3I
0.275

MW-4R

MW-4I
0.0271

MW-22S

MW-22I
70.7

MW-23S

MW-23I
0.659

MW-21

MW-14I
0.00133

MW-14S

MW-7

RESIDENCE (1423/1425 DOLLAR)

RESIDENCE (1421 DOLLAR)

RESIDENCE (1419 DOLLAR)

RESIDENCE (1417 DOLLAR)

RESIDENCE (1413 DOLLAR)

TRIANGLE FAMILY CHURCH (1414 WATTS)

MW-16I
<0.001

MW-16S

MW-15S

MW-15I
0.00420

MW-19

MW-6

MW-18

MW-17I
NS

MW-17S

MW-8

0.0007

0.007

0.07

0.7

7.0

LEGEND

- SITE PROPERTY BOUNDARY
- PROPERTY PARCEL
- TYPE II MONITORING WELL
- 0.659 PCE CONCENTRATION IN mg/L
- 0.07 PCE ISOCONTOUR LINE IN mg/L (DASHED WHERE INFERRED)
- EXCAVATION AREA

NOTES:
1. SAMPLES WERE COLLECTED 12/16/13 - 12/20/13.
2. NS = NOT SAMPLED

N

APPROXIMATE
0 40 80
SCALE IN FEET

TITLE
PRE-INJECTION INTERMEDIATE GROUNDWATER PCE ISOCONENTRATION MAP (DECEMBER 2013)

PROJECT
ONE HOUR MARTINIZING
DSCA ID NO: 32-0013
1103 WEST CLUB BLVD
DURHAM, NORTH CAROLINA

hart hickman
SMARTER ENVIRONMENTAL SOLUTIONS
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License # C-1269 / #C-245 Geology

DATE: 03/31/14 | REVISION NO. 0

JOB NO. DS0-84 | FIGURE. 2D

S:\AAA-Master Projects\DSCA - DS0\DS0-84 One Hr Martinizing (former BB&T)\Reports (H&H)\2014-02_Post-Injection Soil Gas & GW Sampling\DC320013_20140404_FebFigures.dwg, FIG2C IntPCE, 4/8/2014 8:07:24 AM, [illegible]

W. CLUB BOULEVARD

FORMER ONE HOUR MARTINIZING FACILITY

SV-8I	
PCE	**30,000,000**
TCE	**3,900**
cDCE	180
tDCE	70
VC	120

	SV-21S	SV-21D
PCE	**64,000**	**130,000**
TCE	8.2 J	**22**

SV-8S	
PCE	**3,400,000**
TCE	130

SV-14	
PCE	**200,000**
TCE	27

SV-50	
PCE	170

SV-50

SV-11

SV-14

SV-17

SV-42S

SV-43S

RESIDENCE (1423/1425 DOLLAR)

SV-16

SV-15

SV-21S/D

SV-22

SV-19

SV-19	
PCE	**5,500**

	SV-25S	SV-25D
PCE	140	NS

SV-25S/D

SV-19

RESIDENCE (1421 DOLLAR)

SV-20S/D

	SV-20S	SV-20D
PCE	NS	**150,000**
TCE	NS	<1.1

RESIDE (1422 DO

	SV-49S	SV-49D
PCE	3,000	13
TCE	1.5 J	1.1
cDCE	<2.0	0.84

RESTAURANT (1129 W. CLUB)

SOIL VAPOR VENT A

SOIL VAPOR VENT C

SOIL VAPOR VENT B

SOIL VAPOR VENT D

SV-49S/D

PASSIVE EXCAVATION VENT STACK

SV-55S/I

SV-8S

SV-8I

SV-23

SV-31

SV-26S/D

SV-29S/D

SV-18

RESIDENCE (1419 DOLLAR)

SV-18	
PCE	**120,000**
TCE	3.2 J

	SV-55S	SV-55I
PCE	**140,000**	NS
TCE	20	NS

SSD SYSTEM EXHAUST FAN

TRIANGLE FAMILY CHURCH (1414 WATTS)

SV-27S/D

	SV-29S	SV-29D
PCE	**1,100,000**	NS
TCE	31	NS

SV-30S

SV-33

SV-32

SV-28D

SV-28D	
PCE	**7,600**
TCE	1.8

SV-36S/D

SV-35S

RESIDENCE (1417 DOLLAR)

SV-34S

	SV-27S	SV-27D
PCE	**2,000,000**	**3,800,000**
TCE	**150**	**560**
cDCE	<7.9	74
tDCE	2.5 J	19
VC	<5.1	11

	SV-36S	SV-36D
PCE	**750,000**	NS
TCE	**170**	NS
cDCE	28	NS
tDCE	13	NS

RESIDENCE (1413 DOLLAR)

RESIDENCE (1414 DOLLAR)

RESIDENC (1416 DOLL

RESID (1418 DO

RE (142

WATTS STREET

DOLLAR AVENUE

LEGEND

- SOURCE PROPERTY BOUNDARY
- PROPERTY PARCEL
- SOIL GAS MONITORING POINT
- NS NOT SAMPLED

SV-14	
PCE	**200,000**
TCE	27

SV-14 — SAMPLE IDENTIFICATION

PCE 200,000 / TCE 27 — CONCENTRATION (µg/m³)

CONSTITUENT

NOTES:
1. DATA SOURCES: DURHAM COUNTY GIS, WITHERS & RAVENEL.
2. J. DENOTES ESTIMATED CONCENTRATION BETWEEN LABORATORY REPORTING LIMIT AND METHOD DETECTION LIMIT.
3. BOLD EXCEEDS DWM SOIL GAS SCREENING LEVEL (SGSL). SV-8S/I, SV-14, SV-49S/D, SV-50, AND SV-55S/I COMPARED TO NON-RESIDENTIAL SGSLs. OTHER SAMPLES COMPARED TO RESIDENTIAL SGSLs.
4. SOIL GAS SAMPLES WERE COLLECTED ON 2/24/14 AND 2/25/14.

N

APPROXIMATE
0 40 80
SCALE IN FEET

TITLE
SOIL GAS
CONTAMINANT CONCENTRATION MAP

PROJECT
ONE HOUR MARTINIZING
DSCA ID NO: 32-0013
1103 WEST CLUB BLVD
DURHAM, NORTH CAROLINA

hart hickman
SMARTER ENVIRONMENTAL SOLUTIONS
2923 South Tryon Street-Suite 100
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License # C-1269 / #C-245 Geology

DATE: 4/4/14 | REVISION NO. 0

JOB NO. DS0-84 | FIGURE NO. 3

S:\AAA-Master Projects\DSCA - DS0\DS0-84 One Hr Martinizing (former BB&T)\Website Updates\2014 Website Updates\April 2014\DC320013_20140404_Figures3.dwg, Fig 3 Soil Gas, 4/4/2014 2:18:13 PM, nfoster

W. CLUB BOULEVARD

FORMER ONE HOUR MARTINIZING FACILITY

RESTAURANT (1129 W. CLUB)

SOIL VAPOR VENT A
SOIL VAPOR VENT C
SOIL VAPOR VENT B
SOIL VAPOR VENT D

PASSIVE EXCAVATION VENT STACK

1414-FRONT

SSD SYSTEM EXHAUST FAN

1414-REAR
TRIANGLE FAMILY CHURCH
(1414 WATTS)

1414-FRONT	
PCE	**91**
TCE	<0.19
CIS-1,2-DCE	<0.14
TRANS-1,2-DCE	<0.14
VINYL CHLORIDE	<0.090

1414-REAR	
PCE	**160**
TCE	<0.19
CIS-1,2-DCE	<0.14
TRANS-1,2-DCE	<0.14
VINYL CHLORIDE	<0.090

1421-UP		
	2/25/14	3/11/14
PCE	1.3	1.7
TCE	<0.19	**1.0**
CIS-1,2-DCE	<0.14	<0.12 C
TRANS-1,2-DCE	<0.14	<0.60 C
VINYL CHLORIDE	<0.090	<0.077 C

1421-DOWN		
	2/25/14	3/11/14
PCE	1.9	2.6
TCE	<0.19	**26**
CIS-1,2-DCE	<0.14	<0.12 C
TRANS-1,2-DCE	<0.14	<0.60 C
VINYL CHLORIDE	<0.090	<0.077 C

1419-UP		
	2/20/14	3/6/14
PCE	4.8	5.7
TCE	<0.19	**1.4**
CIS-1,2-DCE	<0.14	<0.12 C
TRANS-1,2-DCE	<0.14	<0.60 C
VINYL CHLORIDE	<0.090	<0.077 C

1419-DOWN		
	2/20/14	3/6/14
PCE	**9.8**	7.7
TCE	<0.19	<0.14
CIS-1,2-DCE	<0.14	<0.12 C
TRANS-1,2-DCE	<0.14	<0.60 C
VINYL CHLORIDE	<0.090	<0.077 C

1421-UP
RESIDENCE (1421 DOLLAR)
1421-DOWN

1419-UP
RESIDENCE (1419 DOLLAR)
1419-DOWN

RESIDENCE (1423/1425 DOLLAR)
RESIDENCE (1422 DOLLAR)
RESIDENCE (1420 DOLLA
RESIDENCE (1418 DOLLAR)
RESIDENCE (1417 DOLLAR)
RESIDENCE (1416 DOLLAR)
RESIDENCE (1413 DOLLAR)
RESIDENCE (1414 DOLLAR)

WATTS STREET

DOLLAR AVENUE

LEGEND

SOURCE PROPERTY BOUNDARY

PROPERTY PARCEL

INDOOR AIR SAMPLE

SAMPLE IDENTIFICATION

SAMPLE DATE

CONCENTRATION (µg/m³)

CONSTITUENT

NOTES:
1. INDOOR AIR SAMPLES FROM 1414 WATTS ST WERE COLLECTED USING 3-HR SUMMA CANISTERS ON 2/23/14.
2. MARCH INDOOR AIR SAMPLES FROM 1419 AND 1421 DOLLAR AVE WERE COLLECTED USING RADIELLO PASSIVE SAMPLERS DEPLOYED FOR 14 DAYS.
3. FEBRUARY INDOOR AIR SAMPLES FROM 1419 AND 1421 DOLLAR AVENUE WERE COLLECTED USING 24-HOUR SUMMA CANISTERS.
4. **BOLD** CONCENTRATIONS EXCEED DIVISION OF WASTE MANAGEMENT RESIDENTIAL INDOOR AIR SCREENING LEVELS.
5. "J" DENOTES ESTIMATED CONCENTRATION BETWEEN LABORATORY REPORTING LIMIT AND METHOD DETECTION LIMIT.
6. "C" DENOTES ESTIMATED CONCENTRATION DUE TO CALCULATED SAMPLING RATE
7. MAP DATA SOURCES: DURHAM COUNTY GIS, WITHERS & RAVENEL.

