Prepared for:

LAFARGE ROAD MARKING, INC.
2675 North Martin Street
East Point, Georgia

VOLUNTARY REMEDIATION PROGRAM
REVISED COMPLIANCE STATUS REPORT
FORMER LAFARGE ROAD MARKING, INC.
East Point, Georgia

Prepared by:

EPS

400 Northridge Road, Suite 400
Sandy Springs, Georgia 30350
Tel: 404-315-9113

May 2018

DCN: LRM1VRPR003

VOLUNTARY REMEDIATION PROGRAM
REVISED COMPLIANCE STATUS REPORT
FORMER LAFARGE ROAD MARKING, INC.
East Point, Georgia

Prepared For:

LAFARGE ROAD MARKING, INC.
2675 North Martin Street
East Point, Georgia

Prepared By:

EPS

400 Northridge Road, Suite 400
Sandy Springs, GA 30350
Tel: 404-315-9113

Kirk Kessler, P.G.
Senior Principal

Timmerly Bullman, P.E.
Principal

May 2018

EPS

VOLUNTARY REMEDIATION PROGRAM
REVISED COMPLIANCE STATUS REPORT
FORMER LAFARGE ROAD MARKING, INC.
East Point, Georgia

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

EPS

PROFESSIONAL GEOLOGIST CERTIFICATION

"I certify under penalty of law that this report and all attachments were prepared by me or under my direct supervision in accordance with the Voluntary Remediation Program Act (O.C.G.A. Section 12-8-101, et seq.). I am a professional engineer/professional geologist who is registered with the Georgia State Board of Registration for Professional Engineers and Land Surveyors/Georgia State Board of Registration for Professional Geologists and I have the necessary experience and am in charge of the investigation and remediation of this release of regulated substances.

Furthermore, to document my direct oversight of the Voluntary Remediation Plan development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division.

The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Kirk Kessler GA000685

Printed Name and GA PE/PG Number

5/14/2018

Date

Signature and Stamp

GEORGIA REGISTERED PROFESSIONAL GEOLOGIST No 685

Certification of Compliance

I certify that this CSR report and all attachments were prepared under my direction in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Based on my review of the findings of this report with respect to the Risk Reduction Standards (RRSs) under the Rules for Hazardous Site Response, Rule 391-3-19-.07 and the Voluntary Remediation Program Act, O.C.G.A 12-8-108, I have determined that tax parcel 14 0156 LL0293 is in compliance with non-residential RRSs for soil. In accordance with Section 12-8-107(g)(2) of the VRP Act it is not necessary to certify compliance for groundwater at this site. However, based on my review of the findings of this report, the groundwater meets the site specific cleanup criteria at the established point of exposure in accordance with the VRP Act.

Certified by: ______________________ Date: 5/14/18
Lafarge Road Marking, Inc.
Joseph McCarthy

1 INTRODUCTION

1.1 Voluntary Remediation Program ("VRP")

EPS is submitting this Revised Compliance Status Report ("CSR") on behalf of Lafarge Road Marking, Inc. ("LRM") for its former road painting manufacturing facility located at 2674 North Martin Street in East Point, Georgia ("Site"). Figure 1 shows the location of the Site on a topographic map. The original CSR was submitted in April 2017 and this Revised CSR is being submitted after consultation with the Environmental Protection Division ("EPD"). This CSR is in accordance with the requirements outlined in the Georgia Voluntary Remediation Program and the EPD Consent Order No. EPD-VRP-009, issued on August 6, 2014.

LMR submitted a VRP application to the EPD in May 2010 and then a revised application in August 2013 (Arcadis, 2013). The EPD accepted the Site into the VRP through a letter dated August 6, 2014 and a proposed Consent Order (EPD-VRP-009). The Consent Order, which was executed on August 6, 2014, superseded the previous Consent Order EPD-HW-562. In accordance with Consent Order EPD-VRP-009, semiannual progress reports have been submitted for the Site.

This CSR includes certification by the Professional Geologist (Kirk Kessler). Appendix A contains a monthly summary of hours invoiced and description of services provided.

1.2 Site History

The Site operated under the names of Prismo Safety Corporation, Linear Dynamics, Inc. ("LDI") and then LRM purchased LDI in approximately 1999. In 2006, LRM sold the property to by South Central Station, LLC. At the time of the purchase, South Central Station, LLC agreed that the property would only be used for industrial use and LRM agreed to be responsible to complete the site remediation in accordance with State standards. A copy of portions of the Purchase and Sale Agreement were included as Appendix B of the VRP Application.

A history of the Site is presented in *Report of Preliminary Contamination Assessment* (Law, 1986). Previous activities at the Site included research and production of paint for road marking. Historical facilities included paint blending facilities, office buildings, supply storage areas, a laboratory, above-ground storage tanks ("ASTs"), an underground storage tank ("UST") farm, and loading docks.

1.3 Neighboring Properties

There are two parcels north of the Site, which are in the downgradient groundwater flow path from the Site. Environmental samples have been collected from these parcels. One parcel located at

1562 East Forrest Avenue is to the northwest and will be referred to as the "Buggy Works" property. The Buggy Works property is not in use and contains abandoned buildings and a parking area. This property is owned by Jefferson Station Annex LLC.

The other parcel located at 1526 East Forrest Avenue is to the northeast and will be referred to as the former Attwood Canvas Project property. The former Attwood Canvas property contained a warehouse that was converted into an office building, which contains the City of East Point offices along with other businesses and a parking lot. This property is currently owned by Jefferson Station East Point LLC, which obtained the property in 2013. In 2005, Kairos Development Corporation applied to the Brownfield program and submitted a *Brownfields Program Prospective Purchaser Compliance Status Report* ("PPCSR") on November 11, 2005, which is included as Appendix B. The soil was certified to Type 1 Risk Reduction Standards ("RRS"). They concluded that constituents detected in the groundwater on the property were from the LRM facility and obtained a limitation of liability for groundwater. The PPCSR (page 11 in Appendix B) states that Kairos intended to implement a vapor collection and/or venting system during construction, thus obligating Kairos to address any future vapor intrusion issues at the property resulting from the groundwater condition.

1.4 Constituents of Concern and Delineation Standards

Investigations conducted since 1983 identified the presence of volatile organic compounds ("VOCs") in soil and groundwater at the Site. Delineation standards are based on RRSs. RRS calculations were presented in the *Semiannual Progress Report #1* (Arcadis, 2015A), and were approved by the EPD in a letter dated September 3, 2015.

Applicable RRSs for groundwater are shown in Table 1. The delineation standard for groundwater is the Type 1 RRS. The list of Constituents of Concern ("COCs") include those constituents detected in more than 1% of the samples above the Residential RRS (higher of Type 1 and Type 2 RRSs). The COCs in groundwater are as follows: benzene, cis-1,2-dichloroethene ("cis-DCE"), ethylbenzene, m&p-xylene and o-xylene (known collectively as "xylenes"), tetrachloroethene ("PCE"), toluene, trichloroethene ("TCE"), and vinyl chloride. The primary constituent groups include aromatic petroleum hydrocarbons (*i.e.*, benzene, ethylbenzene, toluene, xylene ("BTEX")), and chlorinated ethenes (*i.e.*, PCE, TCE, cis-DCE, and vinyl chloride).

Residential RRS for soil are shown on Table 2. The delineation standard for soil is the Residential RRS, which is the greater of the Type 1 and Type 2 RRS. The COCs in soil are those constituents that exceed the Residential RRS: benzene, cis-DCE, ethylbenzene, methylene chloride, lead, TCE, toluene, xylenes, and vinyl chloride.

2 HISTORICAL ACTIVITIES

2.1 Release Areas and Soil Remediation

The *Supplemental Investigation Phase I Results Report* (GeoTrans, 2006) summarizes historical investigations. Four solid waste management units ("SWMUs") and one former UST were identified at the Site. Additional soil investigation and remediation was conducted by Arcadis in 2013 (Arcadis, 2015A). Soil remediation was completed prior to the acceptance into the VRP (August 2014). A description of the release areas and remedial actions taken are presented below and the locations are depicted on Figure 2.

- **SWMU #1 – Former Drum Storage Area**. Prior to 1983, LDI reported incidental spills in this area during the normal course of facility operations. LDI removed an undetermined volume of soil for off-site disposal in 1983.
- **SWMU #2 – Former ASTs**. When LRM removed the ASTs that contained reclaimed thinner from service in 1984 and 1986, contents were tested and found positive for lead. LRM removed approximately 70 tons of soil for off-site disposal in 1986. Subsequent soil sampling indicated the presence of solvents.
- **SWMU #3 – Caustic Tank Area**. GeoTrans reported that LDI used a caustic solution to clean varnish tanks. The contents (which reportedly failed an Extraction Procedure Toxicity Text for lead and chromium; Geotrans 2006) were allowed to drain to the land surface. LDI removed approximately 100 tons of soil for off-site disposal in 1986. Subsequent testing of the soil revealed the presence of solvents and fuel hydrocarbons.
- **SWMU #4 – Former UST Area**. LDI removed 13 USTs in 1987. The USTs reportedly contained toluene, xylene, methylene chloride, methyl isobutyl ketone, methyl ethyl ketone, 1,1,1-trichloroethane, methyl alcohol, mineral spirits, hexane, heptane. During tank removal activities in 1987, soil contamination was identified.
- **Former Gasoline UST Area**. This area is adjacent to Area #4. LDI's consultant, GeoTrans found BTEX constituents in the groundwater directly down gradient of the former gasoline UST location.
- **2013 Investigation and Removal**. LDI's consultant, Arcadis, conducted large-scale soil remediation in 2013 to remove soil from areas identified as having a potential for direct exposure to VOCs and lead concentrations exceeding Type 3 RRSs. A total of approximately 1,245 tons of impacted soil was excavated and transported off-site for disposal.

2.2 Groundwater Remedial Action

2.2.1 Groundwater Pump-and-Treat System

LRM installed a pump and treat ("P&T") groundwater remediation system in 2000. This system consisted of groundwater recovery wells, an equalization tank, an air stripper, and air phase carbon to control discharge from the air stripper. The location of the recovery wells and treatment system are shown on Figure 3. Treated water was discharged to the local sewer system under a City of Atlanta groundwater discharge permit. The system initially included five active recovery wells. The system was optimized in 2003-2004 to increase the capacity and three additional recovery wells were installed since that time. LRM shut down the groundwater treatment system on July 29, 2016. On October 21, 2016, LRM sent a letter to the City of Atlanta requesting termination of the Groundwater Discharge Permit.

2.2.2 Air Sparge/Soil Vapor Extraction/Dual-Phase Extraction System

In 2013 (prior to enrollment in the VRP), LRM installed a treatment system composed of air sparge ("AS"), soil vapor extraction ("SVE"), and dual-phase extraction ("DPE") to address soil and groundwater impacts. The system included 63 AS wells to treat the VOCs dissolved in groundwater, 74 SVE wells to remove VOCs in soil above the groundwater surface and to collect AS vapors, and 6 DPE wells to treat areas where residual light non-aqueous phase liquid ("LNAPL") was suspected. Figure 4 shows the location of this system. Vapors were treated by C3 Technology prior to emission. Extracted water was treated in the groundwater treatment system. LRM shut down the AS/SVE/DPE system on April 30, 2016.

2.3 Environmental Assessments

2.3.1 Groundwater Monitoring

LRM began to implement a groundwater monitoring program in 2002, conducting groundwater sampling at least semi-annually. Figure 5 shows the locations of the wells. The groundwater monitoring began with a network of 24 monitoring wells (MW-02 through MW-25) and five recovery wells (RW-1 through RW-05). In 2004, two additional recovery wells (RW-06 and RW-07) were added to the monitoring program. In 2010, four additional wells (MW-26 through MW-29) were installed off-Site on the former Attwood Canvas property to begin off-Site delineation of COCs. In 2013 and 2014, seven monitoring wells (MW-30 through MW-36) were installed to better characterize the groundwater condition on the Site. In 2016, twenty-three monitoring wells (MW-37 through MW-57 and TW-01 through TW-03) were installed on multiple off-Site properties to complete delineation of groundwater. From 2002 through 2017 there have been a total of 42 groundwater sampling events. The historical groundwater results are presented in Appendix C.

2.3.2 Soil Assessment

The largest and most comprehensive soil investigation was conducted by LRM's consultant, Arcadis, in 2010 through 2013. The results of the soil investigated determined the areas of soil removed described in Section 1.5.1. A total of 385 samples (including confirmation samples) were collected during this investigation. The results are summarized in tables in Appendix C.

2.3.3 Indoor Air Assessment

LRM conducted an extensive vapor intrusion study prior to the 2013 soil removal actions (Arcadis, 2011). The results of the study are included as Appendix D. Indoor air was evaluated in the three buildings within close proximity to the area with the highest impacts to soil and groundwater. The air sampling results indicated that there were no increased risks or hazards to occupational workers in these buildings. As described in Section 3.2, LRM conducted soil gas testing in January 2017.

3 SUMMARY OF WORK COMPLETED THIS REPORTING PERIOD

3.1 Development of Soil RRSs

According to the VRP Act ("Act"), actions should be taken such that properties are in compliance with applicable clean-up standards. Per the Act, clean-up standards for soil may be based on

a) *direct exposure factors for surficial soils within two feet of the land surface,*
b) *construction worker exposure factors for subsurface soils to a specified subsurface construction depth.*

Accordingly, site-specific soil clean-up standards (the RRSs) will be used for the two scenarios listed above. RRSs for direct-contact were calculated for the soil COCs and the calculations are presented in Appendix E.

The RRSs for direct exposure for surficial soils and construction worker exposure for surface and subsurface soils were calculated by adjusting the standard RRS calculations. The adjustments included changing the exposure parameters to match the two conditions and by excluding the protection of groundwater aspects[1] of the full RRS calculation matrix. Direct exposure for surficial soils was determined for both residential (Type 2) and non-residential (Type 4) receptors using default exposure parameters. The exposure parameters used for the construction worker scenario are shown in the table below. The resulting soil RRSs are presented on Table 3.

[1] Groundwater is being addressed via institutional controls (see Section 8.3).

Construction Worker Exposure Parameters

Parameter		Value	Source
Body Weight (kg)	BW	70	1
Exposure Frequency (d/yr)	EF	125	3
Exposure Duration (yr)	ED	1	2
Exposure Time (hr/d)	ET	8	2
Soil Ingestion (mg/d)	IRs	330	2
Inhalation Rate (m^3/d)	IRa	20	1
Averaging Time, Cancer (d)	ATc	25550	1
Averaging Time, NonCancer (d)	ATnc	365	1
Target Risk	TR	1.00E-05	1
Target Hazard Quotient	THQ	1	1
Water-to-air volatilization factor (L/m^3)	K	0.5	1
Particulate Emission Factor (m^3/kg)	PEF	4.63E+09	1

Notes:
1 GA EPD Regulation 391-3-19 Appendix III, Table 3
2 EPA Regional Screening Levels User's Guide May 2016
3 Professional judgement and Virginia's VRP Risk Assessment Guidance

3.2 Soil Gas Sampling

LRM conducted soil gas sampling as a follow-up to the original indoor air assessment. The indoor air assessment was conducted prior to the soil excavation and prior to operation of the AS/SVE/DPE treatment system. At the request of the EPD, the purpose of the soil gas sampling was to evaluate the condition in the soil after the AS/SVE/DPE treatment system was discontinued. In January 2017, EPS collected soil gas samples at the eight locations shown on Figure 6. The locations were selected to be near existing monitoring wells with elevated VOC concentrations. Vapor sampling probes were installed by drilling into surficial soil using direct-push technology. At the majority of locations, probes were set at 2.5 feet ("ft") below the ground surface ("bgs"), and deeper at approximately 3 ft above the groundwater table. At two locations (SG-1 and SG-2), deeper probes were not set due to the shallowness of the water table (approximately 5 ft-bgs). The probes were set by placing a sand pack around and 6 inches above the probe. The borings were filled with bentonite to seal the borings. The tubing was extended from the probe to just above the ground surface. The probes were placed on January 5th and sampled on January 9th.

Prior to sampling, a helium leak test was performed to determine if the boring was sealed. An enclosure was placed on top of the ground and filled with helium. Soil gas was then extracted from the vapor probe and scanned with a helium meter to determine if a leak was present. A significantly positive reading would indicate that air above the ground was being drawn into the vapor probe through a poor seal. None of the leak tests resulted in a 10% helium leak, which is the upper end of the acceptable leak test range.

After conducting a secondary leak test, the soil gas samples were collected from the vapor probes using laboratory-supplied negatively pressurized Summa canisters. The samples were analyzed for TO-15 VOCs. The laboratory results are contained in Appendix F and the results for constituents that were detected are summarized in Table 4. Also shown on Table 4 are the target exterior soil gas concentrations from the Environmental Protection Agency's ("EPA") Vapor Intrusion Screening Level ("VISL") Calculator. See Section 7 for an evaluation of the vapor intrusion pathway.

3.3 Groundwater Sampling

3.3.1 Grab Groundwater Sample for Delineation

During the soil gas sampling event, one grab groundwater sample (SP-1) was collected from the SG-8 soil gas location for the purposes of groundwater delineation. Depth to groundwater at this location was 27 ft-bgs. The sample was analyzed for VOCs and the laboratory report is included in Appendix F. The only constituent detected was 1,3-dichlorobenzene at 10 micrograms per liter ("µg/L"). 1,3-dichlorobenzene has not been detected in groundwater at the Site.

3.3.2 Post Remediation Shut-down Groundwater Sampling Event

From January 16 through 19, 2017, EPS sampled 28 wells on- and off-Site following the EPA Region 4 purging and sampling guidelines (USEPA, 2013) for groundwater. Each location was purged and sampled using the "low-flow/low-volume" method (also known as the micropurge method) using a peristaltic pump, geopump, or solinst pneumatic pump (pump type depended on the depth and diameter of well). For the "low-flow/low-volume" purge method the pump intake was placed at the center of the well screen and purging continued as slow as feasible until water chemistry readings had stabilized. Figure 5 is a well location map, which includes more than the 28 that were sampled.

New Teflon tubing (1/4-inch) was used at each sample location and equipment was decontaminated with Alconox and distilled water between wells. Water chemistry was measured using a HORIBA U-50 multiparameter water quality meter, which was calibrated prior to use. Purging continued until pH and specific conductance had stabilized and turbidity had either stabilized or was below 10 Nephelometric Turbidity Units ("NTU"). At locations where turbidity below 10 NTU was not achievable, values within 10% were considered stable.

The reverse flow/straw method was used to collect samples when purging with a peristaltic pump or geopump. The samples were collected directly when purging with a solinst pneumatic pump. Groundwater samples were collected in 40 milliliter ("mL") vials preserved with hydrochloric acid ("HCl") and delivered to Analytical Environmental Services, Inc. ("AES") in Atlanta, Georgia for analysis of VOCs by USEPA Method 8260B. A duplicate sample was collected at MW-48. Well sampling logs are presented in Appendix G and analytical laboratory reports are presented in Appendix F. The analytical results for constituents that were detected are summarized in Table 5.

One of the objectives of this groundwater sampling event was to see if there was a substantial change in the groundwater condition after cessation of the groundwater treatment systems in 2016. The table below shows a comparison of the condition two years prior to cessation of the treatment (2014-2015) and sampling conducted in January 2017. In general for each well, the two most prevalent constituents are shown. In most instances, the concentrations observed in 2017 were lower than those in 2014-2015.

	Constituent	Average Concentration 2014-2015 (mg/L)	Concentration in January 2017
MW-02	Benzene	1,696	11
	Vinyl chloride	370	11
MW-07	TCE	31,833	9
	Cis-DCE	7,193	74
MW-11	Cis-DCE	7.2	< 5
MW-17	Benzene	274	<5
	Vinyl Chloride	5.4	< 2
MW-20	TCE	7.25	<5
	Cis-DCE	22.5	9.3
MW-21	Cis-DCE	6,140	4,100
	Vinyl Chloride	324	1,900
MW-26	TCE	8.8	48
	Cis-DCE	94	530
MW-28	TCE	418	140
	Cis-DCE	1,625	2,500
	Vinyl Chloride	9.6	6.2
MW-32	Toluene	9,107	<5
	TCE	249,429	520
DPE-307	Benzene	10,300	140
	Toluene	203,333	43,000
RW-07	cis-DCE	10	6.7
	Vinyl Chloride	11	140

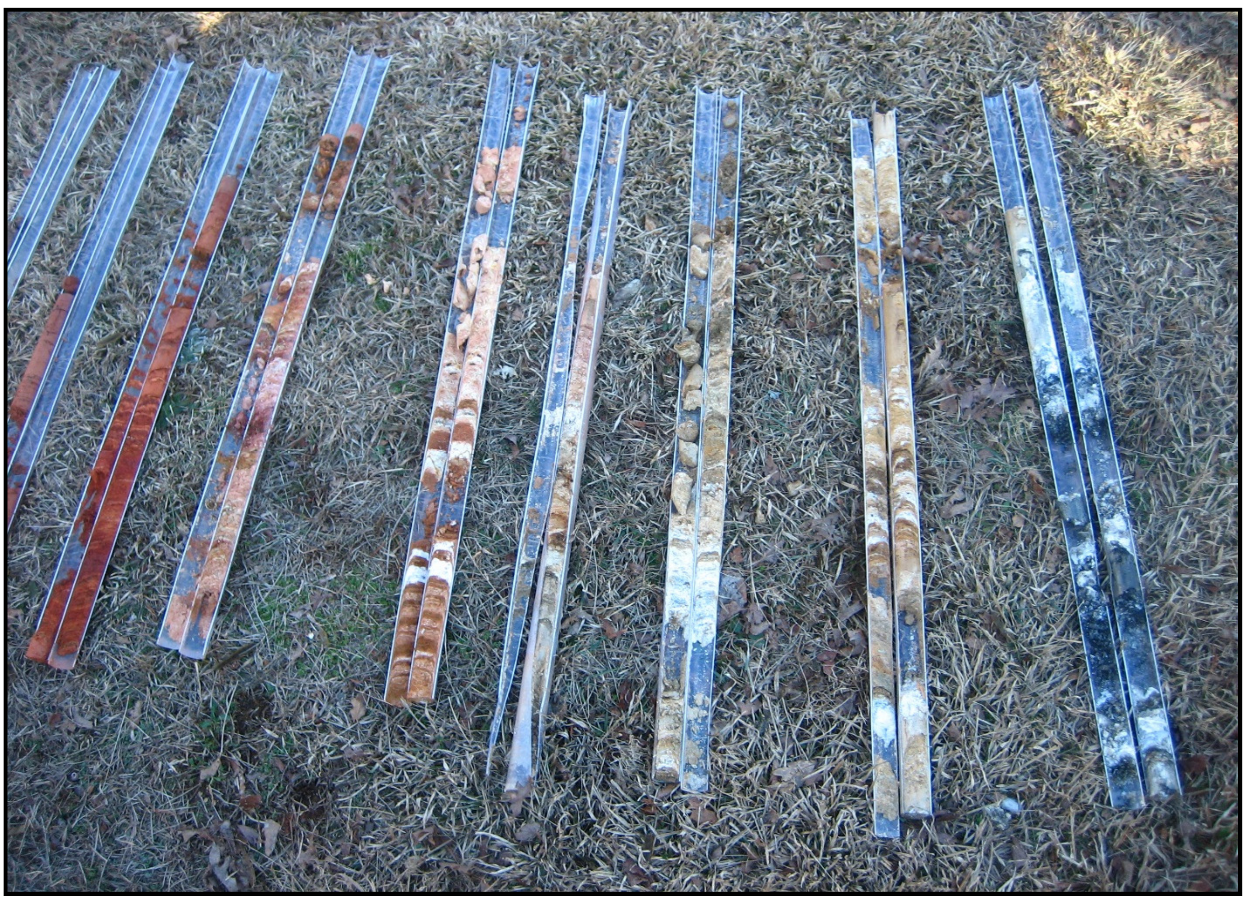
4 FINAL CONCEPTUAL SITE MODEL

4.1 Regional Setting (Piedmont)

4.1.1 Residual Soil Formation and the Weathering Profile

Residual soils in the Piedmont formations in Georgia are products of physical and chemical weathering of the underlying parent crystalline bedrock. Weathering generally decreases with depth below the ground surface, with a textural gradation from clay, silt, and sand-sized particles (soil) to saprolite, where the structure of the parent rock is preserved. In other words, the bedding planes and interfaces of decomposed parent rock are maintained. An example of this weathering profile is provided in a soil core shown in the photograph below, taken from a site in Atlanta. (Note Appendix H contains photographs of cores taken from well installation at the Site.)