N

APPROXIMATE
0 40 80
SCALE IN FEET

TITLE
INDOOR AIR
CONTAMINANT CONCENTRATION MAP

PROJECT
ONE HOUR MARTINIZING
DSCA ID NO: 32-0013
1103 WEST CLUB BLVD
DURHAM, NORTH CAROLINA

hart hickman
SMARTER ENVIRONMENTAL SOLUTIONS
2923 South Tryon Street-Suite 100
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704-586-0007(p) 704-586-0373(f)
License # C-1269 / #C-245 Geology

DATE: 4/4/14 | REVISION NO. 0

JOB NO. DS0-84 | FIGURE NO. 4

S:\AAA-Master Projects\DSCA - DS0\DS0-84 One Hr Martinizing (former B&B/T)\Website Updates\2014 Website Updates\April 2014\DC320013_20140404_Figures3.dwg, Fig Indoor Air, 4/4/2014 2:17:38 PM, mfoster

W. CLUB BOULEVARD

FORMER ONE HOUR MARTINIZING FACILITY

RESTAURANT (1129 W. CLUB)

PASSIVE EXCAVATION VENT STACK	
3/8/13	16.4%
4/8/13	12.6%
5/8/13	15.0%
6/13/13	14.9%
7/8/13	14.5%
8/14/13	15.2%
9/11/13	15.7%
10/9/13	13.8%
11/13/13	12.9%
12/19/13	10.9%
01/08/14	8.7%
02/03/14	0.2%
2/17/14	23.2%
3/17/14	0.0%

SV-11

SV-14

SV-17

METHANE WAS NOT DETECTED IN AMBIENT AIR AT GROUND LEVEL AT THE SUBJECT SITE IN MARCH 2014

SV-16

SOIL VAPOR VENT A

SOIL VAPOR VENT C

SOIL VAPOR VENT B

SOIL VAPOR VENT D

SV-15

PASSIVE EXCAVATION VENT STACK

SV-55S/I

SV-8S

SV-8I

	SV-8S	SV-8I
3/8/13	0.0%	0.1%
4/8/13	0.0%	0.2%
5/8/13	0.0%	0.2%
6/13/13	0.0%	0.2%
7/8/13	0.0%	0.2%
8/14/13	0.1%	0.3%
9/11/13	0.2%	0.2%
10/9/13	0.3%	0.5%
11/13/13	0.2%	0.3%
12/19/13	0.2%	0.4%
01/08/14	0.2%	0.2%
02/03/14	0.1%	NM
2/17/14	0.0%	0.0%
3/17/14	0.0%	0.0%

SV-42S

SV-43S

RESIDENCE (1423/1425 DOLLAR)

SV-21S/D

SV-22

SV-22

SV-25S

SV-19

RESIDENCE (1421 DOLLAR)

SV-20S/D

SV-23

SV-31

SV-26S/D

SV-19	
3/8/13	0.0%
4/8/13	0.0%
5/8/13	0.0%
6/13/13	0.0%
8/15/13	0.0%
9/11/13	0.0%
10/9/13	0.0%
11/13/13	0.0%
12/19/13	0.0%
01/08/14	0.0%
02/03/14	0.2%
2/17/14	0.0%
3/17/14	0.0%

	SV-20S	SV-20D
3/8/13	0.0%	0.0%
4/8/13	0.0%	0.0%
5/8/13	0.0%	0.0%
6/13/13	0.0%	0.0%
8/15/13	0.0%	0.0%
9/11/13	0.1%	0.1%
10/9/13	0.1%	0.1%
11/13/13	0.0%	0.0%
12/19/13	0.0%	0.0%
01/08/14	0.0%	0.0%
02/03/14	0.2%	0.2%
2/17/14	0.0%	0.0%
3/17/14	0.0%	0.0%

RESIDENCE (1422 DOLLAR)

RESIDENCE (1420 DOLLAR

SV-29S

SV-18

RESIDENCE (1419 DOLLAR)

SV-27S/D

SSD SYSTEM EXHAUST FAN

TRIANGLE FAMILY CHURCH (1414 WATTS)

SV-28D

METHANE WAS NOT DETECTED IN INDOOR AIR IN MARCH 2014.

SV-30S

SV-33

SV-32

SV-36S

SV-35S

RESIDENCE (1417 DOLLAR)

SV-34S

RESIDENCE (1418 DOLLAR)

RESIDENCE (1416 DOLLAR)

RESIDENCE (1414 DOLLAR)

RESIDENCE (1413 DOLLAR)

WATTS STR

DOLLAR AV

	SV-55S	SV-55I
3/8/13	1.8%	1.6%
4/8/13	1.4%	NM
5/8/13	1.1%	1.6%
6/13/13	0.8%	1.5%
7/8/13	0.7%	1.5%
8/14/13	0.2%	0.3%
9/11/13	0.9%	0.3%
10/9/13	0.8%	0.1%
11/13/13	0.4%	0.2%
12/19/13	0.6%	0.4%
01/08/14	0.6%	0.7%
02/03/14	0.4%	NM
2/17/14	NM	NM
3/17/14	0.3%	NM

SSD SYSTEM EXHAUST FAN	
3/8/13	0.0%
4/8/13	0.0%
5/8/13	0.0%
6/13/13	0.0%
7/8/13	0.0%
8/14/13	0.1%
9/11/13	0.1%
10/9/13	0.1%
11/13/13	0.0%
12/19/13	0.0%
01/08/14	NM
02/03/14	NM
2/17/14	0.0%
3/17/14	0.0%

SV-29S	
3/8/13	0.0%
4/8/13	0.0%
5/8/13	0.0%
6/13/13	0.0%
8/14/13	0.1%
9/11/13	0.1%
10/9/13	0.0%
11/13/13	0.0%
12/19/13	0.0%
01/08/14	0.0%
02/03/14	0.2%
2/17/14	0.0%
3/17/14	0.0%

SV-18	
3/8/13	0.0%
4/8/13	0.0%
5/8/13	0.0%
6/13/13	0.0%
8/14/13	0.1%
9/11/13	0.1%
10/9/13	0.0%
11/13/13	0.0%
12/19/13	0.0%
01/08/14	0.0%
02/03/14	0.2%
2/17/14	0.1%
3/17/14	NM

LEGEND

SOURCE PROPERTY BOUNDARY

PROPERTY PARCEL

SOIL GAS MONITORING POINT

SV-19	
3/8/13	0.0%
4/8/13	0.0%
5/8/13	0.0%
6/13/13	0.0%
8/15/13	0.0%
9/11/13	0.0%
10/9/13	0.0%
11/13/13	0.0%
12/19/13	0.0%
01/08/14	0.0%
02/03/14	0.2%
2/17/14	0.0%
3/17/14	0.0%

SAMPLE IDENTIFICATION

METHANE % BY VOLUME

SAMPLE DATE

NOTES:
1. DATA SOURCES: DURHAM COUNTY GIS, WITHERS & RAVENEL.
2. METHANE FIELD READINGS WERE MEASURED USING A GEM 2000 MULTI-GAS METER
3. NM = NOT MEASURED

N

APPROXIMATE

0 40 80

SCALE IN FEET

TITLE

METHANE FIELD MEASUREMENTS
MARCH 2014

PROJECT

ONE HOUR MARTINIZING
DSCA ID NO: 32-0013
1103 WEST CLUB BLVD
DURHAM, NORTH CAROLINA

hart hickman
SMARTER ENVIRONMENTAL SOLUTIONS
2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)
License # C-1269 / #C-245 Geology

DATE: 4/4/14 | REVISION NO. 0

JOB NO. DS0-84 | FIGURE NO. 5

S:\AAA-Master Projects\DSCA - DS0\DS0-84 One Hr Martinizing (former B&T)\Website Updates\2014 Website Updates\April 2014\DC320013_20140204_Methane-REV.dwg, Fig 3 Methane, 4/4/2014 2:23:26 PM, mfoster

ATTACHMENT A

PROJECT CALENDAR

~ March 2014 ~

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
2	3	4	5	6	7	8
	14-Day Radiello Indoor Air Sampling at 1419 Dollar Ave					
	14-Day Radiello Indoor Air Sampling at 1421 Dollar Ave					
9	10	11	12	13	14	15
	14-Day Radiello Indoor Air Sampling at 1421 Dollar Ave					
16	17	18	19	20	21	22
3-Hour Summa Canister Indoor Air Sampling at 1414 Watts St	**24-Hour Summa Canister Indoor Air Sampling at 1419 & 1421 Dollar Ave**					
	Methane Field Screening	**14-Day Radiello Indoor Air Sampling at 1419 & 1421 Dollar Ave**				
23	24	25	26	27	28	29
	Post–Injection Groundwater and Soil Vapor Sampling					
	14-Day Radiello Indoor Air Sampling at 1419 & 1421 Dollar Ave					
30	31					
14-Day Radiello Indoor Air Sampling at 1419 & 1421 Dollar Ave						

Note: Schedule tentative and subject to change. Please check http://portal.ncdenr.org/web/wm/dsca/bbt_updates regularly for any changes in the schedule.