Photograph of weathering progression of parent crystalline Piedmont rock (top of core to the left).



In the photograph, depth below ground surface goes from shallow to deep starting at the upper left hand corner moving down to the lower right hand corner. In the near-surface portion of the core, the soil is characterized by the unmistakable red clay of Georgia. The red clay transitions to a brown clay and then to a distinct saprolite profile characterized by bands of browns, whites, and yellows, which retain the structure of the parent rock (brown/yellow coloration is a result of oxidation). This transitions to less chemically-weathered material with the same coloration (gray) as the underlying crystalline rock.

Several weathering profile or classification schemes exist for the Piedmont. Sowers (1963) presented one of the original classification schemes composed of four zones based on relict structure and geotechnical properties, as follows:

- Soil no relict structure; “Blow Count (N)” = 5-50
- Saprolite exhibits relict parent rock structure; N = 5-50
- Partially weathered rock (“PWR”) alternating hard & soft seams; N > 50
- Rock (or bedrock) Quality Designations (“RQD,” a core quality property) > 75%

Wilson and Martin (1996) provide a chart of various classification schemes as shown below:

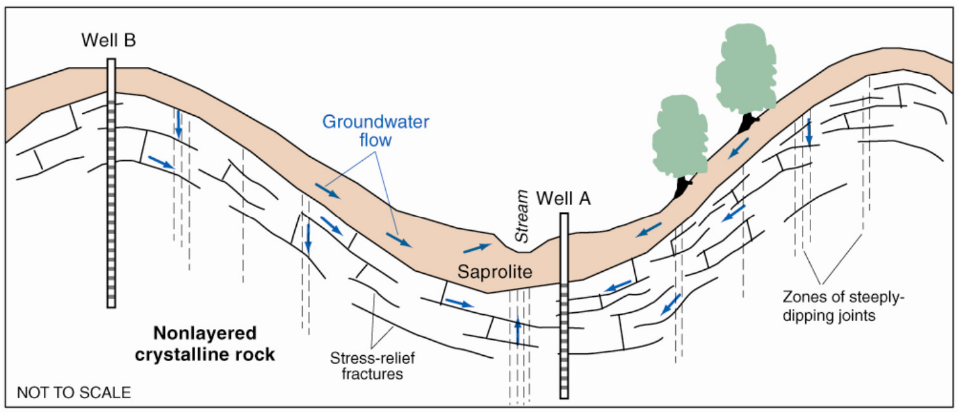
Table 1. Classification systems of weathering profiles (from Wilson and Martin, 1996).

<table>
<tr><th>Sowers (1963)</th><th colspan="2">Deere & Patton (1971)</th><th>Law/MARTA (Richardson & White, 1980)</th><th>Schnabel Engineering Associates (from Martin, 1977)</th></tr>
<tr><td rowspan="2">Soil
N=5-50</td><td rowspan="3">I
Residual Soil</td><td>IA
A Horizon</td><td rowspan="2">Upper Horizon
No Residual Structure</td><td rowspan="3">Residual Soil
N < 60</td></tr>
<tr><td>IB
B Horizon</td></tr>
<tr><td>Saprolite
N=5-50</td><td>IC
C Horizon</td><td>Saprolite</td></tr>
<tr><td rowspan="2">Partially Weathered Rock - Alternate Hard & Soft Seams
N>50</td><td rowspan="2">II
Weathered Rock</td><td>IIA
Transition From Residual Soil to Partially Weathered Rock</td><td>Partially Weathered Rock
N>100
Core Recovery<50%</td><td>Disintegrated or partially weathered rock
N≥60</td></tr>
<tr><td>IIB
Partly Weathered Rock</td><td>Rock Core Recovery>50%
RQD<50%</td><td rowspan="2">Rock
N≥100/2”
Core For Confirmation</td></tr>
<tr><td>Rock
RQD>75%</td><td colspan="2">III
Unweathered Rock
RQD>75%</td><td>Sound Rock
RQD>50%
Core Recovery>85%</td></tr>
<tr><td colspan="5">RQD = Rock Quality Designation
N=Standard Penetration Test N-Value (blows/foot)</td></tr>
</table>

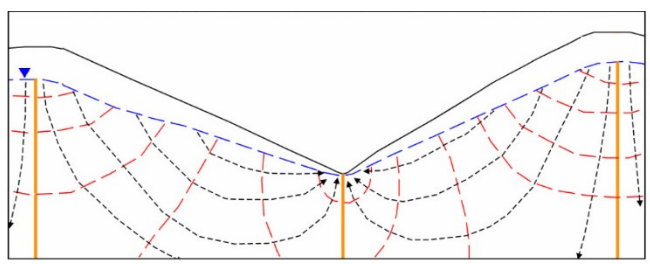
4.1.2 General Hydrogeologic Characteristics of the Piedmont

Groundwater is generally first encountered in the saprolite, under unconfined (*i.e.*, water table) conditions. There is direct hydraulic communication between all of the four zones; however, flow within rock is entirely fracture-flow and on a local scale may be discontinuous. The general direction of groundwater flow in the Piedmont mimics the surface topography (although hydraulic gradients are not as abrupt as topographic gradients). Hydraulic gradients are generally downward in topographic high areas and upward in topographic low areas, especially along the more significant valley bottoms where the bedrock is more highly fractured and groundwater discharge provides the base flow for surface water present in the stream, *i.e.*, the valley is a hydrologic divide (see illustration below, from Williams and Burton 2005).

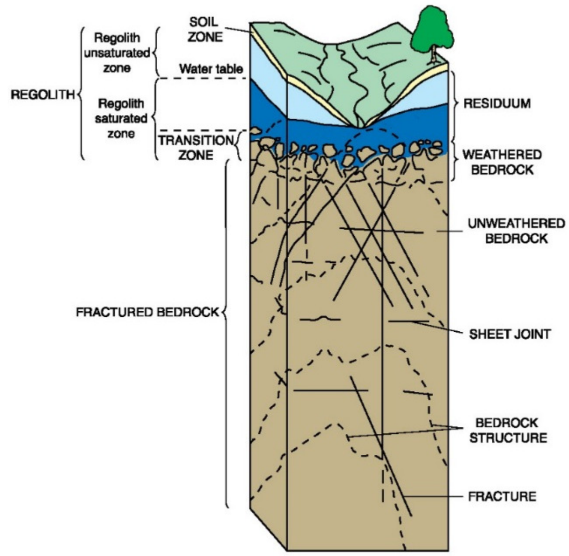
A. A **conceptual model** shows the influence of sheet fractures on groundwater flow in massive to weakly foliated rocks in Rockdale County. **Well A** is located in a topographically favorable position for intercepting recharge whereas **Well B** is located in a topographically less favorable position (Modified from McCollum, 1966).



Basic principles of groundwater flow in a ridge and valley setting are shown in the conceptual model schematic to the right. Equipotential lines (hydraulic head potential) are shown in dashed red lines, and groundwater flow direction occurs perpendicular to the equipotential as illustrated in dashed blue lines (the broader dashed blue line at the top is the groundwater table). Vertical yellow lines mark hydrologic boundaries. Groundwater exhibits a strong downward vertical hydraulic gradient at the ridge (topographic high point), and more dominant lateral hydraulic gradients occur midway along the flowpath with upward vertical hydraulic gradients at the valley bottom.



Groundwater flow within saprolite and PWR behaves in accordance with porous media hydrologic principals. PWR is generally considered as exhibiting the highest relative permeability of the four zones. The un-weathered crystalline rock below the PWR exhibits essentially no primary porosity/permeability but rather relies upon secondary permeability features, such as joints (fractures) and faults, for the storage and transmission of groundwater. These secondary permeability features are generally of a relatively small aperture (opening) and are not highly abundant; thus, this portion of the hydrogeologic system generally stores and contains significantly less groundwater compared to the same volume of PWR above. The degree of fracture development and the size of fracture apertures tends to decrease with depth as shown in the conceptual hydro-stratigraphic section above (Swain, Mesko, and Holiday, et al. 2004).



4.2 Local Setting

4.2.1 Geologic Setting

4.2.1.1 Local Area Geologic Setting

The Site is located within the Greenville Slope District of the Southern Piedmont Physiographic Province. This geologic setting is characterized by metamorphic rocks of the Clarkston Formation of the Atlanta Group (Cressler et al. 1983). This Formation is comprised of biotite-muscovite schist inter-layered with hornblende-plagioclase amphibolite (McConnell and Abrams 1984). Deep in the subsurface, the Clarkston Formation is underlain by the Stonewall and Wahoo Creek Formations. These are similar in geologic characteristics to the Clarkston.

Available geologic information indicates that the local structure is genetically related to the Brevard Fault Zone (Cressler et al.1983). Other local area structural features include granite body intrusions in the parent bedrock, and stress relief fracturing due to weathering and overburden removal.

4.2.1.2 Site Geologic Setting

The Site geologic setting is, therefore, complex and is the result of multi-phase deformation and tectonism. These forces caused joint fracture development in the rock. Differential weathering of the rock results from various factors including variability in orientation of foliations in the rock, geologic contacts between formations, and mineralogical variations. As a result of these variables and the varying degree of weathering, there is considerable variation in the thicknesses of the saprolite and PWR.

A thorough review of all boring logs for the Site was conducted in the course of updating the Conceptual Site Model (“CSM”), which was presented in Progress Report #3 (Arcadis, 2016). The majority of the drilling involved split-spoon soil sampling with standard penetration testing (or blow counts) on 5-ft centers. Rock coring was performed on the majority of the deeper wells (more recent drilling used rotosonic methods, which do not provide a true undisturbed rock core necessary for a refined interpretation) and detailed logs are available describing the core recovery and RQD for each core run (typically 10-ft). A revised interpretation of the geologic zone screened by each well as made. Tables and figures in this report show the revised assignment of geologic zones to the different wells. Saprolite extends at the Site to depths ranging from about 30 to 60 ft-bgs. PWR extends at the Site to depths of 40 to 100 ft-bgs. The variations in geology and hydrogeology can be seen on the cross-sections included as Figure 7 and 8.

4.2.2 Site Hydrogeology

As described above, the topographic slope (gradient) creates the hydraulic gradient with the direction of groundwater flow mimicking the topography. Valley bottoms are typically hydrologic divides. Ground surface topography was mathematically interpolated (Figure 9) for the local area. Norman Berry Drive follows a topographic low and pitches in a southeasterly direction. On Figure 9 the valley bottom (hydrologic divide) is shown in the yellow/green color. This served as a basis for where additional wells were installed in 2016.

Figures 10 through 12 show the potentiometric surface and groundwater flow direction for each geologic zone. These figures confirm that the general groundwater flow direction is to the northeast from the Site with a turn to the southeast at Norman Berry Drive. On the west side of the Site there is a more northerly flow component; however, overall the general direction is as described previously. This general groundwater flow direction is also shown on Figure 9 along with the ground surface topography showing that groundwater turns at the valley bottom as expected.

4.2.3 Contaminant Fate and Transport

4.2.3.1 Dominant Chemical Groups

There are two dominant chemical groups present at the Site: petroleum hydrocarbons (*e.g.*, BTEX), and chlorinated ethenes (*i.e.*, PCE, TCE, cis-DCE, and vinyl chloride). In their product state, petroleum hydrocarbons are Light Non-Aqueous Phase Liquid (“LNAPL”) and chlorinated ethenes are Dense Non-Aqueous Phase Liquid (“DNAPL”). LNAPL floats on top of the groundwater table, whereas DNAPL passes into the groundwater column.

4.2.3.2 LNAPL

LNAPL migrates downward via gravity until it encounters either a physical barrier (*e.g.*, low permeability lens) or is affected by the buoyancy forces at the water table. In the unsaturated zone (above the water table) a fraction of the hydrocarbon will be retained as residual globules in the soil pores due to capillary forces. Once an LNAPL reaches the water table it spreads laterally as a free-phase layer on the top of the water table ("pancakes"). A smear zone exists where the water table fluctuates. Precipitation or groundwater in contact with the residual or mobile LNAPL will cause the LNAPL to dissolve into the water forming an aqueous-phase plume. Volatilization is also an important process that decreases the amount of petroleum hydrocarbons in the subsurface.

4.2.3.3 DNAPL

By contrast, DNAPL actively spreads primarily due to gravity. Vertical migration continues through the vadose zone and aquifer until the released DNAPL either loses continuity and becomes dispersed into isolated bodies (referred to as ganglia or globules) or reaches a less permeable layer where it either accumulates in a pool or flows along the pitch of the layer. During downward migration, a globule trail of residual product and sorbed-phase contamination is left. The DNAPLs in this trail are incapable of further migration. Eventually, the entire DNAPL mass becomes immobile as the gravity head is lost.

When the groundwater comes in contact with a DNAPL, an aqueous phase plume is created and slowly fed by the sorbed, residual or pooled DNAPL. A residual-phase DNAPL source offers a large surface contact area (as compared to a pooled DNAPL) for contact with the groundwater, which results in a higher flux from the DNAPL state to the dissolved phase. This in turn results in an accelerated rate of DNAPL depletion. Once in the dissolved-phase, the solvents are transported in the water primarily along in the direction of the groundwater flow, but also horizontally (cross- or upgradient) due to dispersion and diffusion. The aqueous phase plumes become elongated in the hydraulically downgradient direction and are subject to attenuation process such as dispersion, sorption, matrix diffusion and biodegradation. All aqueous plumes will eventually reach a steady-state condition where the leading edge and side edges no longer expand.

A rule of thumb is that concentrations exceeding 1% of the compound's aqueous solubility indicates the possible presence of DNAPL (EPA, 1992). For TCE this value is 14,720 µg/L. In the last two years TCE has been measured greater than 1% of the aqueous solubility in a few bedrock wells (MW-32, MW-41, and MW-46). Thus, it is concluded DNAPL may be present but, if so, in an immobile state as no free-phase product has been observed in the Site monitoring wells. As discussed more fully in Section 8.2, it is technically impracticable to address TCE in bedrock. The VRP specifically allows for technical impracticability to be used for not requiring remediation in fractured bedrock.

Section 12-8-108(9):

- Technical impracticability. Site delineation or remediation beyond the point of technical impracticability shall not be required if the site does not otherwise pose an imminent or substantial danger to human health and the environment.

where the definition is described in 12-8-102(b)(15) as follows:

- ‘Technical impracticability’ means the inability to fully delineate or remediate contamination without incremental expenditures disproportionate to the incremental benefit. An example may include, without limitation, dense non-aqueous phase liquids in fractured bedrock settings.

Remediating DNAPL in fractured bedrock is recognized in the technical literature as extremely difficult and costly, and thus fits with the concept of technical impracticability (Pankow and Cherry, 1996; USEPA, 2009B; Stroo *et al*., 2012).

4.3 Potential Receptors

4.3.1 Migration Pathways

An evaluation of the migration pathways and potential receptors was presented in the VRP Application (Arcadis, 2013) and in the *Progress Report #1* (Arcadis 2015A). Historical releases to soil at the Site impacted the soil and groundwater. VOCs in the soil or groundwater have the potential to volatize providing potential vapor intrusion into buildings. Accordingly, the potential exposure media are surface soil, subsurface soil, groundwater and air. The potential receptors include on-site workers, construction workers, off-site workers, and off-site residents. The purchase and sale agreement between LRM and the current owner (South Central Station, LLC) limits future use of the Site to commercial/industrial (see Appendix B of the VRP Application).

4.3.2 Surface Soil

Although much of the Site is covered with pavement, surface soil (0 to 2 ft bgs) is a potential exposure pathway for on-site workers and construction workers. Soil removal work conducted in 2013 was performed to eliminate this exposure pathway. See Section 6.2 for an evaluation of the surface soil condition to RRSs.

4.3.3 Subsurface Soil

Historical data indicates elevated concentrations of constituents in soil in the subsurface. If intrusive activities were to occur at the Site (*e.g.* construction or utility work), the workers could be exposed to constituents in the subsurface soil. See Section 6.2 for an evaluation of the subsurface soil condition to RRSs.

4.3.4 Groundwater

Receptors theoretically could be exposed to groundwater either by direct contact with the subsurface (*e.g.* during construction activities) or by the use of groundwater as a drinking water source. Direct exposure to groundwater in the subsurface is not a complete pathway as groundwater is located approximately 15 to 20 ft-bgs at the Site, which is below the level that construction workers would be expected to work.

Exposure to groundwater for consumption use is also an incomplete pathway. The *Semiannual Progress Report #2* (Arcadis, 2015B) contains the results of a well survey to determine if any public or private drinking water sources are in the vicinity of the Site. The conclusion of the survey is that there are no active potable water supply wells within a 3-mile radius of the Site. Local residences, businesses, and schools in proximity to the Site are served by city water. The city water is withdrawn from the Sweetwater Creek intake, which is located approximately 12 miles from the Site. Fulton County Ordinance Section 34-112(c) requires that residences and businesses connect to public water where available. Furthermore, the Site was never listed for a release to groundwater on the Hazardous Site Inventory.

4.3.5 Air

VOCs in soil and groundwater could migrate from the subsurface into buildings on or near the Site through a process called vapor intrusion. As mentioned previously, LRM has conducted both indoor air sampling and soil gas testing. See Section 7 for an evaluation of the vapor intrusion pathway.

4.3.6 Ecological

There is very minimal potential habitat for terrestrial or aquatic receptors as the Site is industrialized and mostly paved. The only surface water conveyance is not a significant habitat for surface water ecological receptors as it is a concrete-lined drainage way with intermittent flow. Accordingly, exposure to ecological receptors is not considered a complete pathway.

5 GROUNDWATER CONDITION

5.1 Groundwater Delineation of COCs in Groundwater

Groundwater delineation was presented in the *Semiannual VRP Progress Report #4* (EPS, 2016). The delineation has been updated to include the new groundwater sample location (SP-1) and incorporate the January 2014 groundwater sampling event. Appendix I shows the delineation of the COCs in groundwater. The COCs have been adequately delineated at the Site.

5.2 Intrinsic Biological Degradation

Petroleum hydrocarbons are very amenable to intrinsic biological degradation. Naturally occurring microorganisms in the subsurface will readily consume and degrade the hydrocarbons under both aerobic and anaerobic conditions.

Chlorinated solvents can also degrade biologically in the subsurface through reductive dechlorination. Parent compounds (*i.e.*, PCE or TCE) can be degraded biologically into daughter products (cis-DCE and vinyl chloride). The presence of the daughter products at the Site (especially in the downgradient direction) indicates that biological degradation is occurring.

The biological degradation of chlorinated ethenes is a sequential first order decay reaction. One molecule of PCE will decay to produce one molecule of TCE, which will subsequently produce one molecule of DCE, which will then produce one molecule of vinyl chloride. Thus, the mass based (milligrams per liter, “mg/L”) constituent-specific concentrations can be converted into a molar basis (moles/L) to allow for direct comparison. For each well, the molar concentration of each individual chlorinated ethene was calculated and then added together. This total chlorinated ethene molar concentration for each well could then be compared to the total molar concentration at other wells. Figure 13 shows the chlorinated ethene results in molar concentrations. In saprolite and PWR the chlorinated ethenes are mostly in the form of cis-DCE, with the next most being vinyl chloride, followed by TCE. In bedrock it is mostly TCE, with the majority of the remainder being cis-DCE. This indicates that intrinsic biological degradation is occurring at a faster rate in saprolite and PWR than in bedrock.

5.3 Distribution of COCs in Groundwater

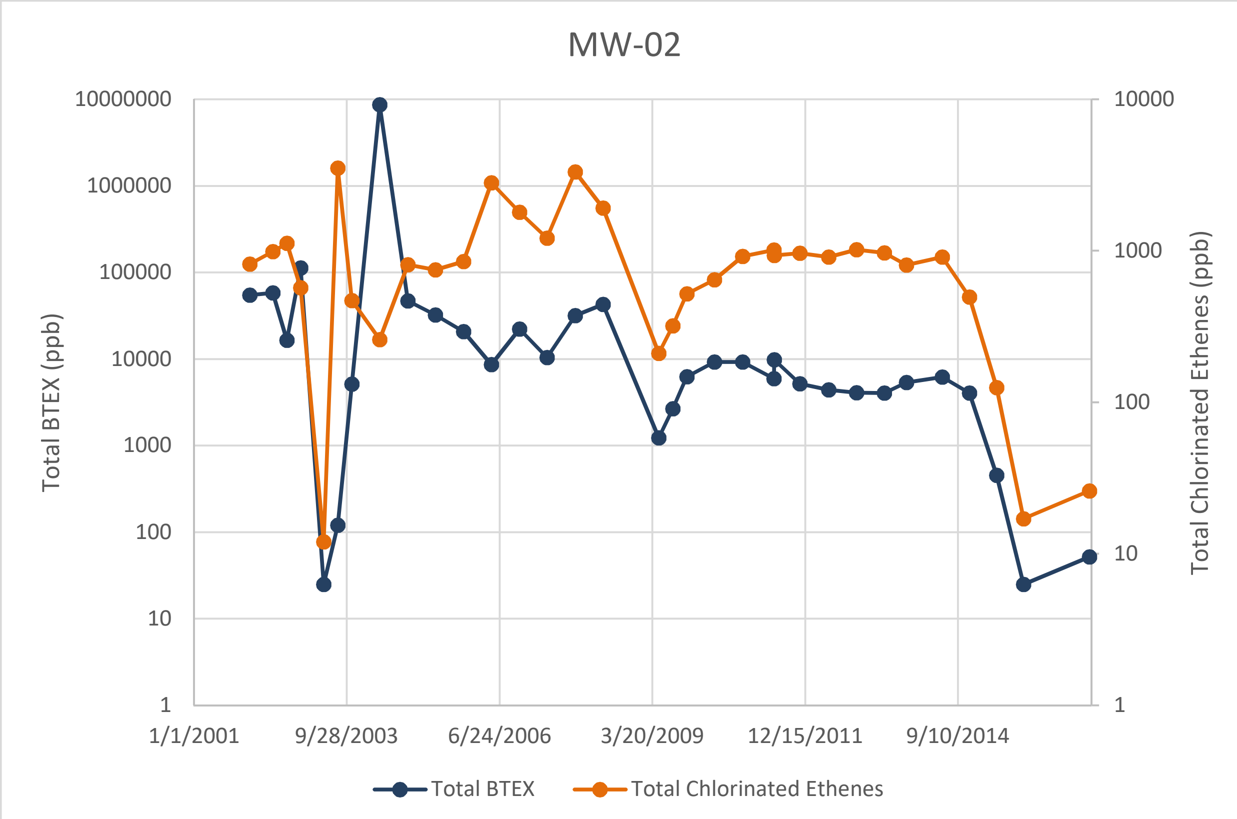
The historical groundwater monitoring results for the COCs are shown in Table 6. Tables of all groundwater results are included in Appendix J. As mentioned previously, there are two dominant chemical groups characteristic of the Site condition: petroleum hydrocarbons (*e.g.*, BTEX), and chlorinated ethenes (*i.e.*, PCE, TCE, cis-DCE, and vinyl chloride). Figures 14 through 17 show total petroleum hydrocarbons or total chlorinated ethenes at each well during different time periods. Figures 15 and 16 show the distribution of petroleum hydrocarbons historically (2002-2005) and currently (2015-2017), respectively. Similarly, Figure 16 and 17 show the distribution of chlorinated ethenes historically and currently.

Petroleum product is lighter than water (*i.e.*, floats atop the water table), whereas chlorinated ethene product is denser than water (*i.e.*, sinks beneath the water table). This difference in physical properties expresses in a difference between the two chemical groups in terms of the vertical distribution of dissolved-phase contamination: petroleum hydrocarbons tend to be limited to the shallow portion of the aquifer (*e.g.*, limited to saprolite), whereas TCE and its related daughter products spread vertically across all hydrologic zones, and are carried downgradient within these zones where lateral hydraulic gradients prevail. The Site data bear this out. Figure 14 and 15 show that the petroleum hydrocarbons are predominantly observed in the shallower zones (saprolite), whereas Figure 16 and 17 show that the chlorinated ethenes are predominantly observed in the deeper zones (bedrock). The chlorinated ethenes have a more protracted downgradient extent than the petroleum hydrocarbons owing likely to the greater affinity of petroleum hydrocarbons to natural attenuation processes that limit transport.

5.4 Concentrations over Time

There has been a significant decrease in COC concentrations over time, especially of petroleum hydrocarbons. The difference is apparent by comparing Figure 14 to Figure 15 for petroleum hydrocarbons and by comparing Figure 16 to Figure 17 for chlorinated ethenes.

Time series graphs for each well showing petroleum hydrocarbons and chlorinated ethenes over time are presented in Appendix J. The time series graph for saprolite well MW-02 (shown below) illustrates this decrease in concentrations over time of total BTEX and total chlorinated ethenes.



5.5 Plume Stability Modeling

5.5.1 Background

A stable aqueous subsurface plume is one in which a contaminant plume is no longer expanding or moving. There are a variety of methods that may be used to determine the stability of a plume including qualitative, statistical, and plume-based methods. In the context of the Site, BTEX and chlorinated ethenes were analyzed for plume stability.

5.5.2 Methods for Determining Plume Stability

5.5.2.1 Mann-Kendall Statistical Analysis Method

A statistical approach was taken to evaluate the stability of the contaminant plume using the Mann-Kendall test on wells throughout the Site. The GSI Mann-Kendall Toolkit (GSI Environmental, Inc., 2012) was used to analyze BTEX and chlorinated ethenes at individual well locations. Temporal concentration data is provided as the input into the software to calculate statistical metrics describing the contaminant trend (increasing, decreasing, or stable).

In cases where a constituent was not detected above its detection limit (non-detect or "ND"), one half of the value of the detection limit ("DL") was used as the concentration input for that data point. However, the USEPA suggests setting ND data points to a common value lower than any of the detected values, so in instances where half of the value of the DL was larger than one or more detections for that constituent at that location over the selected timeframe, the data point in question was disregarded from the calculations (USEPA, 2009A).

A Mann-Kendall test was run for constituents with at least four detected concentrations and where a large majority of the results are not ND. The selected sample locations based on these criteria include wells within the release area and in mid-plume that span each geologic zone (saprolite, PWR, and/or bedrock). Results of the test may be used to evaluate the stability of individual wells or of the entire plume. For the overall stability of the plume, the plume length or the stability of the plume concentrations may be examined.

5.5.2.2 Concentrations over Time Method (Time-Trend Analysis)

In addition to the use of statistical analysis to evaluate plume stability, time-series plots of concentrations of BTEX and chlorinated ethenes were developed. Time series graphs were prepared for all wells for BTEX and chlorinated ethenes and are included in Appendix J. Each graph is scaled to the range of data concentrations. The concentrations are shown on a log scale to fit the wide range of concentrations over the time period. The data extends back to 2002 for most of the wells located in the former operational area of the Site.

5.5.3 Plume Stability Determination Results

5.5.3.1 Mann-Kendall Statistical Analysis Results

Results of the Mann-Kendall tests indicate that the concentration trend of the BTEX plume is decreasing. A summary of the Mann-Kendall test results for wells and constituents yielding a trend are presented in Table 7.

The GSI Mann-Kendall Toolkit input and output data is provided in Appendix K. For BTEX constituents, all but one location where the Mann-Kendall test was performed yielded a trend that is either "stable", "probably decreasing", or "decreasing". The single exception is for benzene, ethylbenzene, and total xylenes at MW-17, which is located in the southern edge of the release area and screened in saprolite/PWR. However, nearby release area wells screened in the same or similar zone are generally decreasing in concentrations (*e.g.*, MW-02, MW-03, and MW-04) of BTEX. If one looks at data collected over the last four years (seven sampling events) at MW-17, there is a decreasing trend in BTEX constituents. The last two sample events (2015 and 2017) were non-detect.

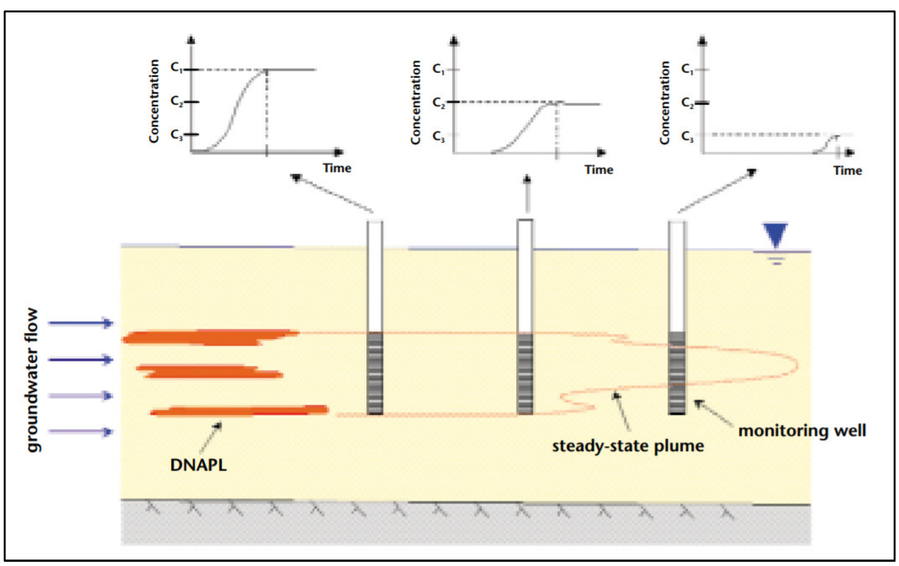
The analysis of chlorinated ethene data (PCE, TCE, cis-DCE, and vinyl chloride) generated results consistent with their degradation processes. While PCE is largely non-detect throughout the Site, TCE is generally decreasing in the release area within the saprolite, saprolite/PWR, and PWR/bedrock. The natural degradation pathway for these contaminants in the environment follows PCE, TCE, cis-DCE, vinyl chloride, and finally ethene. In locations (MW-28 and MW-29) where TCE, cis-DCE, and vinyl chloride are increasing down-plume of the release area, reductive dechlorination is the likely cause of the trend. Both MW-28 and MW-29 are screened in the saprolite. If the data from the last three years (5 sampling events) is evaluated, in well MW-28, TCE has a decreasing trend and cis-DCE and vinyl chloride have no statistically significant trend. In well MW-29 TCE is stable and there is no trend for cis-DCE and vinyl chloride. This is sufficient information to demonstrate stability. The other wells in the vicinity have only been sampled once or twice so there is not enough data to determine a trend.

A Mann-Kendall analysis was also conducted on the total chlorinated ethenes (using the molar concentrations). Data from 2011-2017 was used as cis-DCE was not analyzed prior to 2011. As shown in Table 7, in general the total chlorinated ethene trends follow the trends for the individual constituents. There are instances (MW-04, MW-21) where the total chlorinated ethene trend is decreasing and the vinyl chloride trend is increasing. This is further confirmation that the plume is stable with biodegradation occurring, resulting in increasing vinyl chloride concentrations. Figure 18 shows the results of the Mann-Kendall analysis for chlorinated ethenes.

5.5.3.2 Time-Trend Qualitative Evaluation Results

Analysis of contaminant concentrations over time at various locations in and around the contaminant plume indicate that both the BTEX plume and the chlorinated ethene plume are stable. The concentration trends follow the development of a stable, or steady-state, plume where points in the release area have reached equilibrium at an earlier time and at a higher concentration than points further down-plume (Environment Agency, 2003). This concept is illustrated in the figure below and is applicable to aqueous constituents in both unconsolidated deposits and fractured rock. Points further away from the release area along the plume centerline in the direction of groundwater flow may show increasing concentrations even after the areas closer to the release area have become stable. Relatedly, concentrations at these points will stop increasing at a time later than for the points closer to the release area. Therefore, a contaminant plume may still be considered stable even if concentrations at down-plume wells are continuing to rise.

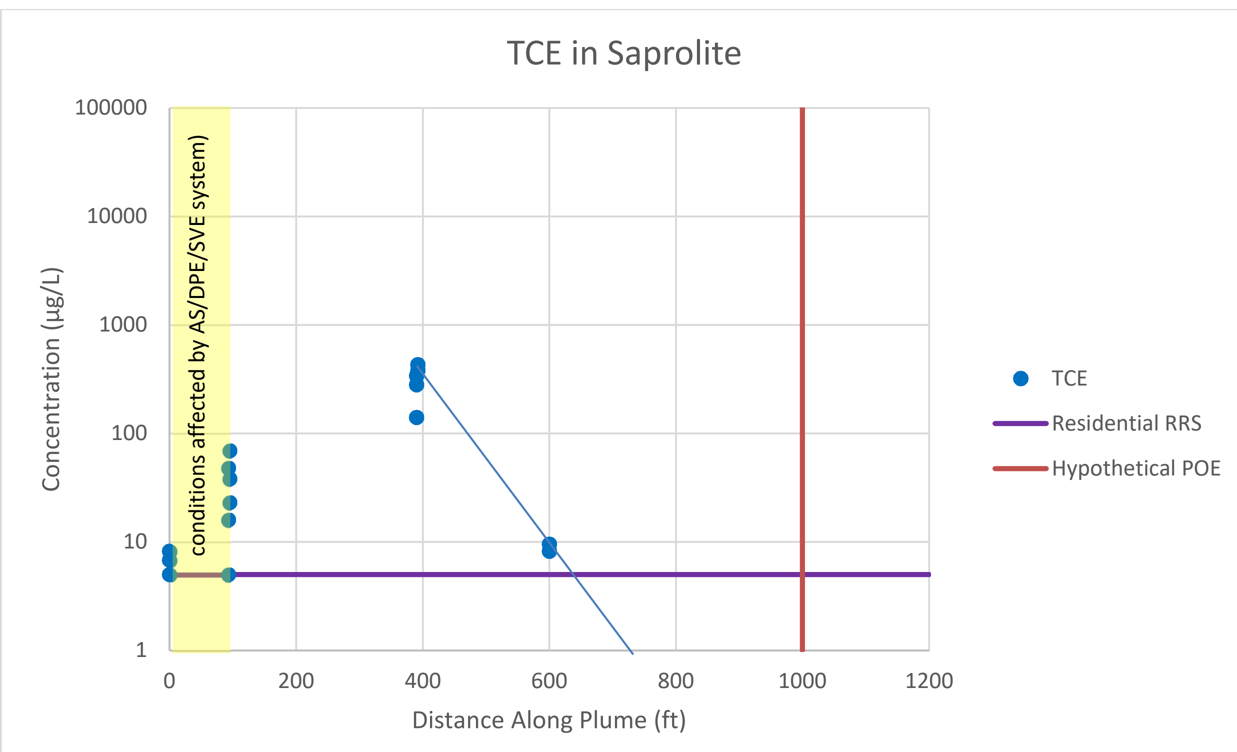
Development of the steady-state plume (Environment Agency, 2003)

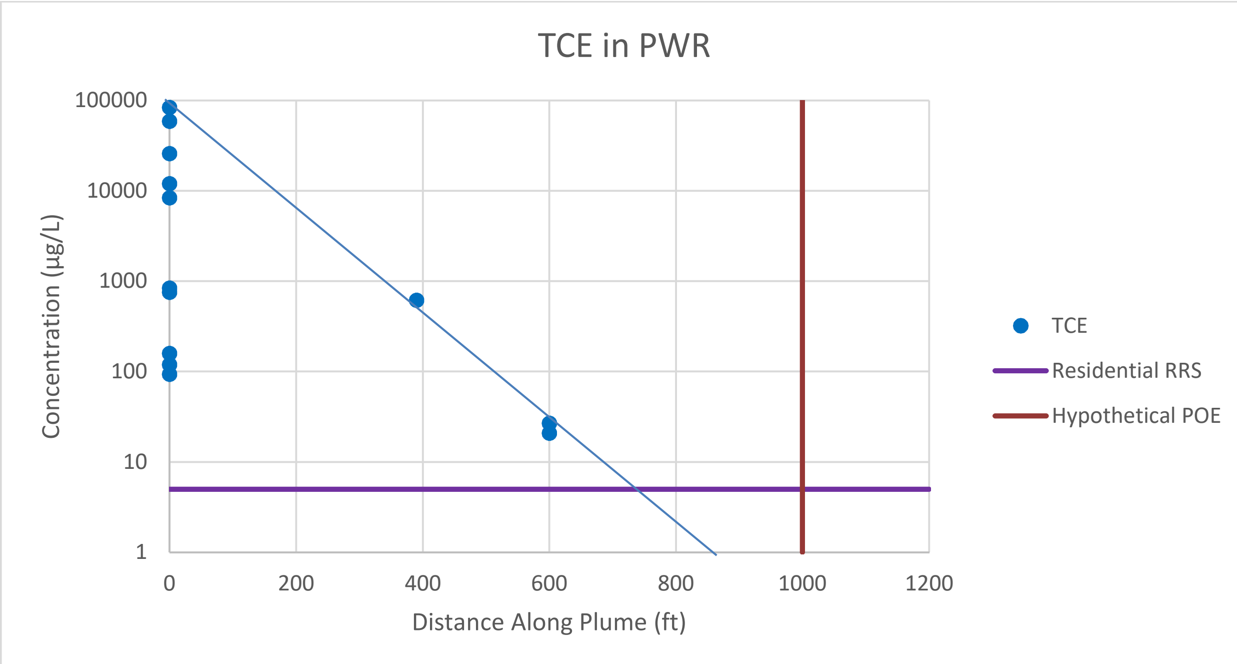


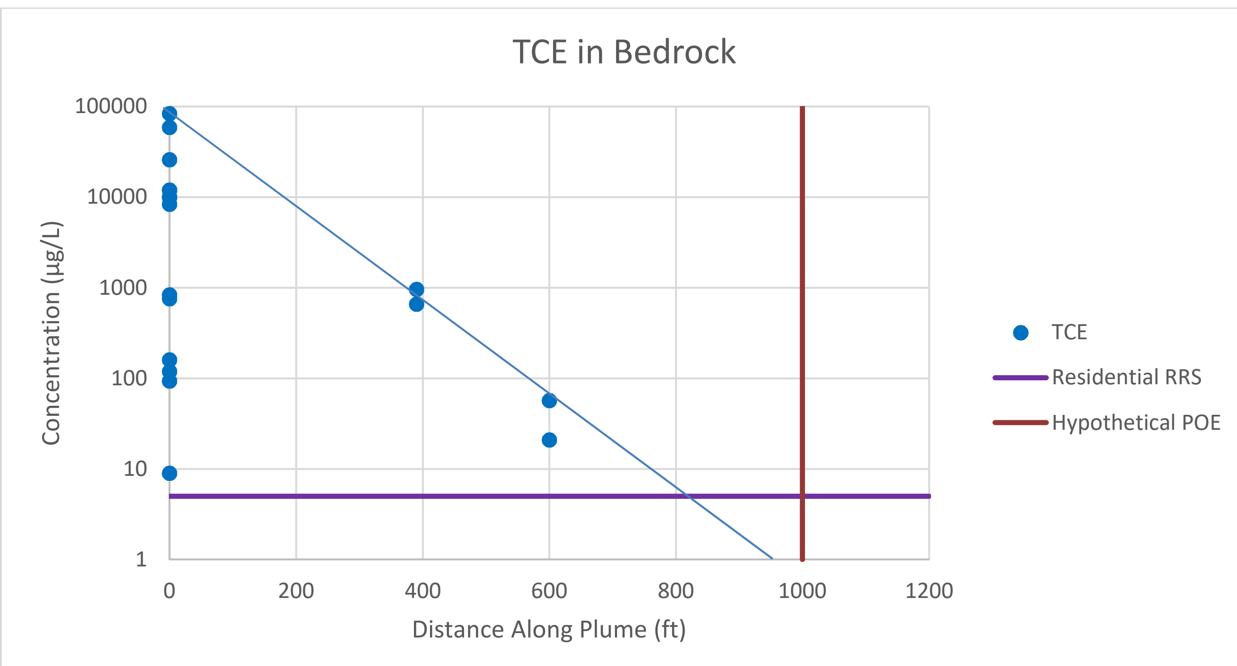
5.6 Compliance

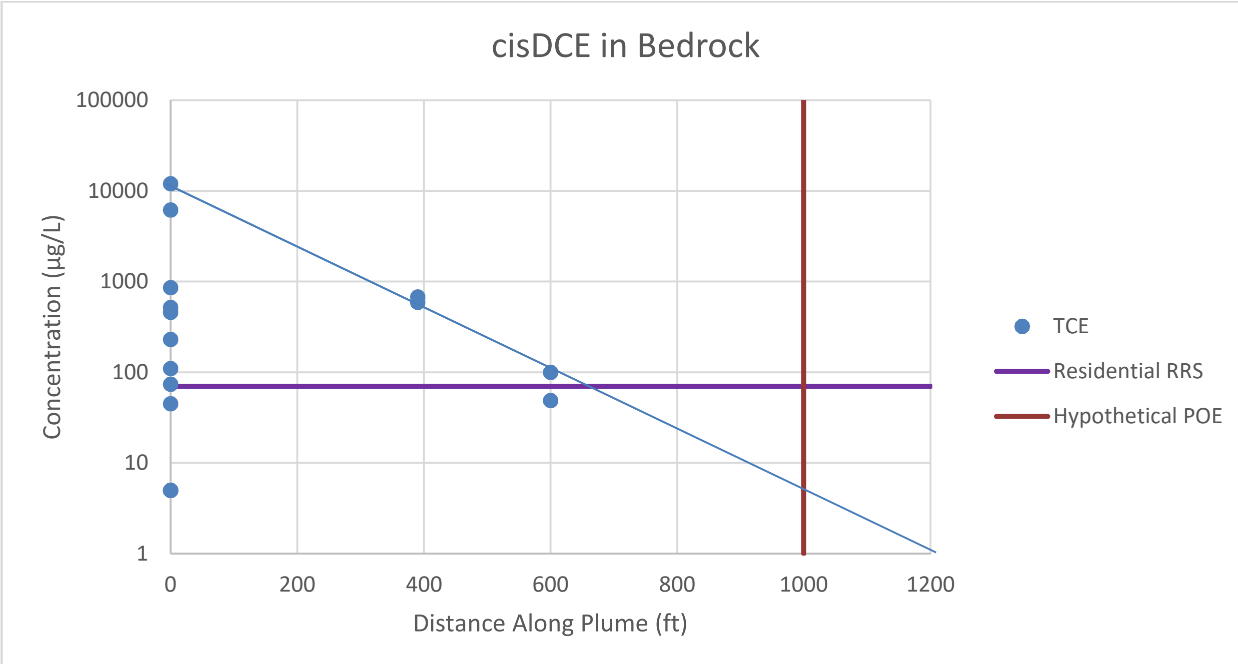
In accordance with Section 12-8-107(g)(2) of the Act, it is not necessary to certify compliance for groundwater at this Site. However, LRM has evaluated the condition of groundwater with respect to the Act. In accordance with the Act, compliance with groundwater clean-up standards are to be determined based on an evaluation of groundwater at a point of exposure. Per the Act, the "point of exposure" ("POE") means the nearest of: a) the closest drinking water well; b) the likely nearest future well; or c) a distance of 1000 feet downgradient from the delineated Site contamination. There are no drinking water wells within three miles of the Site and a Fulton County Ordinance Section 34-112(c) requires that residences and businesses connect to public water where availableThus, the POE is a hypothetical well located 1000 feet downgradient from the release area. Per the Act, other wells (point of demonstration ("POD") wells) may be used to demonstrate that groundwater concentrations are protective of any downgradient point of exposure. Well cluster MW-55/MW-56/MW-57 is the furthest-most downgradient monitoring wells and can serve as a POD. The well cluster is approximately 600 feet downgradient from the release area. There are low level VOC detections in the POD well cluster; however, the POE, which is 400 feet beyond the POD models to meet the residential RRSs as demonstrated below.

As the plume is mature and stable, current groundwater data (*i.e.*, an empirical model) can be used to evaluate the groundwater condition at the POE. Graphs were generated showing the concentration of TCE along the plume from the release area (the Site). The wells used are shown on Figure 19. The data from 2015-2017 from each well were used. Below are graphs for TCE in saprolite, PWR, and bedrock; and cis-DCE in bedrock. These graphs indicate that the expected concentration at the POE are below the residential RRSs.




TCE in PWR
100000
10000
1000
100
10
1
Concentration (µg/L)
0
200
400
600
800
1000
1200
Distance Along Plume (ft)
TCE
Residential RRS
Hypothetical POE


TCE in Bedrock
100000
10000
1000
100
10
1
Concentration (µg/L)
0
200
400
600
800
1000
1200
Distance Along Plume (ft)
TCE
Residential RRS
Hypothetical POE



More importantly, there is no groundwater exposure as there are no drinking water wells and none will be installed due to the availability of municipal water and the Fulton County ordinance. Although it is not necessary to certify compliance for groundwater at the Site, groundwater meets Residential RRSs at the POE.

6 SOIL CONDITION

6.1 Soil Delineation of COCs

Soil characterization and remedial action were completed prior to entry of the Site into the VRP. Delineation of organics and lead in soil was presented in the *Semiannual Progress Report #*1 (Arcadis, 2015A). EPD requested further documentation for delineation of lead, which was provided in the *Semiannual Progress Report #2* (Arcadis, 2015B). In a letter dated September 3, 2015, the EPD accepted soil delineation. Applicable pages from these reports are included as Appendix L. This information shows that delineation of organics is also complete; however, ethylbenzene at one of the delineation locations (SB-148) had a concentration of 89 milligrams per kilogram (mg/kg). The residential RRS at the time that delineation was documented was 30 mg/kg. Due to changes in toxicity information, the current residential RRS is 70 mg/kg, which is very close to the value found at location SB-148. Additionally, a SVE well (SVE-321) was installed in SB-148. Thus, this area of the Site would now have much lower concentrations of organics in the vadose zone than was observed at the time of soil sampling. Accordingly, delineation is sufficiently complete at the Site and no further action is warranted.

6.2 Comparison to RRSs

As described previously, soil RRS were calculated for 1) direct contact of residents and nonresidents (*i.e.*, commercial/industrial workers) to surface soils, and 2) direct contact of construction workers to surface and subsurface soils. Historical soil data is included in Appendix B. Table 8 and Table 9 show the remaining soil data (soil not excavated) for the soil COCs. Table 8 shows the surface soil (0-2 ft) and Table 9 shows the surface and subsurface soil (0-10 ft) COC data for the samples not removed. Each table shows the maximum detected concentration for each constituent as well as the RRSs applicable for the depth range. The soil locations are shown on Figure 20 for lead and Figure 21 for VOCs.