~ April 2014 ~

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

3-Hour Summa Canister Indoor Air Sampling at 1414 Watts St

24-Hour Summa Canister Indoor Air Sampling at 1419 & 1421 Dollar Ave

Methane Field Screening

14-Day Radiello Indoor Air Sampling at 1419 & 1421 Dollar Ave

Post–Injection Groundwater and Soil Vapor Sampling

14-Day Radiello Indoor Air Sampling at 1419 & 1421 Dollar Ave

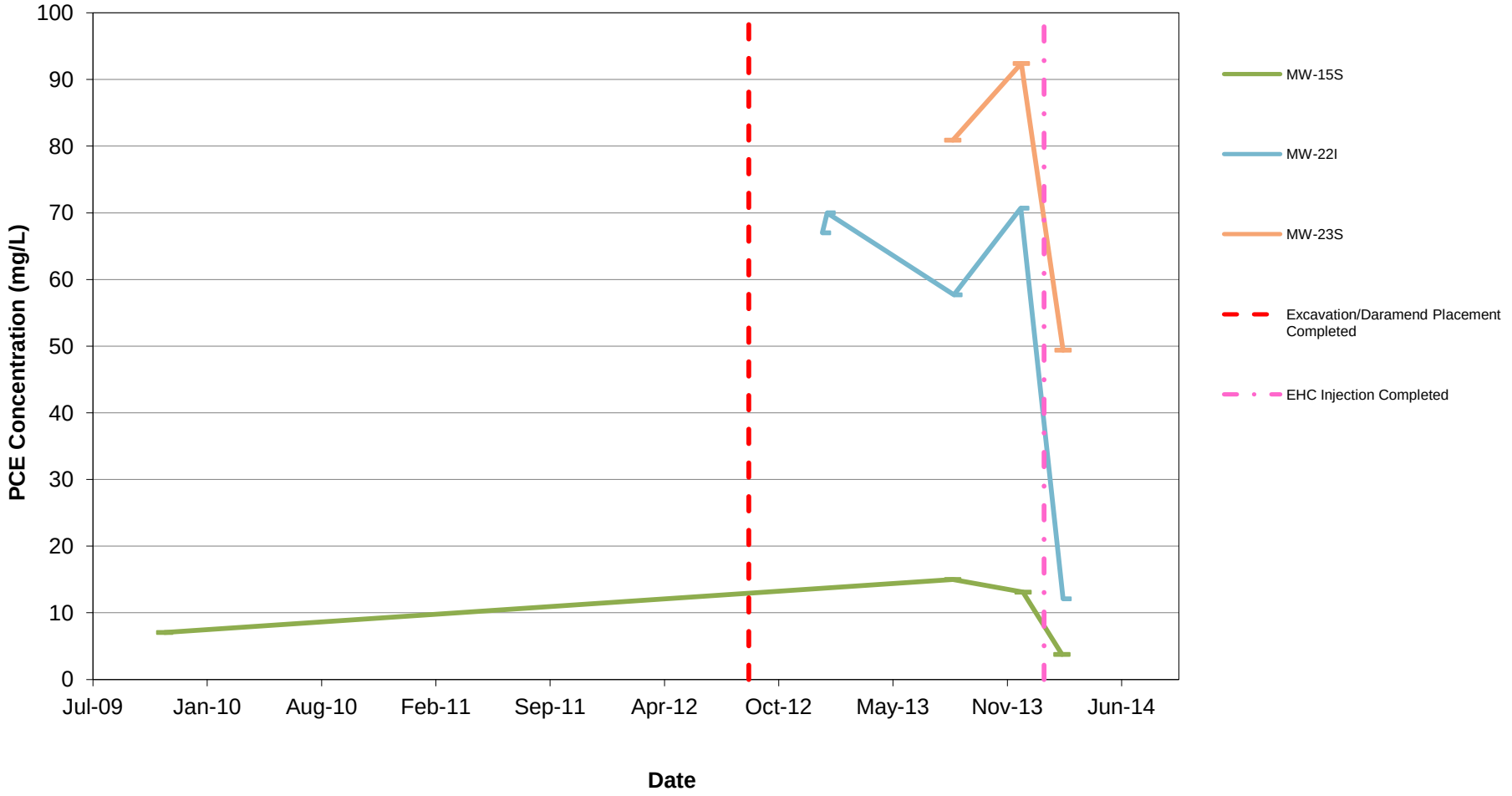
14-Day Radiello Indoor Air Sampling at 1419 & 1421 Dollar Ave

Note: Schedule tentative and subject to change. Please check http://portal.ncdenr.org/web/wm/dsca/bbt_updates regularly for any changes in the schedule.

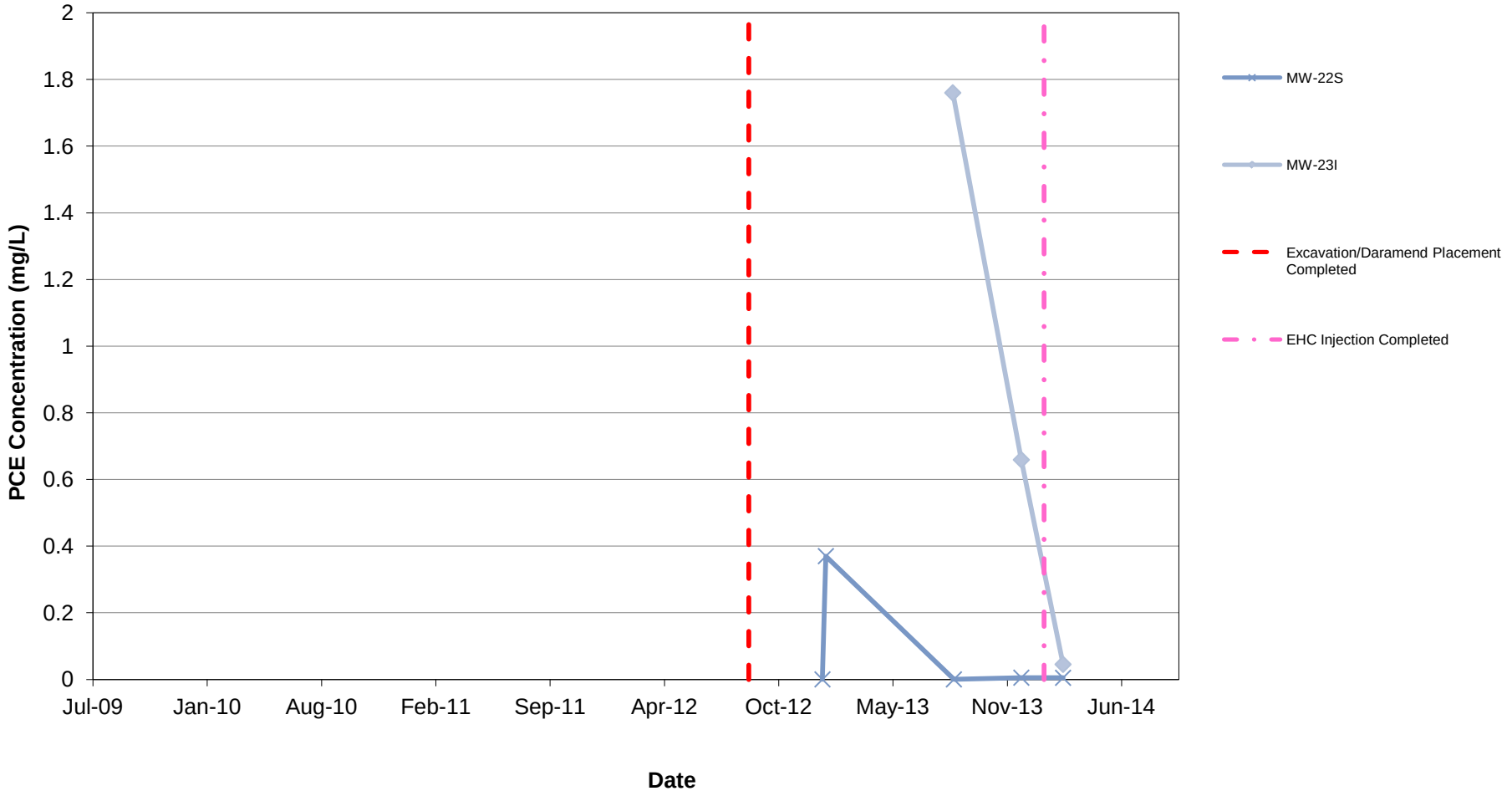
ATTACHMENT B

GRAPHS

PCE Groundwater Concentrations vs. Time
Injection Area MWs: MW-15S, MW-22I, MW-23S
One Hour Martinizing, Durham, Durham County
DSCA ID: 32-0013

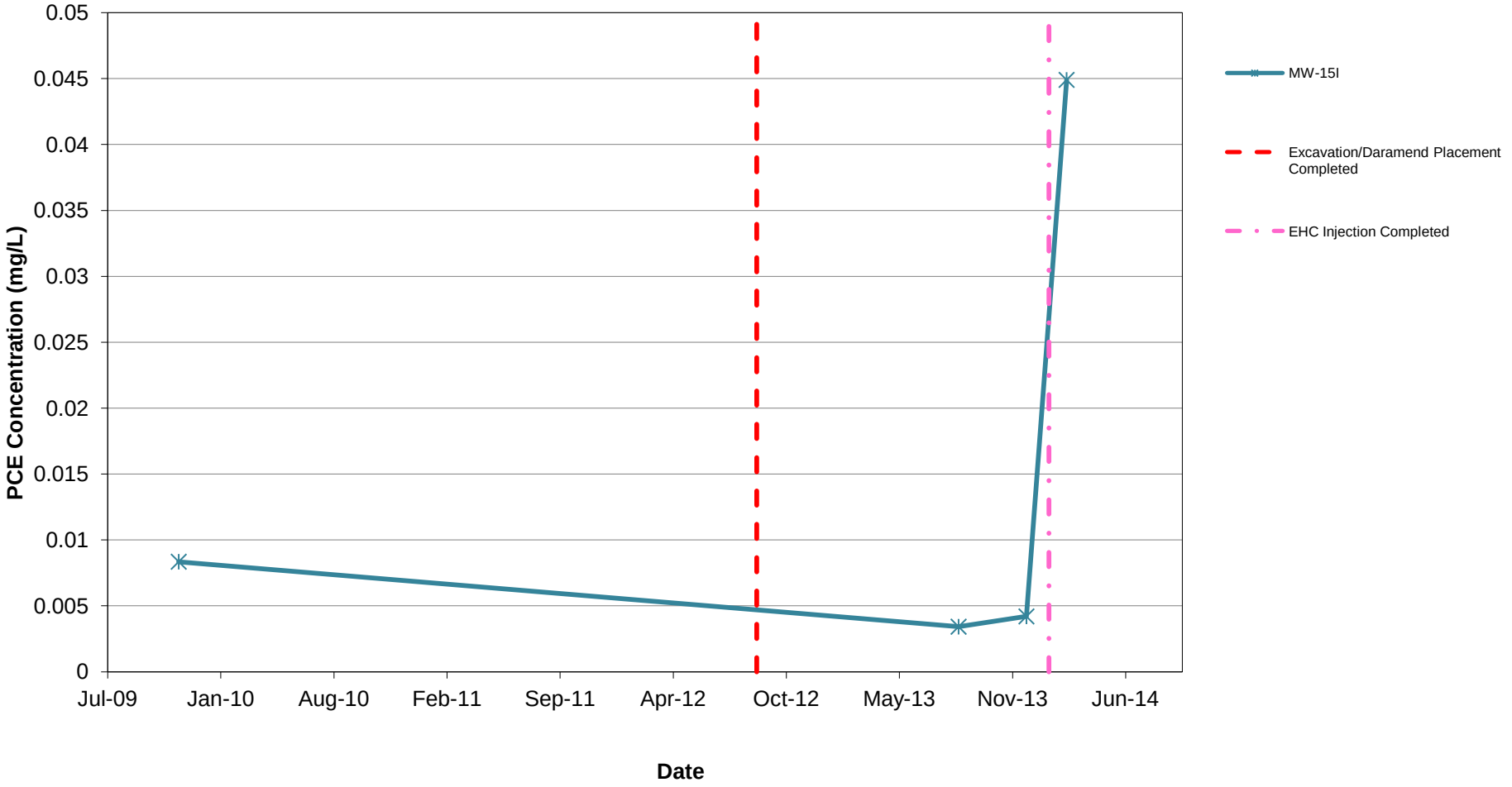


PCE Groundwater Concentrations vs. Time
Injection Area MWs: MW-22S and MW-23I
One Hour Martinizing, Durham, Durham County
DSCA ID: 32-0013

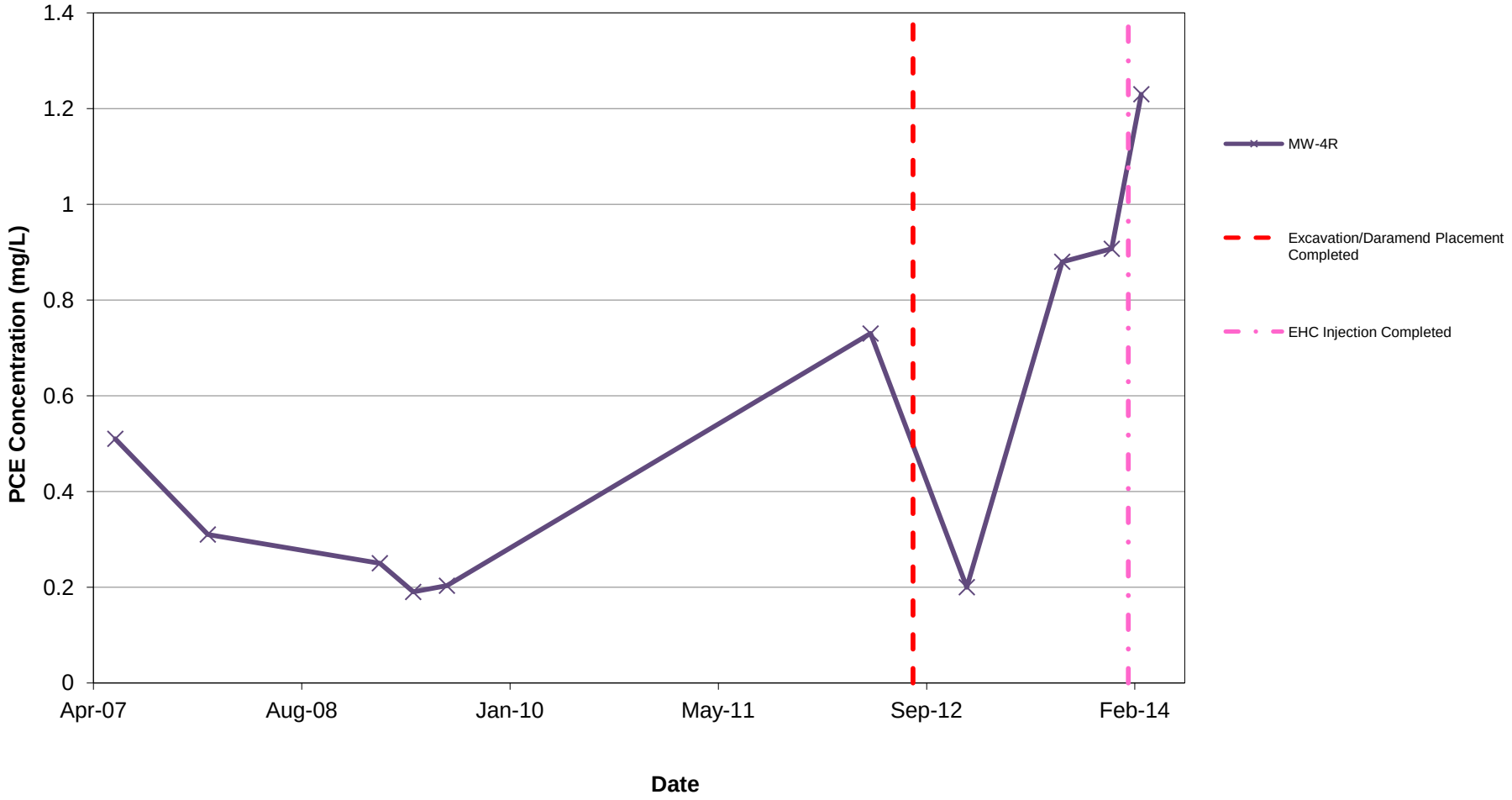


Note: Non-detect values are graphed as half the laboratory method detection limit.

PCE Groundwater Concentrations vs. Time
Injection Area MWs: MW-15I
One Hour Martinizing, Durham, Durham County
DSCA ID: 32-0013