Per the Act, compliance with the clean-up values may be determined "on the basis of representative concentrations of constituents of concern in soils across each applicable soil exposure domain, and the representative concentrations for groundwater at a point of exposure." It is conventional in risk assessments to use the 95% Upper Confidence Limit ("UCL") on the mean as the exposure point concentration for an exposure domain. The entire (approximately 5.4 acre) Site is considered one exposure domain. The use of one exposure domain for the entire Site is both appropriate and conservative for the following reasons:

- The contract between LRM and the current owner (South Central Station, LLC) limits future use to be commercial/industrial. It is expected that people working at the Site would be evenly/randomly distributed across the Site.
- There are no specific uses of areas of the Site that would necessitate a special evaluation.

- The majority of the soil samples was collected in the areas where there were known or suspected constituent releases. Thus, the constituent concentrations represented in the dataset are biased high. If additional samples were collected in other areas of the Site where there were no releases, the Site conditions would be characterized by lesser constituent concentrations.
- Large portions of the Site are covered by buildings or asphalt, thus limiting possible exposure.
- A large amount of clean imported backfill soil was placed following soil excavations. This clean fill material was not accounted for in the analysis that follows. Thus, the analysis is biased high and the actual exposure would be lower due to the clean fill material.

The 95% UCL was calculated for each soil horizon for constituents using the EPA's ProUCL software (version 5.1). ProUCL input and output is presented in Appendix M. As shown at the top of Table 8, the only constituents with maximum detected concentrations above the site-specific Residential or Industrial Worker RRS are lead and TCE. The 95% UCL for lead is 372 mg/kg, which is below the Residential RRS (418 mg/kg). The 95% UCL for TCE is 1.0, which is also below the Residential RRS (1.4 mg/kg). Thus, surface soil is in compliance with Residential RRSs.

As shown on the top of Table 9, the only constituent with a maximum concentration above the Construction Worker RRS is lead. The 95% UCL for lead is 337 mg/kg, which is well below the Construction Worker RRS (930 mg/kg). Accordingly, subsurface soil is in compliance with the Construction Worker Value. The lead values also meets the site-specific Residential RRS of 418 mg/kg.

Additionally, the cumulative risk and hazard of exposure to the receptors to the soil COCs (presented in Section 8) shows that there is not an unacceptable risk to receptors at the Site.

6.3 Protection of Groundwater

Per the Act, soil concentrations for the protection of groundwater are to be based at an established point of groundwater exposure. There is no actual point of groundwater exposure as there are no drinking water wells and the establishment of new wells is prohibited via the Fulton County Ordinance. Additionally, the Site was not listed for groundwater. As described more thoroughly in Section 5.6, the POE (1000 feet downgradient of the release area) for groundwater meets cleanup standards. There are no additional soil sources and the plume is mature and stable. Accordingly, soil concentrations for the protection of groundwater are not needed.

7 VAPOR INTRUSION EVALUATION

7.1 Overview

Vapor intrusion involves the migration of vapors from the subsurface (soil or groundwater), through the soil and into an overlying building. EPA's guidance regarding vapor intrusion (EPA, 2015) recommends collecting and weighing multiple lines of evidence when evaluating the potential risk due to vapor intrusion. EPA endorses the use of the VISL calculator for vapor intrusion evaluation. VISL is a spreadsheet tool that provides generally recommended screening-level concentrations for groundwater, soil gas (exterior to buildings and sub-slab) and indoor air for specified target risk levels and exposure scenarios. LRM has looked at three primary lines of evidence: groundwater data, soil gas, and indoor air.

As mentioned previously, elevated concentrations of VOCs are present in groundwater at the Site, which leads to the potential for vapor intrusion. Once vapors leave the groundwater, they migrate through the vadose zone. In this zone the soil gas can be sampled to determine if vapors are present. The vapors may then migrate through building foundations into the building. Indoor air samples can be taken to determine if vapors are present at potentially unsafe levels. LRM has collected groundwater, soil gas and indoor air samples. Figure 23 shows the locations of the soil gas and indoor air sampling as well as the nearby monitoring wells. The samples collected around the building located on the former Attwood Canvas Site (1526 East Forrest Avenue) can be used to evaluate the three lines of evidence. (A cumulative risk and hazard of potential vapor intrusion exposure to receptors (presented in Section 8) shows that there is not an unacceptable risk to receptors.)

7.2 Lines of Evidence

7.2.1 Shallow Groundwater

The shallow monitoring wells (screened in saprolite) closest to the building located on the former Attwood Canvas Site have the following recent groundwater concentrations in parts per billion ("ppb"):

Groundwater Results near Building

Well	TCE Result (ppb)
MW-26	48
MW-28	140
MW-39	<5
MW-42	25
MW-37	160

This gives an average TCE concentration of approximately 76 ppb, which is above the VISL target groundwater concentration (22 ppb for a commercial receptor based on a hazard quotient of 1), indicating that further evaluation is warranted.[2]

7.2.2 Soil Gas

Table 4 shows the results of the January 2017 soil gas sampling compared to the VISL target exterior soil gas concentrations. The target concentrations are for a commercial scenario based on a 10^{-5} target risk for carcinogens and a target hazard quotient for non-carcinogens of 1. All results except one (TCE in the sample collected from SG-1) were below the target screening levels. The soil gas concentrations in micrograms per cubic meter ("$\mu g/m^3$") nearest to the building on the former Attwood Canvas Site are as follows:

Soil Gas Results near Building

Location	Depth (ft)	TCE Soil Gas ($\mu g/m^3$)
SG-1	2.5	1,500
SG-2	2.5	<5.5
SG-3 shallow	2.5	8.1
SG-3 deep	9.0	52
SG-6 shallow	2.5	<5.5
SG-6 deep	5.5	<5.5
SG-7 shallow	2.5	<5.5
SG-7 deep	14.0	23

The average soil gas concentration is 200 $\mu g/m^3$, which is below the target soil gas concentration[3] of 292 $\mu g/m^3$. This indicates that a vapor intrusion issue is unlikely.

7.2.3 Indoor Air

Table 10 shows a comparison of the indoor air sampling to VISL target indoor air concentrations. All results are below the target commercial indoor air concentrations. The indoor air samples from the building are as follows:

Indoor Air Results inside Building

Location	TCE Indoor Air ($\mu g/m^3$)
AS-1	1.2
AS-2	1.2
AS-3	1.1
AS-4	1.7
AS-5	1.6

[2] The screening level concentrations in the VISL calculator are not intended to be used as clean-up levels, rather they are used to determine whether site conditions may warrant further investigation.
[3] Commercial worker, target risk of 10-5 and hazard quotient 1.

The average indoor air concentration is 1.36 $\mu g/m^3$, which is significantly lower than the VISL commercial target indoor air concentration of 8.8 $\mu g/m^3$ and the residential target indoor air concentration of 2.1 $\mu g/m^3$ (both based on target risk of 10-5 and hazard quotient of 1).

7.3 Summary

Based on these multiple lines of evidence (groundwater, soil gas and indoor air data), there is not an unacceptable risk due to vapor intrusion. Further, as this is a mature plume, the soil vapor concentrations are expected to continue to decrease over time. Additionally, the cumulative risk and hazard of potential vapor intrusion exposure to receptors (presented in Section 8) show that there is not an unacceptable risk to receptors.

Further, in the PPCSR for the former Attwood Canvas Site, Kairos Development Corporation evaluated the groundwater data and determined that there was a potential for vapor intrusion into buildings at the property. Accordingly, as an added precaution, the PPCSR (page 11 in Appendix C) states that Kairos intended to implement a vapor collection and/or venting system during construction (redevelopment) of the former Attwood Canvas property. It is unknown whether or not Kairos did implement a system on the building during redevelopment.

8 RISK EVALUATION

8.1 Background

At the request of the EPD, we have evaluated the cumulative risk and hazard to hypothetical receptors exposed to COCs the soil and/or indoor air. The risk due to carcinogenic compounds is evaluated in terms of the excess lifetime cancer risk ("ELCR"). The hazard due to noncarcinogenic compounds is evaluated in terms of the hazard quotient ("HQ"). The ELCR and HQ can be summed across media for each receptor to determine the cumulative ELCR and cumulative HQ (called the hazard index, "HI"). The EPA's allowable risk range is 10^{-6} to 10^{-4} and allowable hazard index is 1-3.

The hypothetical receptors and exposures evaluated are as follows:

- On-Site Worker
  - 0-1 ft soil
  - vapor intrusion
- On-Site Construction Worker
  - 0-10 ft soil
- Off-Site Worker
  - vapor intrusion
- Off-Site Resident
  - vapor intrusion

8.2 Soil Evaluation

The risk and hazard due to soil exposure in each domain was calculated for the soil COCs. A simple proportion can be used to determine the ELCR and HQ for individual COCs using information presented in the RRS calculations (Table 6 and Table 7 of Appendix E). The proportion for the ELCR is as follows:

$$\mathrm{ELCR_{COCx}} = \frac{\mathrm{EPC_{COCx}} \times \mathrm{Target\ ELCR_{COCx}}}{\mathrm{RAGS\ Soil\ Concentration_{COCx}}}$$

where: EPC is the exposure point concentration

Target ELCR is 10^{-5} (value used in RRS calculations)

RAGS soil concentration is from Appendix E Table 6 for each receptor

The proportion for the HQ is as follows:

$$HQ_{COCx} = \frac{EPC_{COCx} \times \text{Target } HQ_{COCx}}{\text{RAGS Soil Concentration}_{COCx}}$$

where: EPC is the exposure point concentration

Target HQ is 1 (value used in RRS calculations)

RAGS soil concentration is from Appendix E Table 7 for each receptor

The calculations are shown on Table 11. In general the 95% UCL was used for the EPC unless there were only one or two detects, in which case the maximum detected concentration was used. The ELCRs for the on-site industrial worker and construction worker are below 10^{-6}. The HQs are below unity.

8.3 Vapor Intrusion Evaluation

The EPA's VISL "Indoor Air Concentration to Risk Calculator" was used to determine the ELCR and HQ for each groundwater COC for each receptor in each domain. The 95% UCL was used as the indoor air concentration, unless there was only one detection, in which case the detected value was used.

Vinyl chloride was not analyzed during the indoor air sampling event. Accordingly, the vinyl chloride data from the soil gas sampling was used to determine the risk and/or hazard for vapor intrusion using the "Sub-slab or Exterior Soil Gas Concentration to Indoor Air Concentration Calculator."

The data input and the VISL calculator output are presented in Appendix N. A summary of the results is shown in Table 12. All ELCRs are below 10^{-5} and all HQs are below unity.

8.4 Cumulative Risk and Hazard

The cumulative risk and hazard for each receptor in each domain is shown in Table 13. The highest cumulative ELCR (7.1×10^{-6}) and HI (0.55) for the hypothetical off-site resident. All ELCR values are within the acceptable risk range of 10^{-6} to 10^{-4} and all HI are below the preferred threshold value of 1. Accordingly, exposure to soil does not present an unacceptable risk at the Site. Similarly, exposure to vapor intrusion both on-site and off-site does not present an unacceptable risk.

9 FINAL REMEDIAL ACTION PLAN

9.1 Summary of Site Remedial Actions

9.1.1 Introduction

Over the years, LRM has performed significant remediation at considerable expense:

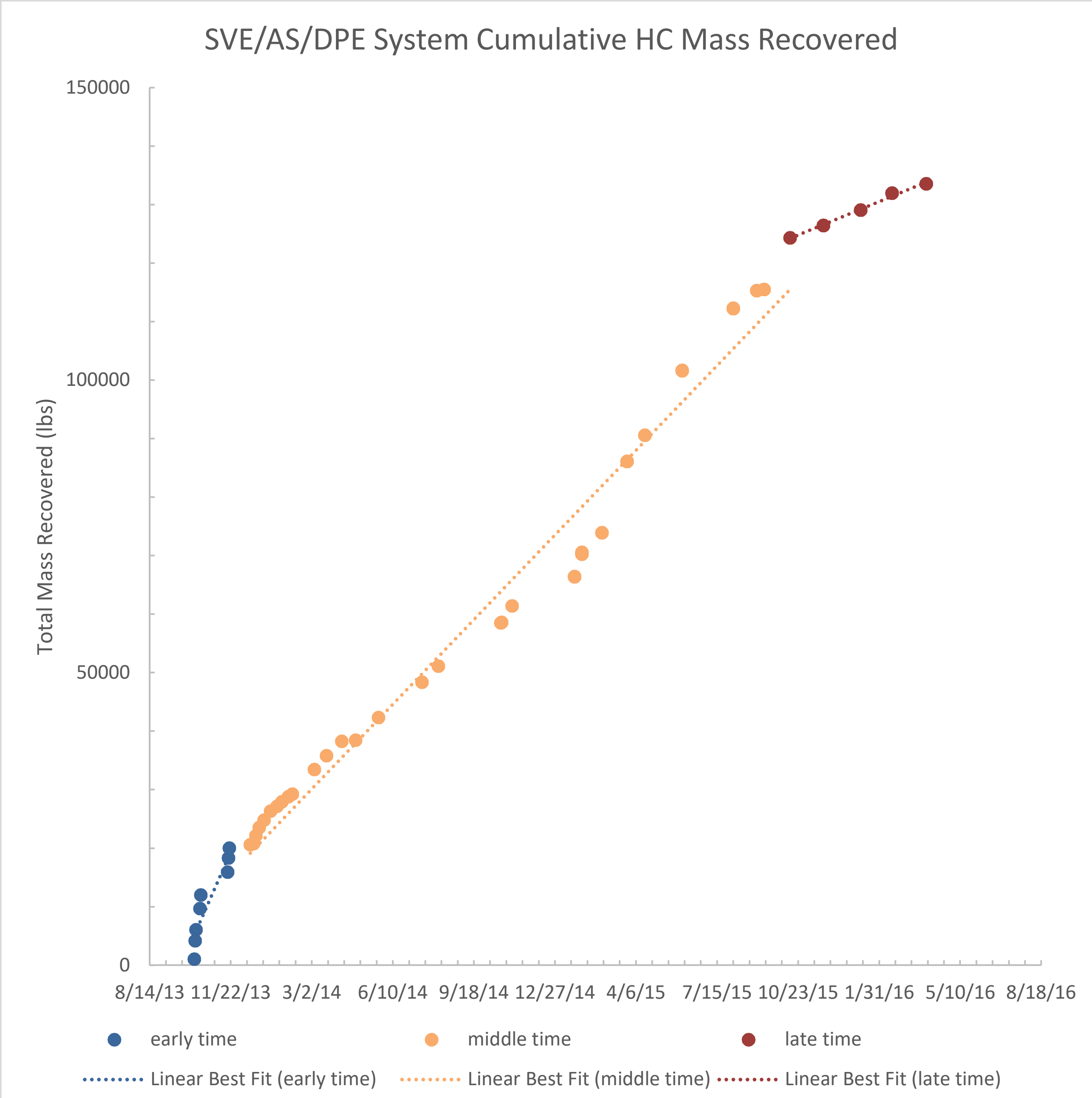
- Over 1,400 tons of soil were excavated;
- Nearly 1,000,000 gallons of water were processed through a groundwater treatment system during the P&T system's nearly 16 years of operation; and
- Approximately 133,588 lbs of VOCs were removed from the AS/SVE/DPE system during it's nearly 3 years of operation.

The soil excavations performed were sufficient such that the Site meets Non-Residential RRSs. The treatment systems served their purpose of decreasing the elevated conditions at the Site.

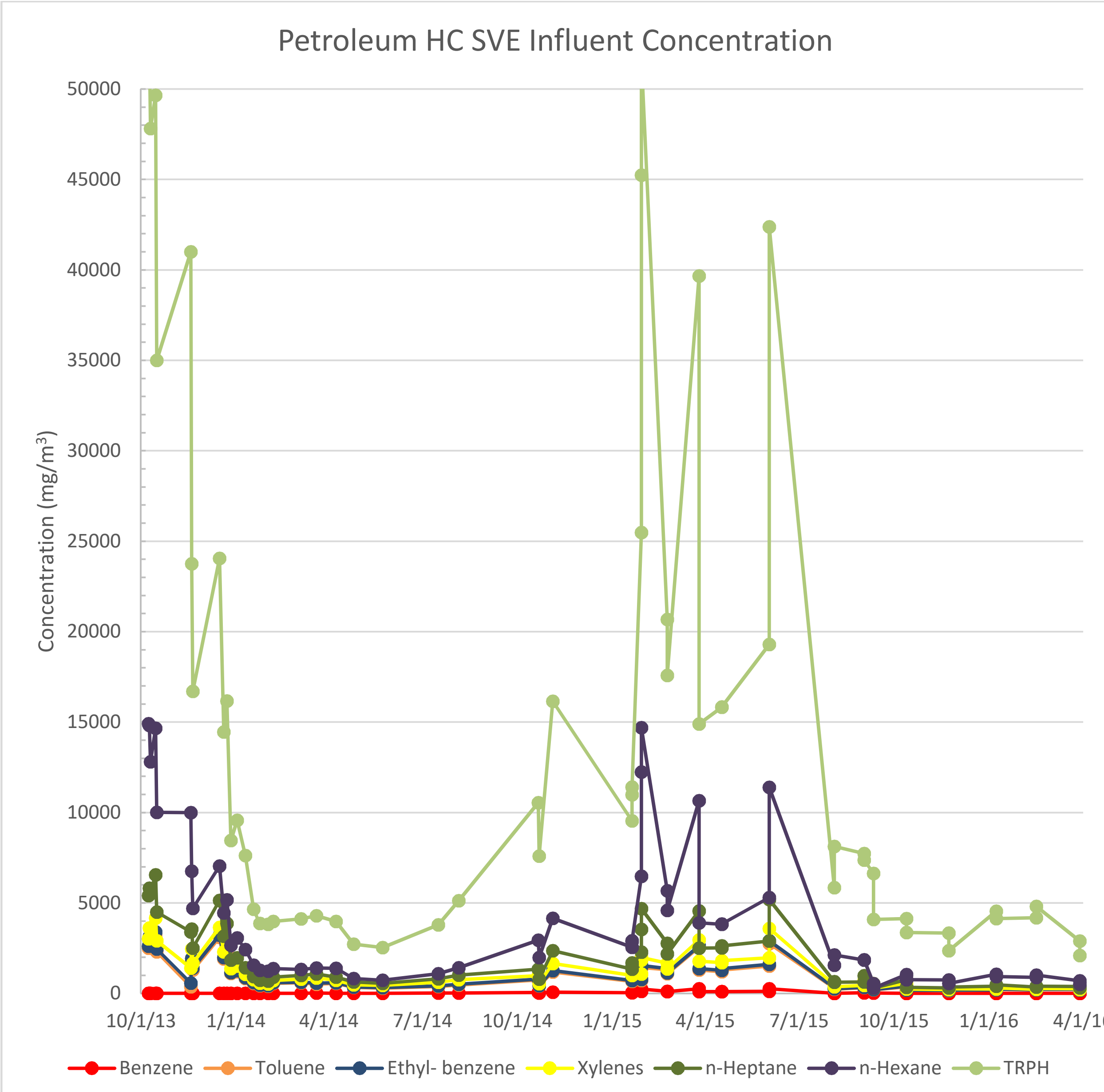
9.1.2 AS/SVE/DPE Treatment System

The AS, SVE, and DPE wells used in the system are all screened within the saprolite or PWR zones, with the exception of MW-07 and MW-32, which are deeper wells (screened in PWR/bedrock) and were converted into DPE wells.

The figure below shows the cumulative mass of hydrocarbons removed from the system. The figure shows that the effectiveness of the system has gone through three periods. In the start-up period (2013), the cumulative hydrocarbon recovery rate was very steep indicating a significant rate of removal. In the second period (2014-2015) there was a steady removal rate that was less significant than the start-up removal rate. In the third period (2015-2016) the rate of removal further flattened.



In addition to the lessening rate of COC mass removal, another factor considered in the decision to cease the AS/SVE/DPE operation involved the nature of the COCs being removed. The figure below shows a breakdown of the specific hydrocarbons removed from the system. The vast majority of the hydrocarbon mass removed are non-toxic aliphatics (n-heptane and n-hexane). The mass of aromatic hydrocarbons (*i.e.*, BTEX) removed were low to non-detect over the last year of operation. This provides another indication that the treatment system had reached its effectiveness at removal the COCs at the Site.

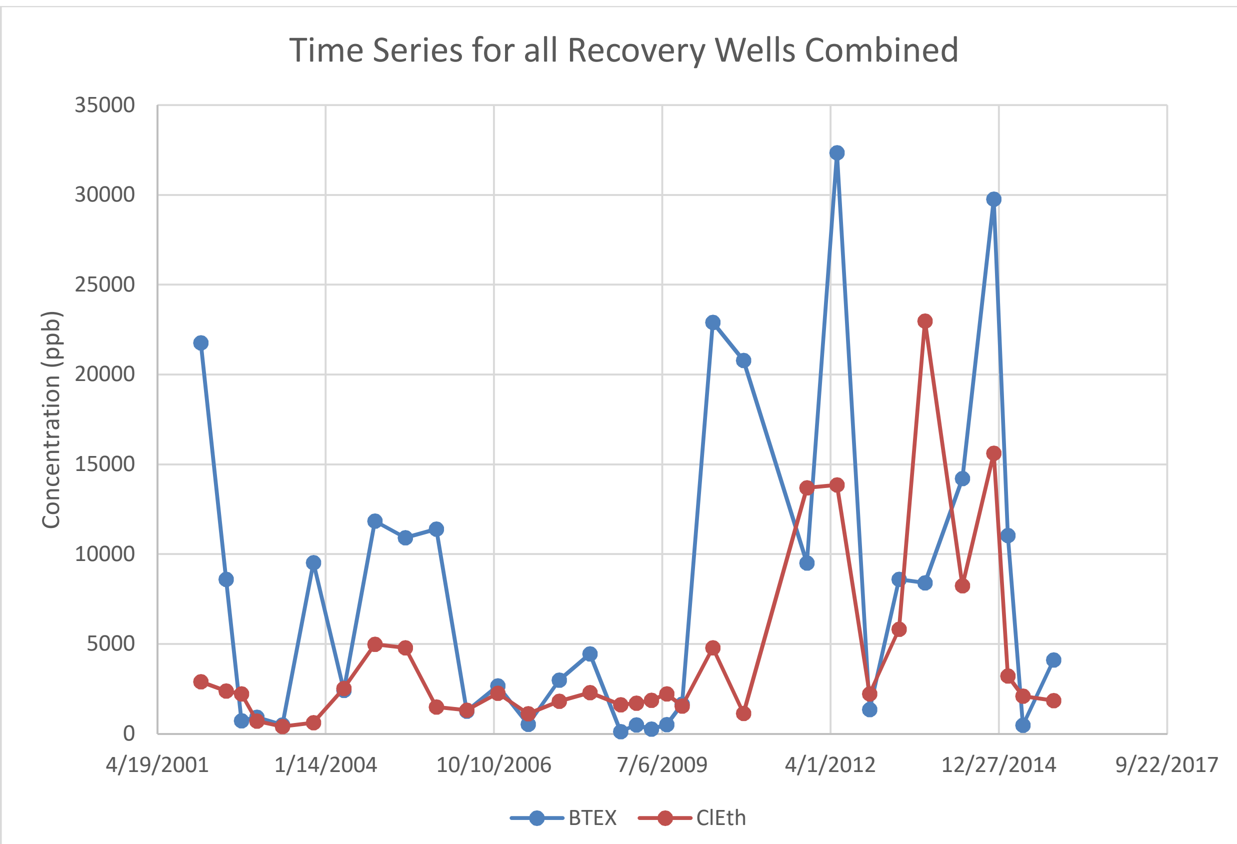


The purpose of the AS/SVE/DPE system was to target residual LNAPL (smear zone) and shallow groundwater, where the largest amount of petroleum hydrocarbons was located. This system was not designed to address the BTEX constituents located deeper in the aquifer. Although the system did effectively remove BTEX constituents in the shallow soil and groundwater, it had no impact on chlorinated ethenes in the deeper parts of the aquifer.