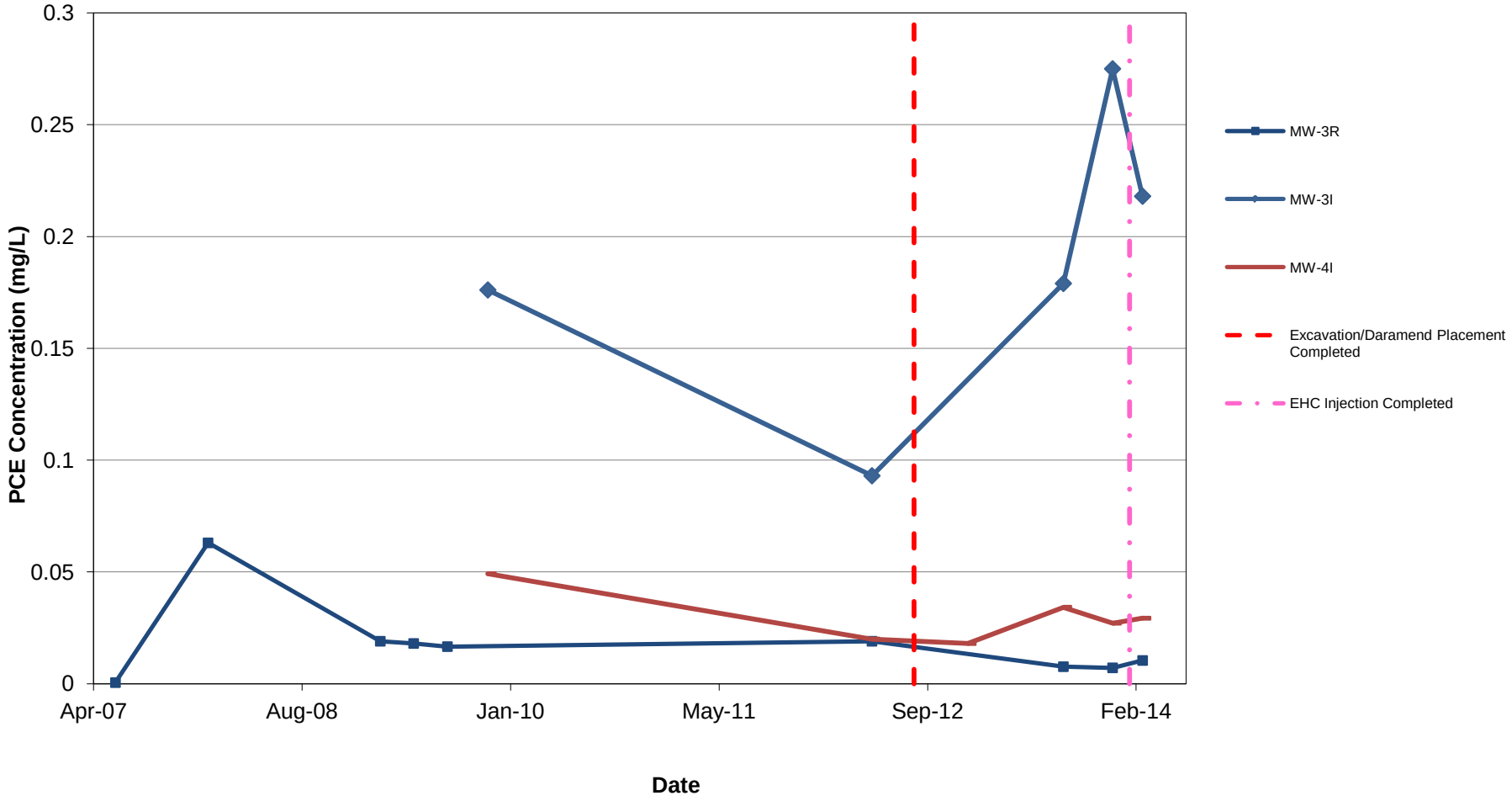


PCE Groundwater Concentrations vs. Time
MWs North of Injection Area: MW-4R
One Hour Martinizing, Durham, Durham County
DSCA ID: 32-0013



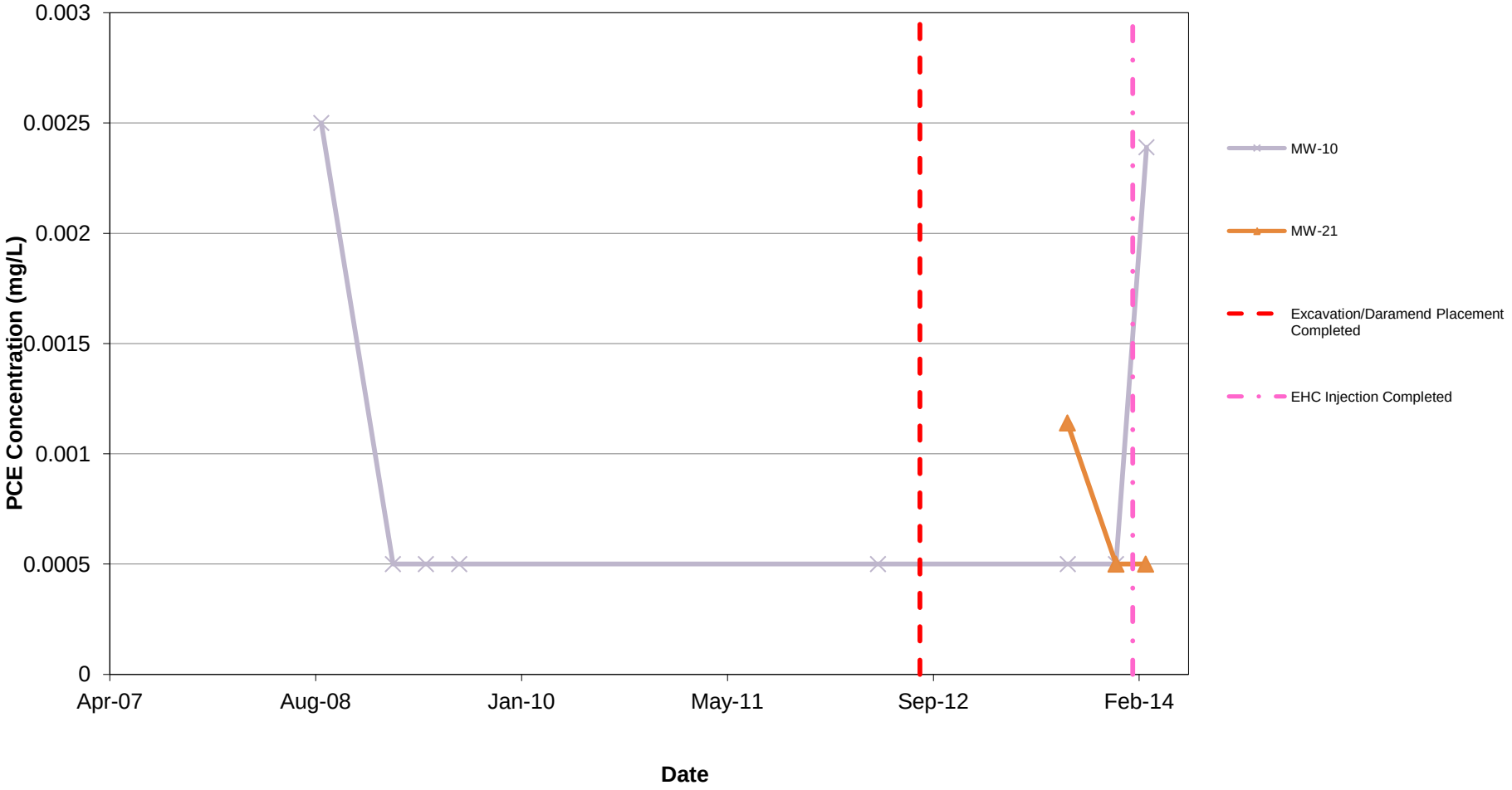
Note: Non-detect values are graphed as half the laboratory method detection limit.

PCE Groundwater Concentrations vs. Time
MWs North of Injection Area: MW-3R/I, MW-4I
One Hour Martinizing, Durham, Durham County
DSCA ID: 32-0013



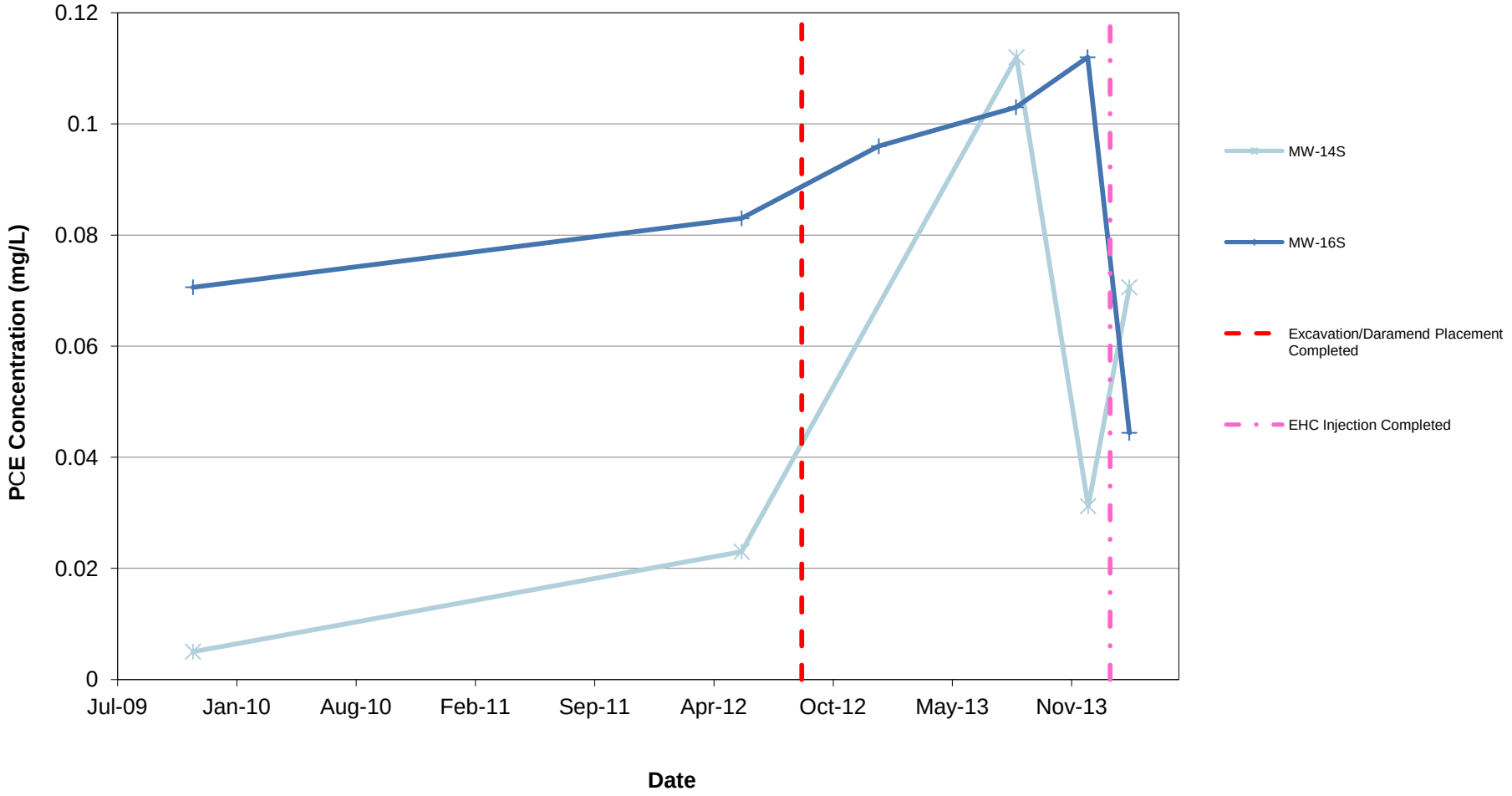
Note: Non-detect values are graphed as half the laboratory method detection limit.

PCE Groundwater Concentrations vs. Time
MWs West of Injection Area: MW-10, MW-21
One Hour Martinizing, Durham, Durham County
DSCA ID: 32-0013



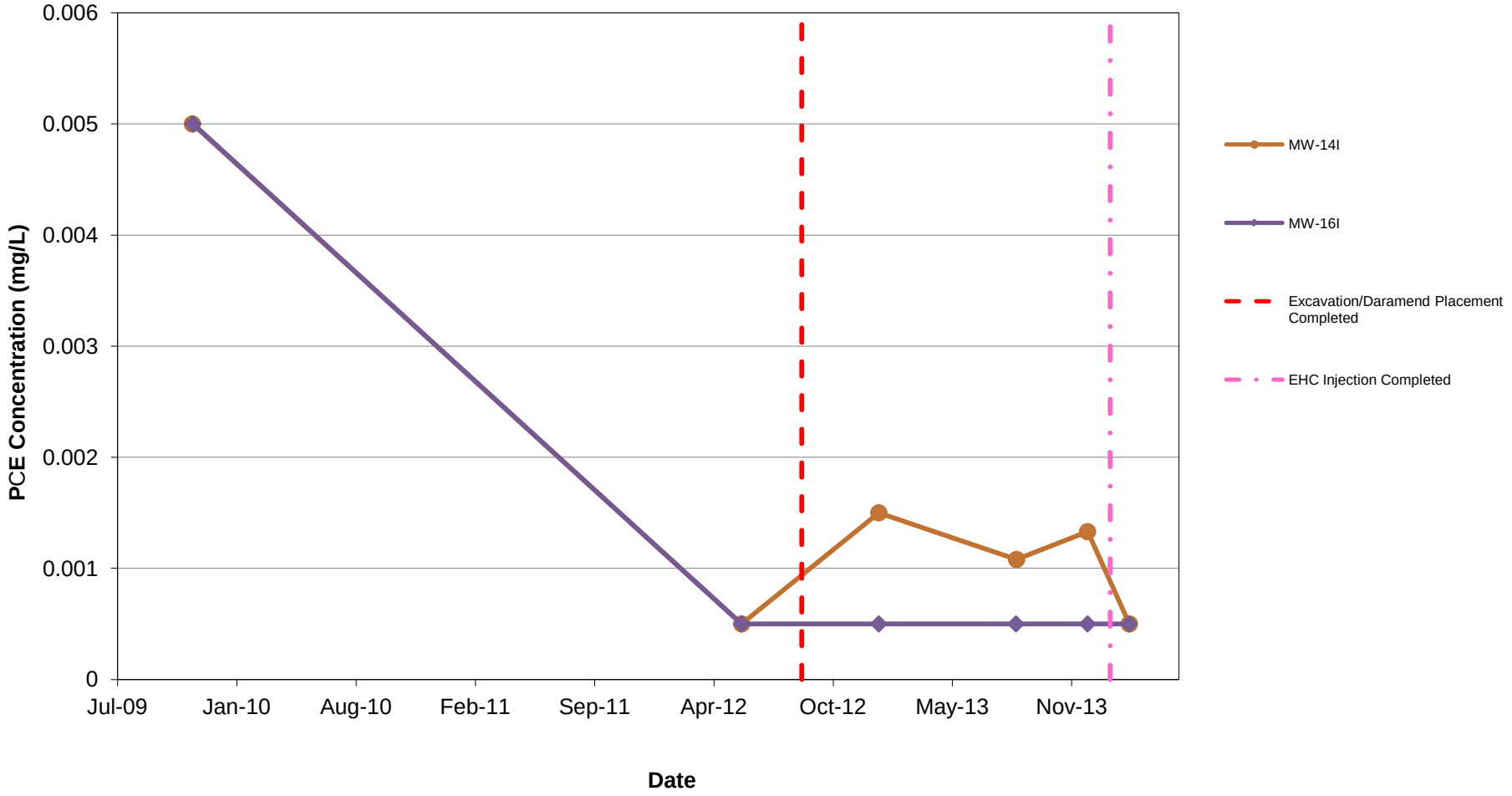
Note: Non-detect values are graphed as half the laboratory method detection limit.

PCE Groundwater Concentrations vs. Time
MWs East of Injection Area: MW-14S and MW-16S
One Hour Martinizing, Durham, Durham County
DSCA ID: 32-0013



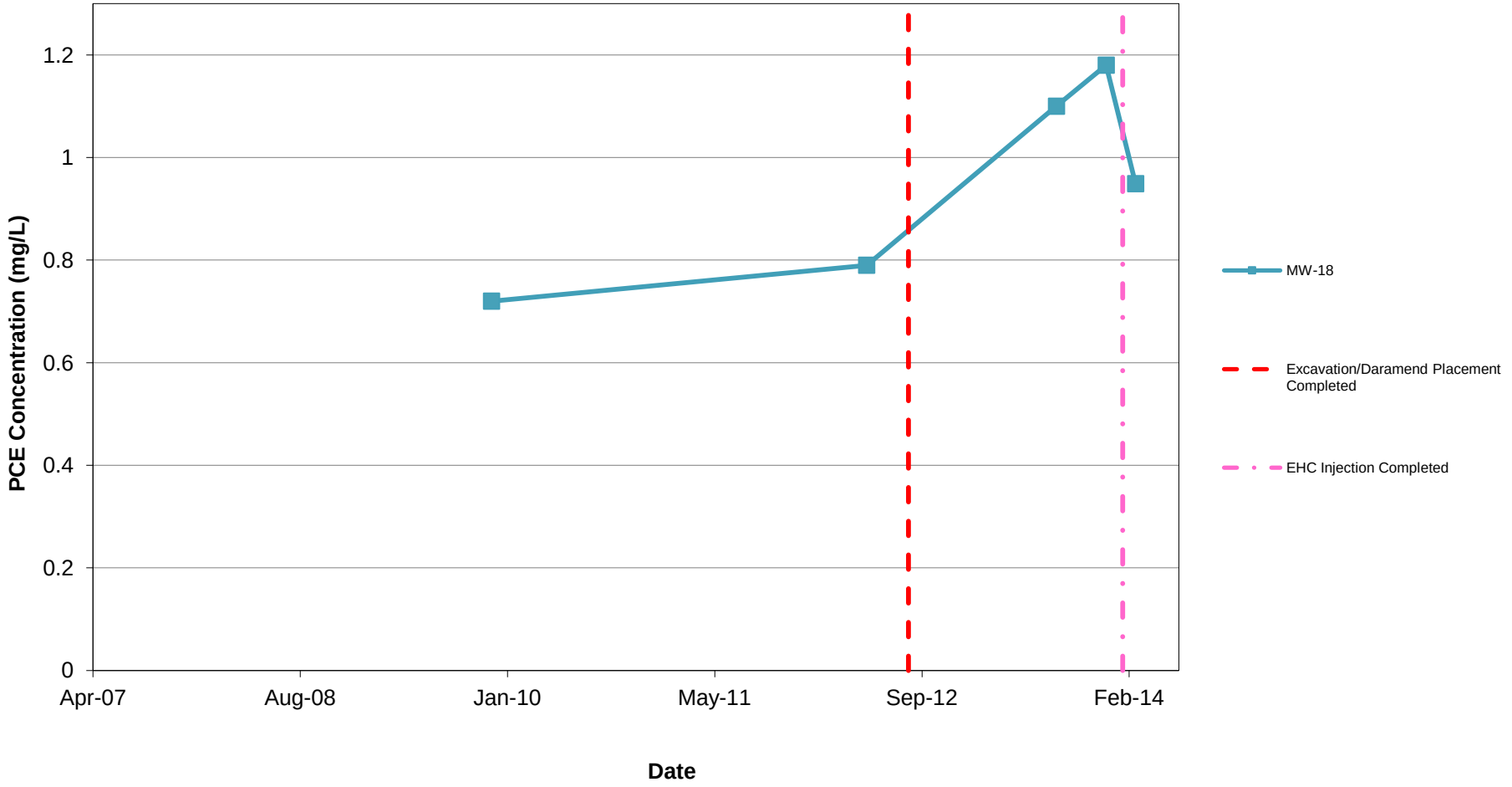
Note: Non-detect values are graphed as half the laboratory method detection limit.

PCE Groundwater Concentrations vs. Time
MWs East of Injection Area: MW-14I,and MW-16I
One Hour Martinizing, Durham, Durham County
DSCA ID: 32-0013



Note: Non-detect values are graphed as half the laboratory method detection limit.

PCE Groundwater Concentrations vs. Time
MWs South of Injection Area: MW-18
One Hour Martinizing, Durham, Durham County
DSCA ID: 32-0013



Note: Non-detect values are graphed as half the laboratory method detection limit.