9.1.3 Groundwater P&T System

The recovery wells included in the groundwater treatment system are screened in all three geologic zones (saprolite, PWR, and bedrock), thus groundwater was extracted from the all zones. The groundwater remediation system operated from 2000 to August of 2016. An estimated 1,159 lbs of total VOCs were removed from groundwater during 2001-2006 and an additional 2,366 lbs during 2012-2016. Records from 2006-2012 were not readily available; although it can be assumed a VOC removal rate equivalent to the early time period was achieved (approximately 200 lb/yr). Thus, an estimated 3,500-4,500 pounds of VOCs have been removed from groundwater through the groundwater P&T system.

The time series graph below shows the total concentrations from all recovery wells combined over time. This figure shows the erratic nature of concentrations over time and indicates that the groundwater pump-and-treat system has not been very effective. This is common to P&T remediation, *i.e.*, it is not an effective remediation alternative for restoration of the groundwater impacts.



9.2 Current Condition in Groundwater and Effectiveness of Remedial Actions

9.2.1 Condition of COCs in Saprolite and PWR Groundwater

The combination of natural processes (*e.g.*, biodegradation and volatilization), and the treatment systems have resulted in a significant decrease in concentrations in the saprolite and PWR. The table below shows the difference between the historical and current average concentration of COCs in the saprolite and PWR.

Decrease in Constituent Concentrations over Time in Saprolite and PWR[4]

COC Group	Average Concentration (µg/L)[5]		Percent Decrease
	Historical (2002-2005)	Current (2015-2016)	
Petroleum Hydrocarbons	7,181	86	99%
Chlorinated Ethenes	2,268	818	64%

In the last two years, groundwater concentrations in the saprolite and PWR have been below the 1% solubility rule values; thus sufficient "source material" remediation has been achieved by the remedial actions.

9.2.2 Condition of COCs in Bedrock Groundwater

All but one of the recovery wells included in the groundwater treatment system are screened at least partially in bedrock. The table below shows the difference between the historical and current average concentration of COCs in the bedrock.

Decrease in Constituent Concentrations over Time in Bedrock[6]

COC Group	Average Concentration (µg/L)[7]		Percent Decrease
	Historical (2002-2005)	Current (2015-2016)	
Petroleum Hydrocarbons	3,338	3,311	0.8%
Chlorinated Ethenes	10,346	9,230	11%

This table clearly shows that the condition in the bedrock has not substantially changed over time. Additionally, concentrations of TCE in some of the bedrock wells have been above 1% Solubility, indicating the possible presence of DNAPL in remote fractures in the bedrock.

Remediating DNAPL compounds in fractured bedrock is "exceptionally difficult, and in many cases, even futile" (Pankow and Cherry, 1996). The main difficulties as described by Pankow and Cherry (1996) are:

---

[4] Using the 19 monitoring wells present both in the past and currently. Data from January 2017 was not included as only 5 of these 19 wells were sampled.
[5] 95% Upper Confidence Limit on the Mean as determined by USEPA's ProUCL software
[6] Using the 9 monitoring and recovery wells present both in the past and currently. Data from January 2017 was not included as only 5 of these 19 wells were sampled.
[7] 95% Upper Confidence Limit on the Mean as determined by USEPA's ProUCL software

1) *Complex fracture networks cause the initial distribution of DNAPL mass to be difficult to predict or locate;*
2) *Dead-end fractures or fractures not well-connected to active groundwater flushing impede cleaning by pump-and-treat systems; and*
3) *The existence of much or nearly all the contaminant mass in the relatively immobile pore water of the matrix as a result of matrix diffusion greatly increases the time scales required for clean-up.*

A confounding problem is that back diffusion from less permeable zones to more permeable zones can sustain groundwater plumes for a very long time (Chapman and Parker, 2005).

It is well known that pump-and-treat systems are ineffective at removing DNAPLs from the subsurface as the pumping only recovers the dissolved fraction, which can be very small compared to the amount sorbed to soil (USEPA, 2009B; Stroo *et al.*, 2012). Other treatment technologies do not seem to work much better, especially those that rely on transport mechanisms of getting materials to the DNAPL or removing DNAPL from bedrock. Clean-up goals are often impossible to attain even when small amounts of DNAPL are present; accordingly, there has been a movement away from remediation to meet drinking water standards and toward risk reduction (Stroo et al., 2012). Risk reduction often includes not using the groundwater as a potable water source and allowing natural attenuation (natural bioremediation) to remediate the condition over time.

Remediating fractured bedrock is so difficult, that the EPA has issued Technical Impracticability waivers (providing relief from the need to achieve drinking water standards) for many sites that have NAPLs in bedrock. Of 85 groundwater waivers reviewed, 43 had DNAPLs, 54 had complex geology (such as fractured bedrock), and 56 had clean-up timeframes of greater than 100 years (USEPA, 2012). This is also why the VRP specifically allows for technical impracticability to be used for not requiring remediation in fractured bedrock:

Section 12-8-108(9):

- Technical impracticability. Site delineation or remediation beyond the point of technical impracticability shall not be required if the site does not otherwise pose an imminent or substantial danger to human health and the environment.

where the definition is described in 12-8-102(b)(15) as follows:

- ‘Technical impracticability’ means the inability to fully delineate or remediate contamination without incremental expenditures disproportionate to the incremental benefit. An example may include, without limitation, dense non-aqueous phase liquids in fractured bedrock settings.

The cost of any additional active remedial action in bedrock would be prohibitive with a minimal likelihood of success.

9.3 Final Remediation Plan

LRM has sufficiently improved conditions in the saprolite and PWR. The condition in bedrock is such that LRM maintains that it is technically impracticable to address the condition in bedrock. There are no drinking water wells in the vicinity, a Fulton County ordinance prevents any new drinking water wells in the area, and the Site was not listed on the Hazardous Site Inventory for a release to groundwater. Accordingly, LRM will not perform any additional active remedial measures at the Site. LRM will employ a passive remediation strategy of natural source zone depletion or natural attenuation. The natural processes include sorption, volatilization, dissolution and biodegradation.

In addition, although not required by the Act, LRM agrees to conduct two years of groundwater monitoring. A network of 29 wells (as shown on Figure 24) will be sampled and analyzed annually for two years (once in 2018 and once in 2019) for VOCs. The analytical results will be shared with the EPD in the format of a letter report to be submitted within three months of the sampling event.

10 SITE COMPLIANCE AND DELISTING

The shallow soils (from 0 to 2 ft-bgs) meet the Residential (direct-contact) RRS. Additionally, the deeper soils (0 to 10 ft-bgs) meet the direct-contact RRSs for construction workers. Accordingly, soils at the Site are in compliance with RRSs.

Groundwater is not used as a drinking water source in the area and a county ordinance prohibits the installation of new drinking water wells. Thus, there is no exposure pathway for groundwater as shown by the fact that the Site did not get listed on the Hazardous Site Inventory for a release to groundwater and is not required to demonstrate compliance to RRSs for groundwater. Regardless, groundwater sampling along the groundwater flow path indicates that a hypothetical point of exposure meets residential RRS. Accordingly, groundwater meets residential RRSs in accordance with the VRP Act.

11 REFERENCES

Arcadis, 2011. IAVI Report for the Building North of East Forrest Avenue and the Two On-site Buildings in the Central and the most Western Portion of the Property. January 17.

Arcadis, 2013. Revised Voluntary Remediation Plan Application. August.

Arcadis, 2015.A Voluntary Investigation and Remediation Plan - Semiannual Progress Report #1. April.

Arcadis, 2015B. Voluntary Investigation and Remediation Plan - Semiannual Progress Report #2. October.

Arcadis, 2016. Voluntary Investigation and Remediation Plan - Semiannual Progress Report #3. May.

Chapman, S.W., B.L. Parker. 2005. "Plume persistence due to aquitard back diffusion following dense nonaqueous phase liquid removal or isolation." Water Resour. Res. 41 (12), W12411. 16 pp.

Cressler, C.W., Thurmond, C.J., and Hester, W.G. 1983. Ground Water in the Greater Atlanta Region, Georgia. Georgia Geologic Survey Information Circular 63.

Environment Agency, UK, 2003. An Illustrative Handbook of DNAPL Transport and Fate in the Subsurface, Environment Agency R&D Publications 133.

EPS, 2016. Semiannual VRP Progress Report #4. November.

Geotrans 2006. February. 2006 Supplemental Investigation Phase I Results Report.

GSI Environmental, 2010. GSI Mann-Kendall Toolkit For Constituent Trend Analysis User's Manual, Version 1.0. November 2012.

Law, 1986. Report of Preliminary Contamination Assessment.

McConnell, Keith I. and Charlotte E. Abrams. 1984. Geology of the Greater Atlanta Region, Bulletin 96. Department of Natural Resources, Environmental Protection Division, Georgia Geologic Survey.

Pankow, James F. and John A. Cherry. 1996. Dense Chlorinated Solvents and Other DNAPLs in Groundwater: History, Behavior, and Remediation. Waterloo Press.

Sowers, G.F. 1963. Engineering Properties of Residual Soils Derived from igneous and Metamorphic Rocks, Proc. 2nd Panamerican Conference on Soil Mechanics and Foundation Engineering, Sao Paulo, Brazil, 39-62.

Stroo, Hnas F., Andrea Leeson, Jeffrey A. Marqusee, Paul C. Johnson, C. Herb Ward, Michael C. Kavanaugh, Tom C. Sale, Charles J. Newell, Kurt D. Pennell, Carmen A. Lebron, and Marvin Unger. 2012. "Chlorinated Ethene Source Remediation: Lessons Learned." Environmental Science & Technology. 46, 6438-6447. May 4.

Swain, L.A. Mesko, T.O., and Holiday, E.F. 2004. Summary of the Hydrogeology of the Valley and Ridge, Blue Ridge, and Piedmont Physiographic Provinces in Eastern United States, USGS Professional Paper 1422-A.

USEPA, 1992. Estimating Potential for Occurrence of DNAPL at Superfund Sites. OSWER Publication 9355.4-07FS. National Technical Information Service (NTIS) Order Number PB92-963338CDH.

USEPA, 2009A. Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities Unified Guidance, U.S. Environmental Protections Agency, EPA/530/R/09-007, Washington D.C., March 2009.

USEPA. 2009B. DNAPL Remediation: Selected Projects where Regulatory Closure Goals have been Achieved. EPA 542/R-09/008. August.

USEPA. 2012. Summary of Technical Impracticability Waivers at National Priorities List Sites. OSWER Directive 9230.2-24. August.

USEPA Region 4. 2013. Groundwater Sampling Operating Procedure (SESDPROC-301-R3). March.

USEPA. 2015. OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air. June.

Williams, L.J. and W.C. Burton. 2005. Common Types of Water-Bearing Features in Bedrock, Rockdale County, Georgia in Proceedings of the 2005 Georgia Water Resources Conference, held April 25-27, 2005 at the University of Georgia.

Wilson, C. and Martin, R. 1996. Embankment dams in the Piedmont/Blue Ridge Province. Design with Residual Materials: Geotechnical and Construction Conference, ASCE GSP 63, 27-36.

TABLES

Table 1. Groundwater RRSs and Constituents of Concern

Parameter	Type 1 RRS* (µg/L)	Residential RRS (µg/L)	NonResidential RRS (µg/L)	Maximum Detected Concentration (µg/L)	Number of Samples	Frequency of Detections	% Above Residential RRS	Constituent of Concern?
1,1,1-Trichloroethane	200	2700	14000	38	1076	8/1076		
1,1,2-Trichloroethane	5	5	410	119	1076	12/1076	0.7%	
1,1-Dichloroethene	7	100	520	100	1089	94/1089		
2-Butanone (MEK)	2000	2300	12000	550	1076	6/1076		
2-Methylphenol	10	780	5100	110	7	4/7		
4-Methyl-2-pentanone	2000	2000	4200	590	1071	34/1071		
4-Methylphenol	10	1600	10000	300	7	4/7		
Acetone	4000	8000	46000	3800	1102	8/1102		
Barium	2000	3100	20000	95	7	7/7		
Benzene	5	5.4	8.7	4700	1089	288/1089	17%	Yes
Carbon tetrachloride	5	5.7	10	11	456	2/456	0.4%	
Chlorobenzene	100	100	140	84	456	4/456		
Chloroform	80	80	80	47	1089	110/1089		
cis-1,2-Dichloroethene	70	70	200	27000	450	280/450	26%	Yes
Copper	1300	1300	4100	22	7	1/7		
Cyclohexane	10	3600	18000	2300	444	74/444		
Ethyl benzene	700	700	700	2383338	1089	217/1089	1%	Yes
Freon-11	2000	2000	2000	15	456	12/456		
Lead	15	15	15	28	41	7/41	2%	**
Methylene chloride	5	74	450	561	1089	33/1089	0.6%	
m&p-Xylene	2	58	290	15000	450	80/450	7%	Yes
o-Xylene	1	58	290	4000	449	59/449	4%	Yes
Tetrachloroethene	5	19	98	84	1089	103/1089	1%	Yes
Toluene	1000	1000	5200	250000	1089	270/1089	5%	Yes
trans-1,2-Dichloroethene	100	310	2000	896	1089	57/1089	0.2%	
Trichloroethene	5	5	5.2	540000	1090	551/1090	35%	Yes
Vinyl chloride	2	2	2	3300	1090	369/1090	22%	Yes
Xylenes (Unspecified)	10	10	10	6274000	645	172/645	0%	

RRSs approved by EPD in letter dated Septemeber 3, 2015.

Selected as COC if >1% of results above Residential RRS

* Primary delineation criteria

** Not selected as COC as only one sample exceeded the RRS. Subsequent sampling in the same well had results below the RRS.

Table 2. Soil Delineation Standards and Constituents of Concern

Parameter	Residential RRS* (mg/kg)	Maximum Detected Concentration (mg/kg)	Detection Frequency	% Above Residential RRS	Constituent of Concern?
1,1,1-Trichloroethane	20	0	0/44	0%	
1,1,2-Trichloroethane	0.5	0.047	2/44	0%	
1,1-Dichloroethene	0.71	0	0/44	0%	
2-Butanone (MEK)	200	45	7/197	0%	
4-Methyl-2-pentanone	200	49	7/197	0%	
Acetone	400	9.6	18/197	0%	
Barium	2550	321	27/27	0%	
Benzene	0.5	19	34/197	5%	Yes
Carbon tetrachloride	0.5	0	0/44	0%	
Chlorobenzene	10	0.0053	1/44	0%	
Chloroform	1	0	0/44	0%	
cis-1,2-Dichloroethene	7	29	54/197	3%	Yes
Cyclohexane	74	41	23/71	0%	
Ethyl benzene	30	210	82/197	11%	Yes
Freon-11	68	0	0/44	0%	
Lead	270	6290	267/277	38%	Yes
Methylene chloride	0.5	63	24/197	5%	Yes
m&p-Xylene	20	780	96/197	20%	Yes
o-Xylene	20	170	63/197	8%	Yes
Tetrachloroethene	0.5	0.12	7/197	0%	
Toluene	100	1900	106/197	13%	Yes
trans-1,2-Dichloroethene	10	0.016	2/197	0%	
Trichloroethene	0.5	4800	57/197	21%	Yes
Vinyl chloride	0.0002	0.032	2/44	5%	Yes

Selected as COC if >1% of results above Residential RRS

* Primary delineation criteria

Table 3. Site-Specific Soil Risk Reduction Standards

Parameter	Surface Soil (0-2ft) Direct Contact RRS		Sub-Surface Soil (0-10 ft) Direct Contact RRS
	Residential (Type 2) (mg/kg)	NonResidential (Type 4) (mg/kg)	Construction Worker (Type 4) (mg/kg)
Benzene	18	66	802
cis-1,2-Dichloroethene	156	4088	1239
Ethyl benzene	92	348	12670
Lead	418	930	930
Methylene chloride	209	3817	2783
o-Xylene	254	3766	7162
m-Xylene	215	3180	6095
p-Xylene	220	3247	6218
m&p-Xylene	215	3180	6095
Toluene	3581	70228	41249
Trichloroethene	1.4	21	38
Vinyl chloride	3.4	13	345

Table 4. January 2017 Soil Gas Results

	Target Exterior Soil Gas Conc.	Former LRM Property				City Offices (1526 E Forrest)				Buggy Works (1562 E Forrest)				East of Site	
	Commercial ELCR 10^{-5}, HI 1 (µg/m^3)	SG-3 2.5 ft (µg/m^3)	SG-3 9 ft (µg/m^3)	SG-5 2.5 ft (µg/m^3)	SG-5 17 ft (µg/m^3)	SG-1 2.5 ft (µg/m^3)	SG-2 2.5 ft (µg/m^3)	SG-6 2.5 ft (µg/m^3)	SG-6 5.5 ft (µg/m^3)	SG-7 2.5 ft (µg/m^3)	SG-7 14 ft (µg/m^3)	SG-8 2.5 ft (µg/m^3)	SG-8 24 ft (µg/m^3)	SG-4 2.5 ft (µg/m^3)	SG-4 9 ft (µg/m^3)
1,1,1-Trichloroethane	730,000	<5.5	<5.5	<28	<28	7.1	<5.5	6.7	8.3	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
1,2,4-Trimethylbenzene	1,000	18	<5	79	160	<5	<5	<5	<5	<5	<5	<5	9.1	8.4	<5
1,3,5-Trimethylbenzene	--	7.6	<5	68	380	<5	<5	<5	<5	<5	<5	<5	6.8	12	<5
4-Ethyltoluene	--	<5	<5	<25	55	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-Methyl-2-pentanone	440,000	<8.3	<8.3	100	<41	<8.3	10	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3
Benzene	520	<3.2	<3.2	130	150	<3.2	<3.2	<3.2	<3.2	<3.2	<3.2	6.7	9.3	<3.2	27
Carbon disulfide	100,000	<6.3	<6.3	<32	<32	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	11
Chloroform	180	<4.9	<4.9	<25	<25	<4.9	<4.9	<4.9	<4.9	<4.9	120	<4.9	<4.9	<4.9	<4.9
cis-1,2-Dichloroethene	--	<4	<4	<20	<20	500	<4	<4	<4	<4	<4	<4	<4	<4	<4
Ethyl benzene	1,600	4.5	<4.4	130	58	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	7.8	<4.4	5.9
Freon-11	--	<5.6	<5.6	<28	<28	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	<5.6	10	<5.6	<5.6
m&p-Xylene	15,000	28	<8.8	100	580	<8.8	<8.8	<8.8	<8.8	<8.8	<8.8	12	29	10	18
o-Xylene	15,000	8.4	<4.4	42	100	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	4.8	11	<4.4	5.1
Tetrachloroethene	5,800	<6.9	8.3	<34	600	16	<6.9	<6.9	9.3	<6.9	24	18	<6.9	<6.9	<6.9
Toluene	730,000	15	4.9	160	49	4.1	5.5	13	4.3	14	11	22	38	<3.8	52
trans-1,2-Dichloroethene	--	<8	<8	<40	<40	15	<8	<8	<8	<8	<8	<8	<8	<8	<8
Trichloroethene	290	8.1	52	31	120	**1500**	<5.5	<5.5	<5.5	<5.5	23	<5.5	<5.5	<5.5	<5.5
Vinyl chloride	930	<2.6	<2.6	15	<13	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6

Exceeds Commercial Target Exterior Soil Gas Concentration

Table 5. January 2017 Groundwater Results for Detected Regulated Constituents

Parameter	GW Type 1 RRS µg/L	NonRes RRS µg/L	Saprolite DPE-307 µg/L 1/18/2017	MW-02 µg/L 1/18/2017	MW-20 µg/L 1/18/2017	MW-21 µg/L 1/19/2017	MW-26 µg/L 1/18/2017	MW-28 µg/L 1/20/2017	MW-37 µg/L 1/17/2017	MW-38 µg/L 1/17/2017	MW-39 µg/L 1/17/2017	MW-42 µg/L 1/17/2017	MW-52 µg/L 1/16/2017	MW-55 µg/L 1/16/2017	SP-1 µg/L 1/5/2017	TW-01 µg/L 1/17/2017	TW-02 µg/L 1/17/2017	TW-03 µg/L 1/17/2017
Benzene	5	8.7	140	11	<5	25	<5	<5	<5	<5	<5	<5	<5	<5	<5	6.1	<5	<5
Chloroform	80	80	<5	<5	<5	<5	<5	<5	<5	<5	<5	6.2	<5	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene	70	200	21	<5	9.3	4100	530	2500	2500	<5	<5	36	<5	8.9	<5	480	<5	<5
Cyclohexane	10	18000	81	69	<5	59	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethyl benzene	700	700	150	14	<5	61	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
m&p-Xylene	2	290	670	22	<5	9.6	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
o-Xylene	1	290	190	<5	<5	20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	5	98	<5	<5	<5	<5	<5	<5	<5	<5	<5	16	<5	<5	<5	<5	<5	<5
Toluene	1000	5200	43000	<5	<5	52	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
trans-1,2-Dichloroethene	100	2000	<5	<5	<5	10	<5	<5	8.3	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	5.2	7.8	<5	<5	6.8	48	140	160	<5	<5	25	<5	9.5	<5	43	<5	<5
Vinyl chloride	2	2	<2	11	<2	1900	<2	6.2	4.8	<2	<2	<2	<2	<2	<2	7.4	<2	<2

Parameter	GW Type 1 RRS µg/L	NonRes RRS µg/L	PWR MW-11 µg/L 1/17/2017	MW-17 µg/L 1/18/2017	MW-40 µg/L 1/17/2017	MW-45 µg/L 1/17/2017	MW-56 µg/L 1/16/2017	Bedrock MW-07 µg/L 1/19/2017	MW-32 µg/L 1/19/2017	MW-41 µg/L 1/17/2017	MW-48 µg/L 1/18/2017	MW-51 µg/L 1/16/2017	MW-54 µg/L 1/16/2017	MW-57 µg/L 1/16/2017	RW-07 µg/L ########
Benzene	5	8.7	<5	<5	<5	<5	<5	<5	<5	<500	<5	28	<5	<5	9
Chloroform	80	80	<5	<5	<5	<5	<5	<5	<5	<500	<5	5.9	9.8	13	<5
cis-1,2-Dichloroethene	70	200	<5	<5	94	300	44	74	520	25000	590	660	<5	49	280
Cyclohexane	10	18000	<5	21	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5
Ethyl benzene	700	700	<5	<5	<5	<5	<5	<5	<5	1100	<5	<5	<5	<5	<5
m&p-Xylene	2	290	<5	<5	<5	<5	<5	<5	<5	5000	<5	<5	<5	<5	<5
Methylcyclohexane			<5	12	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5
o-Xylene	1	290	<5	<5	<5	<5	<5	<5	<5	770	<5	<5	<5	<5	<5
Tetrachloroethene	5	98	<5	<5	<5	<5	<5	<5	<5	<500	<5	46	<5	<5	<5
Toluene	1000	5200	<5	<5	<5	<5	<5	<5	<5	6300	<5	<5	<5	<5	<5
trans-1,2-Dichloroethene	100	2000	<5	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5
Trichloroethene	5	5.2	<5	<5	19	240	27	9	840	150000	660	240	<5	21	6.7
Vinyl chloride	2	2	<2	<2	7.1	2.2	<2	2.9	5.4	<200	5.8	4.9	<2	<2	140

Exceeds Type 1 RRS (*i.e.* , groundwater delineation criteria)

Exceeds NonResidential RRS

Table 6. Historical Groundwater Results for COCs

			BTEX						Chlorinated Hydrocarbons			
Location	Geologic Zone	Date Sampled	Benzene µg/L	Ethyl benzene µg/L	Toluene µg/L	m&p-Xylene µg/L	o-Xylene µg/L	Xylenes (unspecified) µg/L	Tetrachloro-ethene µg/L	Trichloro-ethene µg/L	cis-1,2-Dichloroethene µg/L	Vinyl chloride µg/L
Type 1 RRS			**5**	**700**	**1000**	**2**	**1**	**10000**	**5**	**5**	**70**	**2**
Residential RRS			**5.4**	**700**	**1000**	**58**	**58**	**10000**	**19**	**5**	**70**	**2**
NonResidential RRS			**8.7**	**700**	**5200**	**290**	**290**	**10000**	**98**	**5.2**	**200**	**2**
Maximum			**4700**	**2383338**	**107000**	**5000**	**800**	**6274000**	**84**	**540000**	**27000**	**3300**
MW-02	Sap	1/1/2002	3960	1500	49140			118	<5	<5		807
MW-02	Sap	6/1/2002	4400	2100	51000			<500	<200	<200		590
MW-02	Sap	9/1/2002	3400	1000	6700			5400	<200	<200		720
MW-02	Sap	12/1/2002	1950	796	107000			2990	<5	<5		560
MW-02	Sap	5/1/2003	<5	<5	<5			<10	<5	<5		<2
MW-02	Sap	8/1/2003	<5	8.4	97.2			<10	<5	3500		<5
MW-02	Sap	11/1/2003	<5	100	4560			470	<5	<5		460
MW-02	Sap	5/1/2004	<5	2383338	689			6274000	<5	135		119
MW-02	Sap	11/1/2004	3300	1000	37600			5000	<5	643		162
MW-02	Sap	5/1/2005	2980	782	27000			1607	<5	590		154
MW-02	Sap	11/1/2005	3300	630	15000			1770	<5	<5		840
MW-02	Sap	5/1/2006	2200	590	4200			1600	<5	<5		2800
MW-02	Sap	11/1/2006	2150	<5	17600			2410	<5	<5		1790
MW-02	Sap	5/1/2007	1900	280	6900			1300	<5	<5		1200
MW-02	Sap	11/1/2007	3700	840	24000			3240	<5	<5		3300
MW-02	Sap	5/1/2008	4700	2000	28000			8000	<5	<5		1900
MW-02	Sap	5/1/2009	740	180	160			150	<	<5		200
MW-02	Sap	8/1/2009	1600	330	440			300	<	<5		310
MW-02	Sap	11/1/2009	1000	350	3100			1790	<5	<5		510
MW-02	Sap	5/1/2010	2000	340	5000			1900	<5	39		600
MW-02	Sap	11/1/2010	2700	490	3600			2440	<5	<5		910
MW-02	Sap	5/24/2011	2400	350	1100	1700	390		<5	<5	40	960
MW-02	Sap	5/27/2011	2800	440	4400			2200	<5	26		900
MW-02	Sap	11/10/2011	2400	470	350	1800	150		<5	<5	13	940
MW-02	Sap	5/16/2012	2100	340	650			1300	<5	5.1		900
MW-02	Sap	11/14/2012	2400	370	86	1200	40		<5	<5	<5	1000
MW-02	Sap	5/16/2013	2400	280	150			1200	<5	<5		960
MW-02	Sap	10/7/2013	3100	490	110	1600	75		<5	<5	<5	790
MW-02	Sap	5/30/2014	3700	490	280			1700	<5	16		890
MW-02	Sap	11/24/2014	2800	300	61	840	48		<5	<5	<5	480
MW-02	Sap	5/20/2015	280	64	18	82	9.3		<5	<5	<5	110
MW-02	Sap	11/13/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-02	Sap	1/18/2017	11	14	<5	22	<5		<5	<5	<5	11
MW-03	Sap	1/1/2002	343	<5	<5			32	<5	250		10
MW-03	Sap	6/1/2002	290	5	47			46	<2	70		3
MW-03	Sap	9/1/2002	510	170	940			660	<10	1900		30
MW-03	Sap	12/1/2002	72	<5	78.9			35.2	<5	84.9		<2
MW-03	Sap	5/1/2003	<5	<5	<5			<10	<5	<5		<2
MW-03	Sap	11/1/2003	<5	<5	<5			<10	<5	<5		<5
MW-03	Sap	5/1/2004	433	431	<5			1314	6	272		<5
MW-03	Sap	11/1/2004	1100	900	5600			3200	<5	<5		30
MW-03	Sap	5/1/2005	1120	844	4900			3419	<5	<5		49
MW-03	Sap	11/1/2005	1100	410	5400			890	<5	78		200
MW-03	Sap	5/1/2006	180	66	1800			265	<5	14		49
MW-03	Sap	11/1/2006	162	38	396			68	<5	27		53
MW-03	Sap	5/1/2007	42	12	414			48	<5	54		<5
MW-03	Sap	11/1/2007	65	22	490			66	<5	15		24
MW-03	Sap	5/1/2008	11	5	41			23.3	<5	8.5		2.6
MW-03	Sap	11/1/2008	310	140	1700			320	<5	470		170
MW-03	Sap	2/1/2009	220	71	2100			360	<5	1100		73
MW-03	Sap	5/1/2009	100	42	1600			<	<5	890		51
MW-03	Sap	8/1/2009	320	190	4000			610	5.2	2800		100
MW-03	Sap	11/1/2009	8.9	<5	15			<5	<5	24		90
MW-03	Sap	5/1/2010	11	<5	<5			<5	<5	21		41
MW-03	Sap	11/1/2010	<5	<5	<5			<5	<5	8.6		18
MW-03	Sap	5/24/2011	<5	<5	<5	<5	<5		<5	<5	150	10
MW-03	Sap	11/9/2011	13	<5	<5	<5	<5		<5	22	1200	36
MW-03	Sap	5/15/2012	10	<5	<5	<5	<5		<5	5.3	720	49
MW-03	Sap	11/14/2012	5.3	<5	<5	<5	<5		<5	9.2	1100	49

Table 6. Historical Groundwater Results for COCs

Location	Geologic Zone	Date Sampled	BTEX						Chlorinated Hydrocarbons			
			Benzene µg/L	Ethyl benzene µg/L	Toluene µg/L	m&p-Xylene µg/L	o-Xylene µg/L	Xylenes (unspecified) µg/L	Tetrachloro-ethene µg/L	Trichloro-ethene µg/L	cis-1,2-Dichloroethene µg/L	Vinyl chloride µg/L
Type 1 RRS			**5**	**700**	**1000**	**2**	**1**	**10000**	**5**	**5**	**70**	**2**
Residential RRS			**5.4**	**700**	**1000**	**58**	**58**	**10000**	**19**	**5**	**70**	**2**
NonResidential RRS			**8.7**	**700**	**5200**	**290**	**290**	**10000**	**98**	**5.2**	**200**	**2**
MW-03	Sap	5/16/2013	<5	<5	<5	<5	<5		<5	<5	230	22
MW-03	Sap	10/8/2013	8.7	<5	<5	<5	<5		<5	7.8	43	7.8
MW-03	Sap	5/28/2014	<5	<5	<5	<5	<5		<5	<5	8.3	<2
MW-03	Sap	11/24/2014	13	5.5	<5	14	<5		<5	<5	<5	<2
MW-03	Sap	5/20/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-03	Sap	11/13/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-04	Sap/PWR	1/1/2002	7	54	103			86	<5	158		<2
MW-04	Sap/PWR	6/1/2002	6	9	110			26	<2	49		<2
MW-04	Sap/PWR	9/1/2002	64	<40	1600			120	<40	210		<40
MW-04	Sap/PWR	12/1/2002	15.9	85.3	955			360	<5	103		<5
MW-04	Sap/PWR	5/1/2003	<5	<5	<5			<10	<5	<5		<2
MW-04	Sap/PWR	11/1/2003	<5	45	1070			458	<5	115		<5
MW-04	Sap/PWR	5/1/2004	90	181	<5			729	<5	1982		<5
MW-04	Sap/PWR	11/1/2004	<5	8	27			96	<5	<5		<5
MW-04	Sap/PWR	5/1/2005	133	45	72			247	<5	<5		<5
MW-04	Sap/PWR	11/1/2005	51	120	2200			460	<5	340		<5
MW-04	Sap/PWR	5/1/2006	86	38	1200			159	<5	42		11
MW-04	Sap/PWR	11/1/2006	89	18	1970			210	<5	144		5
MW-04	Sap/PWR	5/1/2007	16	7	306			33	<5	20		<5
MW-04	Sap/PWR	11/1/2007	78	21	1100			147	<5	420		16
MW-04	Sap/PWR	5/1/2008	71	15	220			62	<5	240		52
MW-04	Sap/PWR	11/1/2008	150	20	1300			264	<5	310		250
MW-04	Sap/PWR	8/1/2009	38	10	92			31	<	33		20
MW-04	Sap/PWR	11/1/2009	150	87	3600			448	<5	1500		100
MW-04	Sap/PWR	5/1/2010	59	19	700			128	<5	170		870
MW-04	Sap/PWR	11/1/2010	<5	<5	<5			<5	<5	<5		25
MW-04	Sap/PWR	5/25/2011	<5	<5	<5	<5	<5		<5	<5	59	57
MW-04	Sap/PWR	11/11/2011	6.5	<5	33	<5	<5		<5	10	120	68
MW-04	Sap/PWR	5/15/2012	<5	<5	<5	<5	<5		<5	12	100	14
MW-04	Sap/PWR	11/12/2012	21	<5	<5	<5	<5		<5	87	2400	45
MW-04	Sap/PWR	5/16/2013	5.9	5.4	170	25	7.1		<5	<5	77	16
MW-04	Sap/PWR	10/8/2013	<5	<5	9.4	<5	<5		<5	6.2	38	<2
MW-04	Sap/PWR	5/29/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-04	Sap/PWR	11/24/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-04	Sap/PWR	11/13/2015	<5	<5	<5	<5	<5		<5	<5	12	4.2
MW-05	BR	1/1/2002	67	31	131			44	<5	10700		<2
MW-05	BR	9/1/2002	<500	<500	580			<1300	<500	19000		<500
MW-05	BR	12/1/2002	<5	19.6	34.8			34	<5	976		<5
MW-05	BR	5/1/2003	<5	73	125			415	8.5	2430		<2
MW-05	BR	8/1/2003	<5	<5	<5			<10	<5	5460		21.9
MW-05	BR	11/1/2003	<5	<5	<5			<10	<5	950		<5
MW-05	BR	5/1/2004	<5	<5	140			69	<5	<5		<5
MW-05	BR	11/1/2004	105	118	6700			1003	<5	2480		<5
MW-05	BR	5/1/2005	120	49	5900			890	<5	1850		<5
MW-05	BR	11/1/2005	35	61	230			45	<5	5300		14
MW-05	BR	5/1/2006	57	61	580			120	<5	740		19
MW-05	BR	11/1/2006	17	32	72			20	<5	1140		17
MW-05	BR	5/1/2007	110	68	1600			230	<5	69		42
MW-05	BR	11/1/2007	29	38	200			32	<5	3600		160
MW-05	BR	5/1/2008	10	18	24			7	<5	1300		55
MW-05	BR	11/1/2008	<2500	<2500	<2500			<5000	<2500	<2500		<2500
MW-05	BR	2/1/2009	<5	<5	9			<	<5	320		78
MW-05	BR	5/1/2009	<5	<5	<5			<	<5	9.4		<
MW-05	BR	8/1/2009	<5	<5	<5			<	<5	19		<
MW-05	BR	11/1/2009	<5	<5	24			<5	<5	190		230
MW-05	BR	5/1/2010	6.2	18	87			6.5	<5	170		<2
MW-05	BR	11/1/2010	5.6	8.6	39			<5	<5	1200		790
MW-05	BR	5/25/2011	7.2	15	41	5.6	<5		<5	1700	14000	360
MW-05	BR	5/27/2011	8	17	42			<5	<5	1300		460
MW-05	BR	11/11/2011	<500	<500	<500	<500	<500		<500	4900	16000	<200

Table 6. Historical Groundwater Results for COCs

Location	Geologic Zone	Date Sampled	BTEX						Chlorinated Hydrocarbons			
			Benzene µg/L	Ethyl benzene µg/L	Toluene µg/L	m&p-Xylene µg/L	o-Xylene µg/L	Xylenes (unspecified) µg/L	Tetrachloro-ethene µg/L	Trichloro-ethene µg/L	cis-1,2-Dichloroethene µg/L	Vinyl chloride µg/L
Type 1 RRS			**5**	**700**	**1000**	**2**	**1**	**10000**	**5**	**5**	**70**	**2**
Residential RRS			**5.4**	**700**	**1000**	**58**	**58**	**10000**	**19**	**5**	**70**	**2**
NonResidential RRS			**8.7**	**700**	**5200**	**290**	**290**	**10000**	**98**	**5.2**	**200**	**2**
MW-05	BR	5/15/2012	11	<5	5.8	<5	<5		<5	6400	16000	130
MW-05	BR	11/15/2012	<500	<500	<500	<500	<500		<500	4200	24000	350
MW-05	BR	5/16/2013	<2500	<2500	<2500	<2500	<2500		<2500	3500	27000	<1000
MW-05	BR	5/28/2014	<5	<5	<5	<5	<5		<5	110	96	<2
MW-06	Sap/PWR	1/1/2002	<5	<5	<5			<10	<5	<5		<2
MW-06	Sap/PWR	6/1/2002	<2	<2	<2			<5	<2	<2		<2
MW-06	Sap/PWR	9/1/2002										
MW-06	Sap/PWR	12/1/2002	<5	<5	<5			<5	<5	<5		<5
MW-06	Sap/PWR	5/1/2003	<5	<5	<5			<5	<5	<5		<2
MW-06	Sap/PWR	11/1/2003	<5	<5	<5			<10	<5	<5		<5
MW-06	Sap/PWR	5/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-06	Sap/PWR	11/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-06	Sap/PWR	5/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-06	Sap/PWR	11/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-06	Sap/PWR	5/1/2006	<5	<5	<5			<10	<5	<5		<5
MW-06	Sap/PWR	11/1/2006	<5	<5	<5			<10	<5	<5		<5
MW-06	Sap/PWR	5/1/2007	<5	<5	<5			<10	<5	<5		<5
MW-06	Sap/PWR	11/1/2007	<5	<5	<5			<10	<5	<5		<5
MW-06	Sap/PWR	5/1/2008	<5	<5	<5			<15	<5	<5		<5
MW-06	Sap/PWR	11/1/2008	<5	<5	<5			<15	<5	<5		<5
MW-06	Sap/PWR	5/1/2009	<5	<5	<5			<	<5	5.5		<5
MW-06	Sap/PWR	8/1/2009	<5	<5	<5			<	<5	6.2		<5
MW-06	Sap/PWR	11/1/2009	<5	<5	<5			<5	<5	<5		<5
MW-06	Sap/PWR	5/1/2010	<5	<5	<5			<5	<5	<5		<5
MW-06	Sap/PWR	11/1/2010	<5	<5	<5			<5	<5	<5		<5
MW-06	Sap/PWR	5/23/2011	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-06	Sap/PWR	11/8/2011	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-06	Sap/PWR	5/8/2012	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-06	Sap/PWR	11/16/2012	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-06	Sap/PWR	5/14/2013	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-06	Sap/PWR	10/10/2013	<5	<5	<5	<5	<5		<5	<5	11	<2
MW-06	Sap/PWR	5/20/2014	<5	<5	<5	<5	<5		<5	<5	7.8	<2
MW-06	Sap/PWR	11/18/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-06	Sap/PWR	5/15/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-06	Sap/PWR	11/11/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-07	BR	1/1/2002	<5	102	1500			585	7	43000		115
MW-07	BR	6/1/2002	<2	280	2500			1600	11	94000		<2
MW-07	BR	9/1/2002	<100	<100	210			360	<100	23000		<100
MW-07	BR	12/1/2002	<5	180	800			1120	11.8	34600		<5
MW-07	BR	5/1/2003	1360	713	<5			1893	<5	376		2060
MW-07	BR	8/1/2003	1590	401	3990			1820	<5	<5		1690
MW-07	BR	11/1/2003	<5	<5	<5			<10	<5	13000		<5
MW-07	BR	5/1/2004	<5	64	67			359375	14	<5		<5
MW-07	BR	11/1/2004	<5	21	41			85	<5	5300		<5
MW-07	BR	5/1/2005	37	22	197			144	<5	7620		<5
MW-07	BR	11/1/2005	5	7	68			70	8	26000		<5
MW-07	BR	5/1/2006	10	11	190			62	9.2	3400		<5
MW-07	BR	11/1/2006	<5	<5	12			8	8	25100		<5
MW-07	BR	5/1/2007	6	<5	98			31	16	34000		<5
MW-07	BR	11/1/2007	7	<5	82			19	17	23000		3
MW-07	BR	5/1/2008	10	17	120			75	14	23000		<2
MW-07	BR	11/1/2008	<5000	<5000	<5000			<10000	<5000	18000		<5000
MW-07	BR	2/1/2009	<5	<5	<5			<	8.6	23000		<5
MW-07	BR	5/1/2009	<5	9.5	19			72	21	37000		<5
MW-07	BR	8/1/2009	<5	<5	<5			<	<5	33000		<5
MW-07	BR	11/1/2009	<5	<5	5.1			44	20	29000		<5
MW-07	BR	5/1/2010	<5	<5	5.9			16	17	22000		<5
MW-07	BR	11/1/2010	<2500	<2500	<250			<2500	<2500	56000		<2500
MW-07	BR	5/24/2011	<2500	<2500	<2500	<2500	<2500		<2500	35000	<2500	<1000
MW-07	BR	5/27/2011	<5	<5	<5			25	19	73000		<2

Table 6. Historical Groundwater Results for COCs

Location	Geologic Zone	Date Sampled	BTEX						Chlorinated Hydrocarbons			
			Benzene µg/L	Ethyl benzene µg/L	Toluene µg/L	m&p-Xylene µg/L	o-Xylene µg/L	Xylenes (unspecified) µg/L	Tetrachloro-ethene µg/L	Trichloro-ethene µg/L	cis-1,2-Dichloroethene µg/L	Vinyl chloride µg/L
Type 1 RRS			**5**	**700**	**1000**	**2**	**1**	**10000**	**5**	**5**	**70**	**2**
Residential RRS			**5.4**	**700**	**1000**	**58**	**58**	**10000**	**19**	**5**	**70**	**2**
NonResidential RRS			**8.7**	**700**	**5200**	**290**	**290**	**10000**	**98**	**5.2**	**200**	**2**
MW-07	BR	11/9/2011	<2500	<2500	<2500	<2500	<2500		<2500	20000	<2500	<1000
MW-07	BR	5/16/2012	<5	<5	<5	<5	<5		21	41000	2100	<2
MW-07	BR	11/15/2012	<250	<250	<250	<250	<250		<250	22000	1600	<100
MW-07	BR	5/14/2013	<5	<5	<5	<5	<5		7	6.4	24	6.8
MW-07	BR	10/8/2013	<5	<5	8.3	6.6	19		9	34000	48	<2
MW-07	BR	2/19/2014	<2500	<2500	<2500	<2500	<2500		<2500	21000	<2500	<1000
MW-07	BR	5/29/2014	<5	140	1700	530	200		14	120000	6600	<2
MW-07	BR	11/25/2014	<500	<500	<500	<500	<500		<500	18000	15000	<200
MW-07	BR	2/18/2015	<5	<5	<5	<5	<5		8.4	12000	12000	<2
MW-07	BR	5/19/2015	<5	10	6.4	13	<5		7.5	10000	6200	<2
MW-07	BR	11/17/2015	<5	22	100	120	42		5	10000	860	<2
MW-07	BR	1/19/2017	<5	<5	<5	<5	<5		<5	9	74	2.9
MW-08	Sap/PWR	1/1/2002	111	1780	10900			2460	11	3790		341
MW-08	Sap/PWR	6/1/2002	<20	31	43			<50	<20	100		51
MW-08	Sap/PWR	9/1/2002	<2	15	29			13	2	260		54
MW-08	Sap/PWR	12/1/2002	6.29	52	225			110	<5	82.8		52
MW-08	Sap/PWR	5/1/2003	<5	<5	<5			<10	<5	<5		<2
MW-08	Sap/PWR	11/1/2003	<5	205	500			84.7	<5	42		56.1
MW-08	Sap/PWR	5/1/2004	33	428	458			879	14	603		<5
MW-08	Sap/PWR	11/1/2004	<5	117	71			73	<5	<5		145
MW-08	Sap/PWR	5/1/2005	11	113	97			77	<5	<5		90
MW-08	Sap/PWR	11/1/2005	5	13	130			52	6	33		17
MW-08	Sap/PWR	5/1/2006	11	8	320			39.8	<5	760		7.6
MW-08	Sap/PWR	11/1/2006	<5	<5	60			<10	<5	180		<5
MW-08	Sap/PWR	5/1/2007	<5	<5	32			<10	<5	595		<5
MW-08	Sap/PWR	11/1/2007	10	6	140			22	<5	55		63
MW-08	Sap/PWR	5/1/2008	35	32	260			121	<5	33		38
MW-08	Sap/PWR	11/1/2008	<5	<5	41			<15	<5	660		24
MW-08	Sap/PWR	2/1/2009	<5	<5	<5			<	<5	6.3		87
MW-08	Sap/PWR	5/1/2009	<5	<5	<5			<	<5	7.3		37
MW-08	Sap/PWR	8/1/2009	<5	<5	<5			<	<5	5.3		36
MW-08	Sap/PWR	11/1/2009	<5	<5	<5			<5	<5	<5		18
MW-08	Sap/PWR	5/1/2010	<5	22	<5			<5	<5	5.9		86
MW-08	Sap/PWR	11/1/2010	15	65	1200			171	7.8	50		60
MW-08	Sap/PWR	5/24/2011	330	850	24000	2000	800		6.6	17	17000	590
MW-08	Sap/PWR	11/9/2011	46	170	3600	360	190		<5	17	3100	740
MW-08	Sap/PWR	5/16/2012	<5	<5	<5	<5	<5		10	9.8	41	<2
MW-08	Sap/PWR	11/15/2012	<5	<5	<5	<5	<5		6.8	5.7	<5	<2
MW-08	Sap/PWR	5/14/2013	<5	<5	<5	<5	<5		5.2	<5	57	<2
MW-08	Sap/PWR	10/8/2013	14	120	2700	310	120		<5	<5	1900	110
MW-08	Sap/PWR	2/19/2014	13	85	970	98	91		<5	7.1	1900	170
MW-08	Sap/PWR	5/30/2014	<5	<5	<5	<5	<5		<5	6.4	72	24
MW-08	Sap/PWR	11/25/2014	<5	<5	<5	<5	<5		<5	<5	17	2.9
MW-08	Sap/PWR	2/18/2015	<5	<5	<5	<5	<5		<5	<5	7.7	11
MW-08	Sap/PWR	5/21/2015	<5	<5	<5	<5	<5		<5	<5	8.7	15
MW-08	Sap/PWR	11/16/2015	<5	<5	<5	<5	<5		<5	<5	95	160
MW-09	BR	1/1/2002	<5	<5	<5			<10	<5	183		<2
MW-09	BR	6/1/2002	<2	<2	7			5	<2	330		<2
MW-09	BR	9/1/2002	<2	<2	<2			<5	<2	7		<2
MW-09	BR	12/1/2002	<5	<5	<5			<5	<5	256		<5
MW-09	BR	5/1/2003	<5	<5	<5			<10	<5	<5		<2
MW-09	BR	11/1/2003	<5	<5	<5			<10	<5	<5		<5
MW-09	BR	5/1/2004	<5	<5	<5			<10	<5	32		<5
MW-09	BR	11/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-09	BR	5/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-09	BR	11/1/2005	10	16	120			35	<5	8		<5
MW-09	BR	5/1/2006	<5	<5	<5			<10	<5	17		<5
MW-09	BR	11/1/2006	<5	<5	<5			<10	<5	126		<5
MW-09	BR	5/1/2007	5	<5	<5			<10	<5	405		10
MW-09	BR	11/1/2007	<5	<5	<5			<10	<5	25		<5