ATTACHMENT C

INDOOR AIR RISK CALCULATORS

Calculated Cumulative Indoor Air Risks (February 2014)
Triangle Family Church, 1414 Watts Street, Durham, NC
One Hour Martinizing Site, DSCA ID 32-0013
H&H Job No. DS0-84

Risk Exposure Scenario: Residential exposure based on 6 hrs per week occupancy (typical parishioner)

Cumulative Carcinogenic Risk								
Unit	**Compound**	**Exposure Conc. ug/m^3**	**IUR $(ug/m^3)^{-1}$**	**AT days**	**EF days/yr**	**ED years**	**ET hr/day**	**LICR**
1414-Front	Tetrachloroethene	91	2.60E-07	25550	208	30	1.500	0.00000036
	Trichloroethene		4.10E-06	25550	208	30	1.500	0.00000000
							Total	**3.6E-07**
1414-Rear	Tetrachloroethene	160	2.60E-07	25550	208	30	1.500	0.00000063
	Trichloroethene		4.10E-06	25550	208	30	1.500	0.00000000
							Total	**6.3E-07**

Cumulative Non-Carcinogenic Risk								
Unit	**Compound**	**Exposure Conc. ug/m^3**	**Rfc mg/m^3**	**AT days**	**EF days/yr**	**ED years**	**ET hr/day**	**Hazard Index**
1414-Front	Tetrachloroethene	91	4.00E-02	10950	208	30	1.5	0.08102740
	Trichloroethene		2.00E-03	10950	208	30	1.5	0.00000000
							Total	**0.08**
1414-Rear	Tetrachloroethene	160	4.00E-02	10950	208	30	1.5	0.14246575
	Trichloroethene		2.00E-03	10950	208	30	1.5	0.00000000
							Total	**0.14**

Notes:
IUR and Rfc concentrations from EPA Regional Screening Level (RSL) Residential Air Table, November 2013.
LICR = Lifetime Incremental Cancer Risk
AT = Averaging Time
IUR = Inhalation Unit Rate
Rfc = Reference Concentration
EF = Exposure Frequency
ED = Exposure Duration
ET = Exposure Time

DSCA Indoor Air Risk Calculator - Table 1: Cumulative Risk for Resident

DSCA ID No: 32-0013 **Name/Address of DSCA Site:** One Hour Martinizing, 1103 West Club Blvd, Durham, NC 27701

Name/Address of Sampling Location: First Floor, Drey Residence, 1419 Dollar Ave, Durham, NC 27701 **Sampling Date:** 2/20/2014 **Sample ID:** 1419-UP

Cumulative Risk Calculation for Indoor Air Pathway (Residential)														
	Tetrachloroethene	Trichloroethylene	Vinyl Chloride	Benzene	Ethylbenzene	Naphthalene	MTBE	1,2-Dichlorethane						
Maximum Concentration Detected (µg/m^3)	4.8													
EPA Regional Screening Level (RSL) for Residential Air (carcinogenic target risk = 1E-06) µg/m^3	9.36	0.43	0.16	0.31	0.97	0.072	9.4	0.094						
Ratio = Max Concentration ÷ EPA RSL	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

CUMULATIVE RISK (sum of ratios x 10^{-6})	**5.13E-07**

Cumulative Hazard Index (HI) Calculation for Indoor Air Pathway (Residential)														
	Tetrachloroethene	Trichloroethylene	Vinyl Chloride	trans - 1,2 -DCE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	1,2-Dichloroethane			
Maximum Concentration Detected	4.8													
EPA Regional Screening Level (RSL) for Residential Air [noncancer Hazard Index (HI)=1] µg/m3	41.7	2.1	100	63	31	5200	1000	100	3.1	3100	7.3			
Ratio = Max Concentration ÷ EPA RSL	0.1151	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			

CUMULATIVE HI (sum of ratios)	**0.12**

Notes:

1. RSLs available at: **http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm**
2. Trans-1,2-DCE, toluene and xylenes were not included in the cumulative risk calculation since they currently have no carcinogenic EPA RSLs.
3. Cis-1,2-DCE was not included in cumulative risk or HI calculation since there are currently no EPA RSLs.
4. Note that EPA RSL for PCE was recalculated by the DSCA Program based on the 2/10/2012 toxicity data issued under IRIS.

DSCA Indoor Air Risk Calculator - Table 1: Cumulative Risk for Resident

DSCA ID No: 32-0013 **Name/Address of DSCA Site:** One Hour Martinizing, 1103 West Club Blvd, Durham, NC 27701

Name/Address of Sampling Location: First Floor, Drey Residence, 1419 Dollar Ave, Durham, NC 27701 **Sampling Date:** 3/6/2014 **Sample ID:** 1419-UP

Cumulative Risk Calculation for Indoor Air Pathway (Residential)														
	Tetrachloroethene	Trichloroethylene	Vinyl Chloride	Benzene	Ethylbenzene	Naphthalene	MTBE	1,2-Dichlorethane						
Maximum Concentration Detected (µg/m^3)	5.7	1.4												
EPA Regional Screening Level (RSL) for Residential Air (carcinogenic target risk = 1E-06) µg/m^3	9.36	0.43	0.16	0.31	0.97	0.072	9.4	0.094						
Ratio = Max Concentration ÷ EPA RSL	0.61	3.26	0.00	0.00	0.00	0.00	0.00	0.00						

CUMULATIVE RISK (sum of ratios x 10^{-6})	**3.86E-06**

Cumulative Hazard Index (HI) Calculation for Indoor Air Pathway (Residential)														
	Tetrachloroethene	Trichloroethylene	Vinyl Chloride	trans - 1,2 -DCE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	1,2-Dichloroethane			
Maximum Concentration Detected	5.7	1.4												
EPA Regional Screening Level (RSL) for Residential Air [noncancer Hazard Index (HI)=1] µg/m3	41.7	2.1	100	63	31	5200	1000	100	3.1	3100	7.3			
Ratio = Max Concentration ÷ EPA RSL	0.1367	0.6667	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			

CUMULATIVE HI (sum of ratios)	**0.80**

Notes:

1. RSLs available at: **http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm**
2. Trans-1,2-DCE, toluene and xylenes were not included in the cumulative risk calculation since they currently have no carcinogenic EPA RSLs.
3. Cis-1,2-DCE was not included in cumulative risk or HI calculation since there are currently no EPA RSLs.
4. Note that EPA RSL for PCE was recalculated by the DSCA Program based on the 2/10/2012 toxicity data issued under IRIS.

DSCA Indoor Air Risk Calculator - Table 1: Cumulative Risk for Resident

DSCA ID No: 32-0013 **Name/Address of DSCA Site:** One Hour Martinizing, 1103 West Club Blvd, Durham, NC 27701

Name/Address of Sampling Location: Basement, Drey Residence, 1419 Dollar Ave, Durham, NC 27701 **Sampling Date:** 2/20/2014 **Sample ID:** 1419-DOWN

Cumulative Risk Calculation for Indoor Air Pathway (Residential)														
	Tetrachloroethene	Trichloroethylene	Vinyl Chloride	Benzene	Ethylbenzene	Naphthalene	MTBE	1,2-Dichlorethane						
Maximum Concentration Detected (µg/m^3)	9.8													
EPA Regional Screening Level (RSL) for Residential Air (carcinogenic target risk = 1E-06) µg/m^3	9.36	0.43	0.16	0.31	0.97	0.072	9.4	0.094						
Ratio = Max Concentration ÷ EPA RSL	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

CUMULATIVE RISK (sum of ratios x 10^{-6})	**1.05E-06**

Cumulative Hazard Index (HI) Calculation for Indoor Air Pathway (Residential)														
	Tetrachloroethene	Trichloroethylene	Vinyl Chloride	trans - 1,2 -DCE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	1,2-Dichloroethane			
Maximum Concentration Detected	9.8													
EPA Regional Screening Level (RSL) for Residential Air [noncancer Hazard Index (HI)=1] µg/m3	41.7	2.1	100	63	31	5200	1000	100	3.1	3100	7.3			
Ratio = Max Concentration ÷ EPA RSL	0.2350	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			

CUMULATIVE HI (sum of ratios)	**0.24**

Notes:

1. RSLs available at: **http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm**
2. Trans-1,2-DCE, toluene and xylenes were not included in the cumulative risk calculation since they currently have no carcinogenic EPA RSLs.
3. Cis-1,2-DCE was not included in cumulative risk or HI calculation since there are currently no EPA RSLs.
4. Note that EPA RSL for PCE was recalculated by the DSCA Program based on the 2/10/2012 toxicity data issued under IRIS.

DSCA Indoor Air Risk Calculator - Table 1: Cumulative Risk for Resident

DSCA ID No: 32-0013 **Name/Address of DSCA Site:** One Hour Martinizing, 1103 West Club Blvd, Durham, NC 27701

Name/Address of Sampling Location: Basement, Drey Residence, 1419 Dollar Ave, Durham, NC 27701 **Sampling Date:** 3/6/2014 **Sample ID:** 1419-DOWN

Cumulative Risk Calculation for Indoor Air Pathway (Residential)														
	Tetrachloroethene	Trichloroethylene	Vinyl Chloride	Benzene	Ethylbenzene	Naphthalene	MTBE	1,2-Dichlorethane						
Maximum Concentration Detected (µg/m^3)	7.7													
EPA Regional Screening Level (RSL) for Residential Air (carcinogenic target risk = 1E-06) µg/m^3	9.36	0.43	0.16	0.31	0.97	0.072	9.4	0.094						
Ratio = Max Concentration ÷ EPA RSL	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

CUMULATIVE RISK (sum of ratios x 10^{-6})	**8.23E-07**

Cumulative Hazard Index (HI) Calculation for Indoor Air Pathway (Residential)														
	Tetrachloroethene	Trichloroethylene	Vinyl Chloride	trans - 1,2 -DCE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	1,2-Dichloroethane			
Maximum Concentration Detected	7.7													
EPA Regional Screening Level (RSL) for Residential Air [noncancer Hazard Index (HI)=1] µg/m3	41.7	2.1	100	63	31	5200	1000	100	3.1	3100	7.3			
Ratio = Max Concentration ÷ EPA RSL	0.1847	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			

CUMULATIVE HI (sum of ratios)	**0.18**

Notes:

1. RSLs available at: **http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm**
2. Trans-1,2-DCE, toluene and xylenes were not included in the cumulative risk calculation since they currently have no carcinogenic EPA RSLs.
3. Cis-1,2-DCE was not included in cumulative risk or HI calculation since there are currently no EPA RSLs.
4. Note that EPA RSL for PCE was recalculated by the DSCA Program based on the 2/10/2012 toxicity data issued under IRIS.