Table 6. Historical Groundwater Results for COCs

Location	Geologic Zone	Date Sampled	BTEX						Chlorinated Hydrocarbons			
			Benzene µg/L	Ethyl benzene µg/L	Toluene µg/L	m&p-Xylene µg/L	o-Xylene µg/L	Xylenes (unspecified) µg/L	Tetrachloro-ethene µg/L	Trichloro-ethene µg/L	cis-1,2-Dichloroethene µg/L	Vinyl chloride µg/L
Type 1 RRS			5	700	1000	2	1	10000	5	5	70	2
Residential RRS			5.4	700	1000	58	58	10000	19	5	70	2
NonResidential RRS			8.7	700	5200	290	290	10000	98	5.2	200	2
MW-09	BR	5/1/2008	<5	<5	<5			<15	<5	10		<2
MW-09	BR	11/1/2008	17	<5	<5			<15	<5	1400		19
MW-09	BR	2/1/2009	30	<5	<5			<15	<5	3000		74
MW-09	BR	5/1/2009	66	<5	<5			<15	<5	1600		110
MW-09	BR	8/1/2009	140	<5	<5			<15	<5	590		170
MW-09	BR	11/1/2009	67	<5	<5			<5	<5	280		100
MW-09	BR	5/1/2010	21	<5	<5			<5	<5	3400		30
MW-09	BR	11/1/2010	14	<5	<5			<5	<5	280		22
MW-09	BR	5/24/2011	<5	<5	<5	<5	<5		<5	12	98	15
MW-09	BR	11/11/2011	<5	<5	<5	<5	<5		<5	49	94	13
MW-09	BR	5/14/2012	<5	<5	<5	<5	<5		<5	57	120	8.2
MW-09	BR	11/14/2012	<5	<5	<5	<5	<5		<5	550	250	12
MW-09	BR	5/15/2013	<5	<5	<5	<5	<5		<5	11	34	3.2
MW-09	BR	10/10/2013	<5	<5	<5	<5	<5		<5	<5	20	5.6
MW-09	BR	5/27/2014	<5	<5	<5	<5	<5		<5	5.1	13	4.9
MW-09	BR	11/21/2014	<5	<5	<5	<5	<5		<5	19	17	6.7
MW-09	BR	5/20/2015	<5	<5	<5	<5	<5		<5	56	64	<2
MW-09	BR	11/19/2015	<5	<5	<5	<5	<5		<5	<5	9.1	2.6
MW-10	Sap/PWR	1/1/2002	<5	<5	<5			<10	<5	<5		<2
MW-10	Sap/PWR	6/1/2002	<2	<2	<2			<5	<2	3		<5
MW-10	Sap/PWR	9/1/2002	<2	<2	<2			<5	<2	<2		<2
MW-10	Sap/PWR	12/1/2002	<5	<5	<5			<5	<5	<5		<5
MW-10	Sap/PWR	5/1/2003	<5	<5	<5			<10	<5	<5		<2
MW-10	Sap/PWR	11/1/2003	<5	<5	<5			<10	<5	<5		<5
MW-10	Sap/PWR	5/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-10	Sap/PWR	11/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-10	Sap/PWR	5/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-10	Sap/PWR	11/1/2005	5	11	66			25	<5	<5		<5
MW-10	Sap/PWR	5/1/2006	<5	<5	<5			<10	<5	10		<5
MW-10	Sap/PWR	11/1/2006	<5	<5	<5			<10	<5	21		<5
MW-10	Sap/PWR	5/1/2007	<5	<5	<5			<10	<5	70		<5
MW-10	Sap/PWR	11/1/2007	<5	<5	<5			<10	<5	10		2
MW-10	Sap/PWR	5/1/2008	<5	<5	<5			<15	<5	<5		<2
MW-10	Sap/PWR	11/1/2008	140	<5	<5			<15	<5	210		310
MW-10	Sap/PWR	2/1/2009	190	<5	<5			<15	<5	220		470
MW-10	Sap/PWR	5/1/2009	490	<5	<5			<15	<5	230		640
MW-10	Sap/PWR	8/1/2009	63	<5	<5			<15	<5	76		77
MW-10	Sap/PWR	11/1/2009	21	<5	<5			<5	<5	24		29
MW-10	Sap/PWR	5/1/2010	8.2	<5	<5			<5	<5	8		13
MW-10	Sap/PWR	11/1/2010	<5	<5	<5			<5	<5	<5		10
MW-10	Sap/PWR	5/24/2011	<5	<5	<5	<5	<5		<5	<5	37	11
MW-10	Sap/PWR	11/11/2011	<5	<5	<5	<5	<5		<5	<5	20	13
MW-10	Sap/PWR	5/15/2012	<5	<5	<5	<5	<5		<5	<5	18	9.9
MW-10	Sap/PWR	11/14/2012	<5	<5	<5	<5	<5		<5	<5	6	<2
MW-10	Sap/PWR	5/15/2013	<5	<5	<5	<5	<5		<5	<5	<5	3.2
MW-10	Sap/PWR	10/10/2013	<5	<5	<5	<5	<5		<5	<5	11	8.9
MW-10	Sap/PWR	5/27/2014	<5	<5	<5	<5	<5		<5	<5	5.8	2.5
MW-10	Sap/PWR	11/21/2014	<5	<5	5.3	<5	<5		<5	<5	5.3	3
MW-10	Sap/PWR	5/20/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-10	Sap/PWR	11/19/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-11	PWR	1/1/2002	<5	<5	<5			<10	<5	6		<2
MW-11	PWR	6/1/2002	<2	<2	<2			<5	<2	6		<2
MW-11	PWR	9/1/2002										
MW-11	PWR	12/1/2002	<5	<5	<5			<5	<5	<5		<5
MW-11	PWR	5/1/2003	<5	<5	<5			<10	<5	<5		<2
MW-11	PWR	11/1/2003	<5	<5	<5			<10	<5	<5		<5
MW-11	PWR	5/1/2004	<5	<5	<5			<10	<5	7		<5
MW-11	PWR	11/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-11	PWR	5/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-11	PWR	11/1/2005	<5	<5	<5			<10	<5	19		<5

Table 6. Historical Groundwater Results for COCs

			BTEX						Chlorinated Hydrocarbons			
Location	Geologic Zone	Date Sampled	Benzene µg/L	Ethyl benzene µg/L	Toluene µg/L	m&p-Xylene µg/L	o-Xylene µg/L	Xylenes (unspecified) µg/L	Tetrachloro-ethene µg/L	Trichloro-ethene µg/L	cis-1,2-Dichloroethene µg/L	Vinyl chloride µg/L
Type 1 RRS			**5**	**700**	**1000**	**2**	**1**	**10000**	**5**	**5**	**70**	**2**
Residential RRS			**5.4**	**700**	**1000**	**58**	**58**	**10000**	**19**	**5**	**70**	**2**
NonResidential RRS			**8.7**	**700**	**5200**	**290**	**290**	**10000**	**98**	**5.2**	**200**	**2**
MW-11	PWR	5/1/2006	<5	<5	<5			<10	<5	23		<5
MW-11	PWR	11/1/2006	<5	<5	<5			<10	<5	29		<5
MW-11	PWR	5/1/2007	<5	<5	<5			<10	<5	32		<5
MW-11	PWR	11/1/2007	<5	<5	<5			<10	<5	34		<5
MW-11	PWR	5/1/2008	<5	<5	<5			<15	<5	21		<2
MW-11	PWR	11/1/2008	<5	<5	<5			<15	<5	38		<2
MW-11	PWR	2/1/2009	<5	<5	<5			<15	<5	160		<2
MW-11	PWR	5/1/2009	<5	<5	<5			<15	<5	150		<2
MW-11	PWR	8/1/2009	<5	<5	<5			<15	<5	180		<2
MW-11	PWR	11/1/2009	<5	<5	<5			<5	<5	190		<5
MW-11	PWR	5/1/2010	<5	<5	<5			<5	<5	120		<5
MW-11	PWR	11/1/2010	<5	<5	<5			<5	<5	95		<5
MW-11	PWR	5/23/2011	<5	<5	<5	<5	<5		<5	52	81	<2
MW-11	PWR	11/9/2011	<5	<5	<5	<5	<5		<5	35	47	<2
MW-11	PWR	5/8/2012	<5	<5	<5	<5	<5		<5	36	60	2.2
MW-11	PWR	11/13/2012	<5	<5	<5	<5	<5		<5	24	48	<2
MW-11	PWR	5/15/2013	<5	<5	<5	<5	<5		<5	24	50	3.8
MW-11	PWR	10/9/2013	<5	<5	<5	<5	<5		<5	15	26	<2
MW-11	PWR	5/28/2014	<5	<5	<5	<5	<5		<5	<5	9.6	<2
MW-11	PWR	11/20/2014	<5	<5	<5	<5	<5		<5	<5	7.6	<2
MW-11	PWR	5/18/2015	<5	<5	<5	<5	<5		<5	<5	6.6	<2
MW-11	PWR	11/19/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-11	PWR	1/17/2017	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-12	Sap/PWR	1/1/2002	<5	<5	<5			<10	<5	<5		<2
MW-12	Sap/PWR	6/1/2002	<2	<2	<2			<5	<2	3		<2
MW-12	Sap/PWR	12/1/2002	<5	<5	<5			<5	<5	<5		<5
MW-12	Sap/PWR	5/1/2003	<5	<5	<5			<10	<5	<5		<2
MW-12	Sap/PWR	11/1/2003	<5	<5	<5			<10	<5	<5		<5
MW-12	Sap/PWR	5/1/2004	<5	<5	<5			<10	<5	11		<5
MW-12	Sap/PWR	11/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-12	Sap/PWR	5/1/2005	<5	<5	<5			<10	<5	9		<5
MW-12	Sap/PWR	11/1/2005	<5	<5	<5			<10	<5	64		<5
MW-12	Sap/PWR	5/1/2006	<5	<5	<5			<10	<5	96		<5
MW-12	Sap/PWR	11/1/2006	<5	<5	<5			<10	<5	96		<5
MW-12	Sap/PWR	5/1/2007	<5	<5	<5			<10	<5	72		<5
MW-12	Sap/PWR	11/1/2007	<5	<5	<5			<10	<5	140		<5
MW-12	Sap/PWR	5/1/2008	<5	<5	<5			<15	23	120		<2
MW-12	Sap/PWR	11/1/2008	<5	<5	<5			<15	6.4	74		<5
MW-12	Sap/PWR	2/1/2009	<5	<5	<5			<15	<5	190		<5
MW-12	Sap/PWR	5/1/2009	<5	<5	<5			<15	<5	200		<5
MW-12	Sap/PWR	8/1/2009	<5	<5	<5			<15	6.1	270		<5
MW-12	Sap/PWR	11/1/2009	<5	<5	<5			<5	<5	330		<5
MW-12	Sap/PWR	5/1/2010	<5	<5	<5			<5	5.6	310		<5
MW-12	Sap/PWR	10/1/2010	<5	<5	<5			<10	<5	480		10
MW-12	Sap/PWR	11/1/2010	<5	<5	<5			<5	9.9	310		<5
MW-12	Sap/PWR	5/23/2011	<5	<5	<5	<5	<5		<5	310	480	2.8
MW-12	Sap/PWR	11/9/2011	<5	<5	<5	<5	<5		12	120	190	<2
MW-12	Sap/PWR	5/8/2012	<5	<5	<5	<5	<5		14	110	240	<2
MW-12	Sap/PWR	11/13/2012	<5	<5	<5	<5	<5		7.8	100	250	<2
MW-12	Sap/PWR	5/15/2013	<5	<5	<5	<5	<5		<5	160	240	<2
MW-12	Sap/PWR	10/9/2013	<5	<5	<5	<5	<5		<5	480	510	10
MW-12	Sap/PWR	5/27/2014	<5	<5	<5	<5	<5		<5	85	130	2.7
MW-12	Sap/PWR	11/19/2014	<5	<5	<5	<5	<5		<5	7.9	33	<2
MW-12	Sap/PWR	5/18/2015	<5	<5	<5	<5	<5		<5	22	39	<2
MW-12	Sap/PWR	11/19/2015	<5	<5	<5	<5	<5		<5	24	47	<2
MW-13	PWR	1/1/2002	<5	<5	<5			<10	<5	<5		<2
MW-13	PWR	6/1/2002	<2	<2	<2			<5	<2	<2		<2
MW-13	PWR	9/1/2002										
MW-13	PWR	12/1/2002	<5	<5	<5			<5	<5	<5		<5
MW-13	PWR	5/1/2003	<5	<5	<5			<10	<5	<5		<2

Table 6. Historical Groundwater Results for COCs

Location	Geologic Zone	Date Sampled	BTEX						Chlorinated Hydrocarbons			
			Benzene µg/L	Ethyl benzene µg/L	Toluene µg/L	m&p-Xylene µg/L	o-Xylene µg/L	Xylenes (unspecified) µg/L	Tetrachloro-ethene µg/L	Trichloro-ethene µg/L	cis-1,2-Dichloroethene µg/L	Vinyl chloride µg/L
Type 1 RRS			**5**	**700**	**1000**	**2**	**1**	**10000**	**5**	**5**	**70**	**2**
Residential RRS			**5.4**	**700**	**1000**	**58**	**58**	**10000**	**19**	**5**	**70**	**2**
NonResidential RRS			**8.7**	**700**	**5200**	**290**	**290**	**10000**	**98**	**5.2**	**200**	**2**
MW-13	PWR	11/1/2003	<5	<5	<5			<10	<5	<5		<5
MW-13	PWR	5/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-13	PWR	11/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-13	PWR	5/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-13	PWR	11/1/2005	<5	<5	<5			<10	<5	6		<5
MW-13	PWR	5/1/2006	<5	<5	<5			<10	<5	<5		<5
MW-13	PWR	11/1/2006	<5	<5	<5			<10	<5	<5		<5
MW-13	PWR	5/1/2007	<5	<5	<5			<10	<5	<5		<5
MW-13	PWR	11/1/2007	<5	<5	<5			<10	<5	<5		<5
MW-13	PWR	5/1/2008	<5	<5	<5			<15	<5	17		<2
MW-13	PWR	11/1/2008	<5	<5	<5			<15	<5	<5		<5
MW-13	PWR	11/1/2009	<5	<5	<5			<5	<5	5.3		<5
MW-13	PWR	5/1/2010	<5	<5	<5			<5	<5	<5		<5
MW-13	PWR	11/1/2010	<5	<5	<5			<5	<5	<5		<5
MW-13	PWR	5/23/2011	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-13	PWR	11/10/2011	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-13	PWR	5/10/2012	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-13	PWR	11/13/2012	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-13	PWR	5/15/2013	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-13	PWR	10/9/2013	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-13	PWR	5/21/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-13	PWR	11/19/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-13	PWR	5/18/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-13	PWR	11/19/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-14	Sap/PWR	1/1/2002	<5	<5	<5			<10	<5	<5		<2
MW-14	Sap/PWR	6/1/2002	<2	<2	<2			<5	<2	<2		<2
MW-14	Sap/PWR	12/1/2002	<5	<5	<5			<5	<5	<5		<5
MW-14	Sap/PWR	5/1/2003	<5	<5	<5			<10	<5	<5		<2
MW-14	Sap/PWR	11/1/2003	<5	<5	<5			<10	<5	<5		<5
MW-14	Sap/PWR	5/1/2004	<5	<5	<5			<10	<5	6		<5
MW-14	Sap/PWR	11/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-14	Sap/PWR	5/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-14	Sap/PWR	11/1/2005	<5	<5	<5			<10	<5	10		<5
MW-14	Sap/PWR	5/1/2006	<5	<5	<5			<10	<5	<5		<5
MW-14	Sap/PWR	11/1/2006	<5	<5	<5			<10	<5	5		<5
MW-14	Sap/PWR	5/1/2007	<5	<5	<5			<10	<5	<5		<5
MW-14	Sap/PWR	11/1/2007	<5	<5	<5			<10	<5	<5		<5
MW-14	Sap/PWR	5/1/2008	<5	<5	<5			<15	<5	13		<2
MW-14	Sap/PWR	11/1/2008	<5	<5	<5			<15	<5	5		<5
MW-14	Sap/PWR	2/1/2009	<5	<5	<5			<5	<5	<5		<5
MW-14	Sap/PWR	5/1/2009	<5	<5	<5			<5	<5	7.3		<5
MW-14	Sap/PWR	8/1/2009	<5	<5	<5			<5	<5	<5		<5
MW-14	Sap/PWR	11/1/2009	<5	<5	<5			<5	<5	<5		<5
MW-14	Sap/PWR	5/1/2010	<5	<5	<5			<5	<5	<5		<5
MW-14	Sap/PWR	10/1/2010	<5	<5	<5			<10	<5	<5		<2
MW-14	Sap/PWR	11/1/2010	<5	<5	<5			<5	<5	<5		<5
MW-14	Sap/PWR	5/23/2011	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-14	Sap/PWR	11/10/2011	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-14	Sap/PWR	5/10/2012	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-14	Sap/PWR	11/13/2012	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-14	Sap/PWR	5/15/2013	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-14	Sap/PWR	10/9/2013	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-14	Sap/PWR	5/21/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-14	Sap/PWR	11/19/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-14	Sap/PWR	5/18/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-14	Sap/PWR	11/17/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-15	Sap/PWR	1/1/2002	<5	<5	<5			<10	<5	<5		<2
MW-15	Sap/PWR	6/1/2002	<2	<2	<2			<5	<2	<2		<2
MW-15	Sap/PWR	9/1/2002										
MW-15	Sap/PWR	12/1/2002	<5	<5	<5			<5	<5	<5		<5

Table 6. Historical Groundwater Results for COCs

Location	Geologic Zone	Date Sampled	BTEX						Chlorinated Hydrocarbons			
			Benzene µg/L	Ethyl benzene µg/L	Toluene µg/L	m&p-Xylene µg/L	o-Xylene µg/L	Xylenes (unspecified) µg/L	Tetrachloro-ethene µg/L	Trichloro-ethene µg/L	cis-1,2-Dichloroethene µg/L	Vinyl chloride µg/L
Type 1 RRS			5	700	1000	2	1	10000	5	5	70	2
Residential RRS			5.4	700	1000	58	58	10000	19	5	70	2
NonResidential RRS			8.7	700	5200	290	290	10000	98	5.2	200	2
MW-15	Sap/PWR	5/1/2003	<5	<5	<5			<10	<5	<5		<2
MW-15	Sap/PWR	11/1/2003	<5	<5	<5			<10	<5	<5		<5
MW-15	Sap/PWR	5/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-15	Sap/PWR	11/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-15	Sap/PWR	5/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-15	Sap/PWR	11/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-15	Sap/PWR	5/1/2006	<5	<5	<5			<10	<5	<5		<5
MW-15	Sap/PWR	11/1/2006	<5	<5	<5			<10	<5	<5		<5
MW-15	Sap/PWR	5/1/2007	<5	<5	<5			<10	<5	<5		<5
MW-15	Sap/PWR	11/1/2007	<5	<5	<5			<10	<5	<5		<5
MW-15	Sap/PWR	5/1/2008	<5	<5	<5			<15	<5	<5		<2
MW-15	Sap/PWR	11/1/2008	<5	<5	<5			<15	<5	<5		<5
MW-15	Sap/PWR	2/1/2009	<5	<5	<5			<15	<5	<5		<5
MW-15	Sap/PWR	5/1/2009	<5	<5	<5			<15	<5	<5		<5
MW-15	Sap/PWR	8/1/2009	<5	<5	<5			<15	<5	<5		<5
MW-15	Sap/PWR	11/1/2009	<5	<5	<5			<15	<5	<5		<5
MW-15	Sap/PWR	5/1/2010	<5	<5	<5			<5	<5	<5		<5
MW-15	Sap/PWR	10/1/2010	<5	<5	<5			<10	<5	<5		<2
MW-15	Sap/PWR	11/1/2010	<5	<5	<5			<5	<5	<5		<5
MW-15	Sap/PWR	5/23/2011	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-15	Sap/PWR	11/9/2011	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-15	Sap/PWR	5/8/2012	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-15	Sap/PWR	11/13/2012	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-15	Sap/PWR	5/13/2013	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-15	Sap/PWR	10/9/2013	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-15	Sap/PWR	5/21/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-15	Sap/PWR	11/19/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-15	Sap/PWR	5/19/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-15	Sap/PWR	11/12/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-16	BR	1/1/2002	<5	<5	<5			<10	<5	<5		<2
MW-16	BR	6/1/2002	<2	<2	<2			<5	<2	<2		<2
MW-16	BR	9/1/2002										
MW-16	BR	12/1/2002	<5	<5	<5			<5	<5	<5		<5
MW-16	BR	5/1/2003	<5	<5	<5			<10	<5	<5		<2
MW-16	BR	11/1/2003	<5	<5	<5			<10	<5	<5		<5
MW-16	BR	5/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-16	BR	11/1/2004	<5	6	<5			<10	<5	<5		<5
MW-16	BR	5/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-16	BR	11/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-16	BR	5/1/2006	<5	<5	<5			<10	<5	<5		<5
MW-16	BR	11/1/2006	<5	<5	<5			<10	<5	<5		<5
MW-16	BR	5/1/2007	<5	<5	<5			<10	<5	<5		<5
MW-16	BR	11/1/2007	<5	<5	<5			<10	<5	<5		<5
MW-16	BR	5/1/2008	<5	<5	<5			<15	<5	<5		3.7
MW-16	BR	11/1/2008	<5	<5	<5			<15	<5	<5		<5
MW-16	BR	2/1/2009	<5	<5	<5			<15	<5	<5		<5
MW-16	BR	5/1/2009	<5	<5	<5			<15	<5	<5		<5
MW-16	BR	8/1/2009	<5	<5	<5			<15	<5	<5		<5
MW-16	BR	11/1/2009	<5	<5	<5			<5	<5	<5		<5
MW-16	BR	5/1/2010	<5	<5	<5			<5	<5	<5		<5
MW-16	BR	11/1/2010	<5	<5	<5			<5	<5	<5		<5
MW-16	BR	5/23/2011	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-16	BR	11/9/2011	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-16	BR	5/8/2012	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-16	BR	11/13/2012	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-16	BR	5/13/2013	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-16	BR	10/9/2013	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-16	BR	5/21/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-16	BR	11/19/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-16	BR	5/19/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2