DSCA Indoor Air Risk Calculator - Table 1: Cumulative Risk for Resident

DSCA ID No: 32-0013 **Name/Address of DSCA Site:** One Hour Martinizing, 1103 West Club Blvd, Durham, NC 27701

Name/Address of Sampling Location: First Floor, Gilligan Residence, 1421 Dollar Ave, Durham, NC 27701 **Sampling Date:** 2/25/2014 **Sample ID:** 1421-UP

Cumulative Risk Calculation for Indoor Air Pathway (Residential)														
	Tetrachloroethene	Trichloroethylene	Vinyl Chloride	Benzene	Ethylbenzene	Naphthalene	MTBE	1,2-Dichlorethane						
Maximum Concentration Detected (µg/m^3)	1.3													
EPA Regional Screening Level (RSL) for Residential Air (carcinogenic target risk = 1E-06) µg/m^3	9.36	0.43	0.16	0.31	0.97	0.072	9.4	0.094						
Ratio = Max Concentration ÷ EPA RSL	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

CUMULATIVE RISK (sum of ratios x 10^{-6})	**1.39E-07**

Cumulative Hazard Index (HI) Calculation for Indoor Air Pathway (Residential)														
	Tetrachloroethene	Trichloroethylene	Vinyl Chloride	trans - 1,2 -DCE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	1,2-Dichloroethane			
Maximum Concentration Detected	1.3													
EPA Regional Screening Level (RSL) for Residential Air [noncancer Hazard Index (HI)=1] µg/m3	41.7	2.1	100	63	31	5200	1000	100	3.1	3100	7.3			
Ratio = Max Concentration ÷ EPA RSL	0.0312	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			

CUMULATIVE HI (sum of ratios)	**0.03**

Notes:

1. RSLs available at: **http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm**
2. Trans-1,2-DCE, toluene and xylenes were not included in the cumulative risk calculation since they currently have no carcinogenic EPA RSLs.
3. Cis-1,2-DCE was not included in cumulative risk or HI calculation since there are currently no EPA RSLs.
4. Note that EPA RSL for PCE was recalculated by the DSCA Program based on the 2/10/2012 toxicity data issued under IRIS.

DSCA Indoor Air Risk Calculator - Table 1: Cumulative Risk for Resident

DSCA ID No: 32-0013 **Name/Address of DSCA Site:** One Hour Martinizing, 1103 West Club Blvd, Durham, NC 27701

Name/Address of Sampling Location: First Floor, Gilligan Residence, 1421 Dollar Ave, Durham, NC 27701 **Sampling Date:** 3/11/2014 **Sample ID:** 1421-UP

Cumulative Risk Calculation for Indoor Air Pathway (Residential)														
	Tetrachloroethene	Trichloroethylene	Vinyl Chloride	Benzene	Ethylbenzene	Naphthalene	MTBE	1,2-Dichlorethane						
Maximum Concentration Detected (µg/m^3)	1.7	1.0												
EPA Regional Screening Level (RSL) for Residential Air (carcinogenic target risk = 1E-06) µg/m^3	9.36	0.43	0.16	0.31	0.97	0.072	9.4	0.094						
Ratio = Max Concentration ÷ EPA RSL	0.18	2.33	0.00	0.00	0.00	0.00	0.00	0.00						

CUMULATIVE RISK (sum of ratios x 10^{-6})	**2.51E-06**

Cumulative Hazard Index (HI) Calculation for Indoor Air Pathway (Residential)														
	Tetrachloroethene	Trichloroethylene	Vinyl Chloride	trans - 1,2 -DCE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	1,2-Dichloroethane			
Maximum Concentration Detected	1.7	1.0												
EPA Regional Screening Level (RSL) for Residential Air [noncancer Hazard Index (HI)=1] µg/m3	41.7	2.1	100	63	31	5200	1000	100	3.1	3100	7.3			
Ratio = Max Concentration ÷ EPA RSL	0.0408	0.4762	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			

CUMULATIVE HI (sum of ratios)	**0.52**

Notes:

1. RSLs available at: **http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm**
2. Trans-1,2-DCE, toluene and xylenes were not included in the cumulative risk calculation since they currently have no carcinogenic EPA RSLs.
3. Cis-1,2-DCE was not included in cumulative risk or HI calculation since there are currently no EPA RSLs.
4. Note that EPA RSL for PCE was recalculated by the DSCA Program based on the 2/10/2012 toxicity data issued under IRIS.

DSCA Indoor Air Risk Calculator - Table 1: Cumulative Risk for Resident

DSCA ID No: 32-0013 **Name/Address of DSCA Site:** One Hour Martinizing, 1103 West Club Blvd, Durham, NC 27701

Name/Address of Sampling Location: Basement, Gilligan Residence, 1421 Dollar Ave, Durham, NC 27701 **Sampling Date:** 2/25/2014 **Sample ID:** 1421-DOWN

Cumulative Risk Calculation for Indoor Air Pathway (Residential)														
	Tetrachloroethene	Trichloroethylene	Vinyl Chloride	Benzene	Ethylbenzene	Naphthalene	MTBE	1,2-Dichlorethane						
Maximum Concentration Detected (µg/m^3)	1.9													
EPA Regional Screening Level (RSL) for Residential Air (carcinogenic target risk = 1E-06) µg/m^3	9.36	0.43	0.16	0.31	0.97	0.072	9.4	0.094						
Ratio = Max Concentration ÷ EPA RSL	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

CUMULATIVE RISK (sum of ratios x 10^{-6})	**2.03E-07**

Cumulative Hazard Index (HI) Calculation for Indoor Air Pathway (Residential)														
	Tetrachloroethene	Trichloroethylene	Vinyl Chloride	trans - 1,2 -DCE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	1,2-Dichloroethane			
Maximum Concentration Detected	1.9													
EPA Regional Screening Level (RSL) for Residential Air [noncancer Hazard Index (HI)=1] µg/m3	41.7	2.1	100	63	31	5200	1000	100	3.1	3100	7.3			
Ratio = Max Concentration ÷ EPA RSL	0.0456	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			

CUMULATIVE HI (sum of ratios)	**0.05**

Notes:

1. RSLs available at: **http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm**
2. Trans-1,2-DCE, toluene and xylenes were not included in the cumulative risk calculation since they currently have no carcinogenic EPA RSLs.
3. Cis-1,2-DCE was not included in cumulative risk or HI calculation since there are currently no EPA RSLs.
4. Note that EPA RSL for PCE was recalculated by the DSCA Program based on the 2/10/2012 toxicity data issued under IRIS.

DSCA Indoor Air Risk Calculator - Table 1: Cumulative Risk for Resident

DSCA ID No: 32-0013 **Name/Address of DSCA Site:** One Hour Martinizing, 1103 West Club Blvd, Durham, NC 27701

Name/Address of Sampling Location: Basement, Gilligan Residence, 1421 Dollar Ave, Durham, NC 27701 **Sampling Date:** 3/11/2014 **Sample ID:** 1421-DOWN

Cumulative Risk Calculation for Indoor Air Pathway (Residential)															
	Tetrachloroethene	Trichloroethylene	Vinyl Chloride	Benzene	Ethylbenzene	Naphthalene	MTBE	1,2-Dichlorethane							
Maximum Concentration Detected (µg/m^3)	2.6	26													
EPA Regional Screening Level (RSL) for Residential Air (carcinogenic target risk = 1E-06) µg/m^3	9.36	0.43	0.16	0.31	0.97	0.072	9.4	0.094							
Ratio = Max Concentration ÷ EPA RSL	0.28	60.47	0.00	0.00	0.00	0.00	0.00	0.00							

CUMULATIVE RISK (sum of ratios x 10^{-6})	**6.07E-05**

Cumulative Hazard Index (HI) Calculation for Indoor Air Pathway (Residential)															
	Tetrachloroethene	Trichloroethylene	Vinyl Chloride	trans - 1,2 -DCE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	1,2-Dichloroethane				
Maximum Concentration Detected	2.6	26													
EPA Regional Screening Level (RSL) for Residential Air [noncancer Hazard Index (HI)=1] µg/m3	41.7	2.1	100	63	31	5200	1000	100	3.1	3100	7.3				
Ratio = Max Concentration ÷ EPA RSL	0.0624	12.3810	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000				

CUMULATIVE HI (sum of ratios)	**12.44**

Notes:

1. RSLs available at: **http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm**
2. Trans-1,2-DCE, toluene and xylenes were not included in the cumulative risk calculation since they currently have no carcinogenic EPA RSLs.
3. Cis-1,2-DCE was not included in cumulative risk or HI calculation since there are currently no EPA RSLs.
4. Note that EPA RSL for PCE was recalculated by the DSCA Program based on the 2/10/2012 toxicity data issued under IRIS.