Table 6. Historical Groundwater Results for COCs

Location	Geologic Zone	Date Sampled	BTEX						Chlorinated Hydrocarbons			
			Benzene µg/L	Ethyl benzene µg/L	Toluene µg/L	m&p-Xylene µg/L	o-Xylene µg/L	Xylenes (unspecified) µg/L	Tetrachloro-ethene µg/L	Trichloro-ethene µg/L	cis-1,2-Dichloroethene µg/L	Vinyl chloride µg/L
Type 1 RRS			**5**	**700**	**1000**	**2**	**1**	**10000**	**5**	**5**	**70**	**2**
Residential RRS			**5.4**	**700**	**1000**	**58**	**58**	**10000**	**19**	**5**	**70**	**2**
NonResidential RRS			**8.7**	**700**	**5200**	**290**	**290**	**10000**	**98**	**5.2**	**200**	**2**
MW-16	BR	11/12/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-17	Sap/PWR	1/1/2002	1870	86	43			312	<5	<5		<2
MW-17	Sap/PWR	6/1/2002	94	13	78			58	<2	<2		<2
MW-17	Sap/PWR	9/1/2002	55	<2	<2			12	<2	<2		<2
MW-17	Sap/PWR	12/1/2002	32.1	<5	<5			<5	<5	<5		<5
MW-17	Sap/PWR	5/1/2003	<5	<5	<5			<10	<5	<5		<2
MW-17	Sap/PWR	11/1/2003	<5	<5	<5			<10	<5	<5		<5
MW-17	Sap/PWR	5/1/2004	85	9	<5			31	<5	<5		<5
MW-17	Sap/PWR	11/1/2004	21	<5	<5			<10	<5	<5		<5
MW-17	Sap/PWR	5/1/2005	31	<5	<5			<10	<5	<5		<5
MW-17	Sap/PWR	11/1/2005	110	<5	<5			14	<5	68		6
MW-17	Sap/PWR	5/1/2006	59	<5	<5			<10	<5	39		<5
MW-17	Sap/PWR	11/1/2006	380	<5	<5			<10	<5	5		<5
MW-17	Sap/PWR	5/1/2007	127	<5	<5			<10	<5	36		<5
MW-17	Sap/PWR	11/1/2007	89	<5	<5			<10	<5	37		<5
MW-17	Sap/PWR	5/1/2008	590	9.7	<5			59	5.2	<5		10
MW-17	Sap/PWR	11/1/2008	400	5.1	<5			13	<5	160		6.4
MW-17	Sap/PWR	2/1/2009	280	<5	14			<10	<5	6.2		6.7
MW-17	Sap/PWR	5/1/2009	30	<5	<5			<10	<5	200		<5
MW-17	Sap/PWR	8/1/2009	130	7.9	5.1			20	6.1	270		<5
MW-17	Sap/PWR	11/1/2009	420	15	6.4			61	<5	330		<5
MW-17	Sap/PWR	5/1/2010	150	21	<5			87.5	<5	<5		<5
MW-17	Sap/PWR	11/1/2010	150	14	<5			50	<5	<5		<5
MW-17	Sap/PWR	5/24/2011	240	110	<5	280	<5		<5	<5	130	13
MW-17	Sap/PWR	11/10/2011	580	71	<5	210	<5		<5	<5	26	3
MW-17	Sap/PWR	5/14/2012	710	88	<5	280	<5		<5	<5	61	5.2
MW-17	Sap/PWR	11/15/2012	200	21	<5	61	<5		<5	<5	17	2.1
MW-17	Sap/PWR	5/14/2013	1300	140	7.5	400	<5		<5	<5	190	21
MW-17	Sap/PWR	10/7/2013	220	61	<5	200	<5		<5	<5	19	2.6
MW-17	Sap/PWR	5/21/2014	560	89	6.8	320	<5		<5	<5	15	11
MW-17	Sap/PWR	11/24/2014	360	100	<5	300	<5		<5	<5	17	6.6
MW-17	Sap/PWR	5/19/2015	170	55	<5	140	<5		<5	<5	11	<2
MW-17	Sap/PWR	11/12/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-17	Sap/PWR	1/18/2017	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-18	Sap/PWR	1/1/2002	<5	<5	<5			<10	<5	<5		<2
MW-18	Sap/PWR	6/1/2002	<2	<2	<2			<5	<2	<2		<5
MW-18	Sap/PWR	9/1/2002										
MW-18	Sap/PWR	12/1/2002	<5	<5	<5			<5	<5	<5		<5
MW-18	Sap/PWR	5/1/2003	<5	<5	<5			<10	<5	<5		<2
MW-18	Sap/PWR	11/1/2003	<5	<5	<5			<10	<5	<5		<5
MW-18	Sap/PWR	5/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-18	Sap/PWR	11/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-18	Sap/PWR	5/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-18	Sap/PWR	11/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-18	Sap/PWR	5/1/2006	<5	<5	<5			<10	<5	<5		<5
MW-18	Sap/PWR	11/1/2006	<5	<5	<5			<10	<5	<5		<5
MW-18	Sap/PWR	5/1/2007	<5	<5	<5			<10	<5	<5		<5
MW-18	Sap/PWR	11/1/2007	<5	<5	<5			<10	<5	<5		<5
MW-18	Sap/PWR	5/1/2008	<5	<5	<5			<15	<5	<5		<2
MW-18	Sap/PWR	11/1/2008	<5	<5	<5			<15	<5	<5		<5
MW-18	Sap/PWR	5/1/2009	<5	<5	<5			<15	<5	<5		<5
MW-18	Sap/PWR	8/1/2009	<5	<5	<5			<15	<5	<5		<5
MW-18	Sap/PWR	11/1/2009	<5	<5	<5			<5	<5	<5		<5
MW-18	Sap/PWR	5/1/2010	<5	<5	<5			<5	<5	<5		<5
MW-18	Sap/PWR	11/1/2010	<5	<5	<5			<5	<5	<5		<5
MW-18	Sap/PWR	5/23/2011	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-18	Sap/PWR	11/8/2011	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-18	Sap/PWR	5/8/2012	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-18	Sap/PWR	11/16/2012	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-18	Sap/PWR	5/14/2013	<5	<5	<5	<5	<5		<5	<5	<5	<2

Table 6. Historical Groundwater Results for COCs

Location	Geologic Zone	Date Sampled	BTEX						Chlorinated Hydrocarbons			
			Benzene µg/L	Ethyl benzene µg/L	Toluene µg/L	m&p-Xylene µg/L	o-Xylene µg/L	Xylenes (unspecified) µg/L	Tetrachloro-ethene µg/L	Trichloro-ethene µg/L	cis-1,2-Dichloroethene µg/L	Vinyl chloride µg/L
Type 1 RRS			**5**	**700**	**1000**	**2**	**1**	**10000**	**5**	**5**	**70**	**2**
Residential RRS			**5.4**	**700**	**1000**	**58**	**58**	**10000**	**19**	**5**	**70**	**2**
NonResidential RRS			**8.7**	**700**	**5200**	**290**	**290**	**10000**	**98**	**5.2**	**200**	**2**
MW-18	Sap/PWR	10/10/2013	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-18	Sap/PWR	5/20/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-18	Sap/PWR	11/18/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-18	Sap/PWR	5/15/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-18	Sap/PWR	11/12/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-19	Sap	1/1/2002	<5	<5	<5			<10	<5	13		<2
MW-19	Sap	6/1/2002	<2	<2	<2			<5	<2	8		<2
MW-19	Sap	9/1/2002										
MW-19	Sap	12/1/2002	<5	<5	<5			<5	<5	5.31		<5
MW-19	Sap	5/1/2003	<5	<5	<5			<10	<5	<5		<2
MW-19	Sap	11/1/2003	<5	<5	<5			<10	<5	<5		<5
MW-19	Sap	5/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-19	Sap	11/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-19	Sap	5/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-19	Sap	11/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-19	Sap	5/1/2006	<5	<5	<5			<10	<5	<5		<5
MW-19	Sap	11/1/2006	<5	<5	<5			<10	<5	<5		<5
MW-19	Sap	5/1/2007	<5	<5	<5			<10	<5	<5		<5
MW-19	Sap	11/1/2007	<5	<5	<5			<10	<5	<5		<5
MW-19	Sap	5/1/2008	<5	<5	<5			<15	<5	7.2		<2
MW-19	Sap	11/1/2008	<5	<5	<5			<15	<5	<5		<5
MW-19	Sap	2/1/2009	<5	<5	<5			<5	<5	<5		<5
MW-19	Sap	5/1/2009	<5	<5	<5			<5	<5	<5		<5
MW-19	Sap	8/1/2009	<5	<5	<5			<5	<5	<5		<5
MW-19	Sap	11/1/2009	<5	<5	<5			<5	<5	<5		<5
MW-19	Sap	5/1/2010	<5	<5	<5			<5	<5	<5		<5
MW-19	Sap	11/1/2010	<5	<5	<5			<5	<5	<5		<5
MW-19	Sap	5/23/2011	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-19	Sap	11/10/2011	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-19	Sap	5/10/2012	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-19	Sap	11/13/2012	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-19	Sap	5/14/2013	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-19	Sap	10/9/2013	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-19	Sap	5/21/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-19	Sap	11/19/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-19	Sap	5/18/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-19	Sap	11/17/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-20	Sap	1/1/2002	25	<5	<5			<10	<5	25		76
MW-20	Sap	6/1/2002	<2	<2	<2			<5	<2	31		14
MW-20	Sap	12/1/2002	<5	<5	<5			<5	<5	<5		<5
MW-20	Sap	5/1/2003	<5	<5	<5			<10	<5	<5		<2
MW-20	Sap	11/1/2003	<5	<5	<5			<10	<5	17.3		<5
MW-20	Sap	5/1/2004	<5	<5	<5			<10	<5	275		<5
MW-20	Sap	11/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-20	Sap	5/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-20	Sap	11/1/2005	<5	11	57			24	<5	6		<5
MW-20	Sap	5/1/2006	<5	<5	<5			<10	<5	140		<5
MW-20	Sap	11/1/2006	<5	<5	<5			<10	<5	7		<5
MW-20	Sap	5/1/2007	<5	<5	<5			<10	<5	91		<5
MW-20	Sap	11/1/2007	<5	<5	<5			<10	<5	95		<5
MW-20	Sap	5/1/2008	<5	<5	<5			<15	<5	<5		<2
MW-20	Sap	11/1/2008	8.3	<5	<5			<15	<5	450		8.5
MW-20	Sap	2/1/2009	<5	<5	<5			<15	<5	<5		<5
MW-20	Sap	5/1/2009	<5	<5	6.3			<15	<5	<5		<5
MW-20	Sap	8/1/2009	<5	<5	<5			<15	<5	<5		<5
MW-20	Sap	11/1/2009	<5	<5	<5			<15	<5	<5		<5
MW-20	Sap	5/1/2010	<5	<5	<5			<5	<5	<5		<5
MW-20	Sap	11/1/2010	<5	<5	<5			<5	<5	<5		<5
MW-20	Sap	5/24/2011	<5	<5	<5	<5	<5		<5	<5	6.2	<2
MW-20	Sap	11/11/2011	<5	<5	<5	<5	<5		<5	<5	<5	<2

Table 6. Historical Groundwater Results for COCs

Location	Geologic Zone	Date Sampled	BTEX						Chlorinated Hydrocarbons			
			Benzene µg/L	Ethyl benzene µg/L	Toluene µg/L	m&p-Xylene µg/L	o-Xylene µg/L	Xylenes (unspecified) µg/L	Tetrachloro-ethene µg/L	Trichloro-ethene µg/L	cis-1,2-Dichloroethene µg/L	Vinyl chloride µg/L
Type 1 RRS			**5**	**700**	**1000**	**2**	**1**	**10000**	**5**	**5**	**70**	**2**
Residential RRS			**5.4**	**700**	**1000**	**58**	**58**	**10000**	**19**	**5**	**70**	**2**
NonResidential RRS			**8.7**	**700**	**5200**	**290**	**290**	**10000**	**98**	**5.2**	**200**	**2**
MW-20	Sap	5/15/2012	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-20	Sap	11/14/2012	<5	<5	<5	<5	<5		<5	<5	11	<2
MW-20	Sap	5/15/2013	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-20	Sap	10/10/2013	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-20	Sap	5/27/2014	<5	<5	<5	<5	<5		<5	<5	52	4.4
MW-20	Sap	11/21/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-20	Sap	5/20/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-20	Sap	11/19/2015	<5	<5	<5	<5	<5		<5	14	28	<2
MW-20	Sap	1/18/2017	<5	<5	<5	<5	<5		<5	<5	9.3	<2
MW-21	Sap	1/1/2002	215	3610	70200			15300	84	69400		55
MW-21	Sap	12/1/2002	117	197	191			70.6	13.8	1960		69.4
MW-21	Sap	5/1/2003	66.7	<5	94.7			11.7	<5	453		<2
MW-21	Sap	11/1/2003	16	290	160			507	<5	1080		150
MW-21	Sap	5/1/2004	<5	<5	<5			13	<5	500		<5
MW-21	Sap	11/1/2004	17	37	172			138	<5	<5		<5
MW-21	Sap	5/1/2005	15	81	158			65	<5	<5		12
MW-21	Sap	11/1/2005	18	93	710			374	10	<5		7
MW-21	Sap	5/1/2006	11	<5	76			<10	6.5	660		13
MW-21	Sap	11/1/2006	19	6	59			14	<5	519		21
MW-21	Sap	11/1/2007	60	6	160			20	5	650		31
MW-21	Sap	5/1/2008	100	25	220			99	8.6	240		59
MW-21	Sap	11/1/2009	110	<5	7.7			11	9	98		160
MW-21	Sap	5/1/2010	94	<5	11			64	<5	23		2900
MW-21	Sap	11/1/2010	17	6	23			8.2	<5	<5		620
MW-21	Sap	5/24/2011	21	<5	9.9	<5	5.6		<5	6.1	1100	640
MW-21	Sap	11/9/2011	28	<5	11	<5	7.4		<5	9.6	1400	640
MW-21	Sap	5/16/2012	78	<5	11	<5	7.9		7.1	51	6800	690
MW-21	Sap	11/15/2012	100	<100	<100	<100	<100		<100	<100	9400	500
MW-21	Sap	5/14/2013	140	<5	15	5.2	5.4		<5	6.4	16000	930
MW-21	Sap	10/8/2013	64	<5	6.3	<5	<5		<5	<5	10000	260
MW-21	Sap	2/19/2014	<500	<500	<500	<500	<500		<500	<500	13000	780
MW-21	Sap	5/29/2014	48	<5	6.4	<5	<5		<5	<5	9300	420
MW-21	Sap	11/25/2014	38	<5	6.5	<5	<5		<5	<5	7800	260
MW-21	Sap	2/18/2015	22	<5	<5	<5	<5		<5	<5	5100	290
MW-21	Sap	5/21/2015	<5	<5	<5	5.6	<5		<5	<5	1300	34
MW-21	Sap	11/16/2015	<5	<5	<5	<5	<5		<5	8.2	340	160
MW-21	Sap	1/19/2017	25	61	52	9.6	20		<5	6.8	4100	1900
MW-22	Sap	1/1/2002	6	<5	<5			<10	<5	17		<2
MW-22	Sap	6/1/2002	3	<2	<2			<5	<2	11		<2
MW-22	Sap	9/1/2002										
MW-22	Sap	12/1/2002	<5	<5	<5			<5	<5	6.3		<5
MW-22	Sap	5/1/2003	<5	<5	<5			<10	<5	<5		<2
MW-22	Sap	11/1/2003	<5	<5	<5			<10	<5	<5		<5
MW-22	Sap	5/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-22	Sap	11/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-22	Sap	5/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-22	Sap	11/1/2005	<5	<5	<5			<10	<5	22		<5
MW-22	Sap	5/1/2006	<5	<5	<5			<10	<5	44		<5
MW-22	Sap	11/1/2006	<5	<5	<5			<10	<5	24		<5
MW-22	Sap	5/1/2007	<5	<5	<5			<10	<5	30		<5
MW-22	Sap	11/1/2007	<5	<5	<5			<10	<5	9		<5
MW-22	Sap	5/1/2008	<5	<5	<5			<15	<5	25		<2
MW-22	Sap	11/1/2008	<5	<5	<5			<15	<5	<5		<5
MW-22	Sap	2/1/2009	<5	<5	<5			<15	<5	<5		<5
MW-22	Sap	5/1/2009	<5	<5	<5			<15	<5	14		<5
MW-22	Sap	8/1/2009	<5	<5	<5			<15	<5	<5		<5
MW-22	Sap	11/1/2009	<5	<5	<5			<5	<5	13		<5
MW-22	Sap	5/1/2010	<5	<5	<5			<5	<5	51		<5
MW-22	Sap	11/1/2010	<5	<5	<5			<5	<5	95		<5
MW-22	Sap	5/23/2011	<5	<5	<5	<5	<5		<5	5.4	8.4	<2

Table 6. Historical Groundwater Results for COCs

Location	Geologic Zone	Date Sampled	BTEX: Benzene µg/L	BTEX: Ethyl benzene µg/L	BTEX: Toluene µg/L	BTEX: m&p-Xylene µg/L	BTEX: o-Xylene µg/L	BTEX: Xylenes (unspecified) µg/L	Chlorinated Hydrocarbons: Tetrachloro-ethene µg/L	Chlorinated Hydrocarbons: Trichloro-ethene µg/L	Chlorinated Hydrocarbons: cis-1,2-Dichloroethene µg/L	Chlorinated Hydrocarbons: Vinyl chloride µg/L
Type 1 RRS			**5**	**700**	**1000**	**2**	**1**	**10000**	**5**	**5**	**70**	**2**
Residential RRS			**5.4**	**700**	**1000**	**58**	**58**	**10000**	**19**	**5**	**70**	**2**
NonResidential RRS			**8.7**	**700**	**5200**	**290**	**290**	**10000**	**98**	**5.2**	**200**	**2**
MW-22	Sap	11/9/2011	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-22	Sap	5/8/2012	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-22	Sap	11/15/2012	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-22	Sap	5/15/2013	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-22	Sap	10/9/2013	<5	<5	<5	<5	<5		<5	<5	5.1	<2
MW-22	Sap	5/28/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-22	Sap	11/19/2014	<5	<5	<5	<5	<5		<5	<5	15	<2
MW-22	Sap	5/18/2015	<5	<5	<5	<5	<5		<5	<5	6.5	<2
MW-22	Sap	11/19/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-23	PWR	1/1/2002	<5	<5	<5			<10	<5	12		<2
MW-23	PWR	6/1/2002	<2	<2	<2			<5	<2	6		<2
MW-23	PWR	12/1/2002	<5	<5	<5			<5	<5	<5		<5
MW-23	PWR	5/1/2003	<5	<5	<5			<10	<5	<5		<2
MW-23	PWR	11/1/2003	<5	<5	<5			<10	<5	<5		<5
MW-23	PWR	5/1/2004	<5	<5	<5			<10	<5	7		<5
MW-23	PWR	11/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-23	PWR	5/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-23	PWR	11/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-23	PWR	5/1/2006	<5	<5	<5			<10	8.4	<5		<5
MW-23	PWR	11/1/2006	<5	<5	<5			<10	<5	<5		<5
MW-23	PWR	5/1/2007	<5	<5	<5			<10	<5	<5		<5
MW-23	PWR	11/1/2007	<5	<5	<5			<10	<5	<5		<5
MW-23	PWR	5/1/2008	<5	<5	<5			<15	8.1	<5		<2
MW-23	PWR	11/1/2008	<5	<5	<5			<15	<5	<5		<5
MW-23	PWR	5/1/2009	<5	<5	<5			<15	12	<5		<5
MW-23	PWR	8/1/2009	<5	<5	<5			<15	<5	<5		<5
MW-23	PWR	11/1/2009	<5	<5	<5			<5	11	<5		<5
MW-23	PWR	5/1/2010	<5	<5	<5			<5	11	<5		<5
MW-23	PWR	11/1/2010	<5	<5	<5			<5	11	<5		<5
MW-23	PWR	5/23/2011	<5	<5	<5	<5	<5		9.7	<5	<5	<2
MW-23	PWR	11/8/2011	<5	<5	<5	<5	<5		9.3	<5	<5	<2
MW-23	PWR	5/8/2012	<5	<5	<5	<5	<5		10	<5	<5	<2
MW-23	PWR	5/15/2013	<5	<5	<5	<5	<5		7.7	6	<5	<2
MW-23	PWR	10/10/2013	<5	<5	<5	<5	<5		5	6.6	<5	<2
MW-23	PWR	5/20/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-23	PWR	11/18/2014	<5	<5	<5	<5	<5		<5	6.4	<5	<2
MW-23	PWR	5/15/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-23	PWR	11/11/2015	<5	<5	<5	<5	<5		6.9	5.7	<5	<2
MW-24	Sap	1/1/2002	<5	<5	<5			69	<5	7		<2
MW-24	Sap	6/1/2002	<2	<2	<2			<5	<2	2		<2
MW-24	Sap	9/1/2002										
MW-24	Sap	12/1/2002	<5	<5	<5			<5	<5	<5		<5
MW-24	Sap	5/1/2003	<5	<5	<5			<10	<5	<5		<2
MW-24	Sap	11/1/2003	<5	<5	<5			<10	<5	<5		<5
MW-24	Sap	5/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-24	Sap	11/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-24	Sap	5/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-24	Sap	11/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-24	Sap	5/1/2006	<5	<5	<5			<10	<5	<5		<5
MW-24	Sap	11/1/2006	<5	<5	<5			<10	<5	<5		<5
MW-24	Sap	5/1/2007	<5	<5	<5			<10	<5	<5		<5
MW-24	Sap	11/1/2007	<5	<5	<5			<10	<5	<5		<5
MW-24	Sap	5/1/2008	<5	<5	<5			<15	<5	<5		<2
MW-24	Sap	11/1/2008	<5	<5	<5			<15	<5	<5		<2
MW-24	Sap	5/1/2009	<	<	<			<	<	<		<
MW-24	Sap	8/1/2009	<	<	<			<	<	<		<
MW-24	Sap	11/1/2009	<	<5	<5			<5	<5	<5		<5
MW-24	Sap	5/1/2010	<5	<5	<5			<5	<5	<5		<5
MW-24	Sap	11/1/2010	<5	<5	<5			<5	<5	<5		<5
MW-24	Sap	5/23/2011	<5	<5	<5	<5	<5		62	<5	<5	<2

Table 6. Historical Groundwater Results for COCs

Location	Geologic Zone	Date Sampled	Benzene µg/L	Ethyl benzene µg/L	Toluene µg/L	m&p-Xylene µg/L	o-Xylene µg/L	Xylenes (unspecified) µg/L	Tetrachloro-ethene µg/L	Trichloro-ethene µg/L	cis-1,2-Dichloroethene µg/L	Vinyl chloride µg/L
			BTEX						Chlorinated Hydrocarbons			
Type 1 RRS			**5**	**700**	**1000**	**2**	**1**	**10000**	**5**	**5**	**70**	**2**
Residential RRS			**5.4**	**700**	**1000**	**58**	**58**	**10000**	**19**	**5**	**70**	**2**
NonResidential RRS			**8.7**	**700**	**5200**	**290**	**290**	**10000**	**98**	**5.2**	**200**	**2**
MW-24	Sap	11/8/2011	<5	<5	<5	<5	<5		18	<5	<5	<2
MW-24	Sap	5/8/2012	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-24	Sap	11/16/2012	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-24	Sap	5/14/2013	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-24	Sap	10/10/2013	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-24	Sap	5/20/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-24	Sap	11/19/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-24	Sap	5/15/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-24	Sap	11/11/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-25	Deep BR	1/1/2002	<5	<5	<5			<10	<5	<5		<2
MW-25	Deep BR	6/1/2002	<2	<2	<2			<5	<2	<2		<2
MW-25	Deep BR	9/1/2002										
MW-25	Deep BR	12/1/2002	<5	<5	<5			<5	<5	<5		<5
MW-25	Deep BR	5/1/2003	<5	<5	<5			<10	<5	<5		<2
MW-25	Deep BR	11/1/2003	<5	<5	<5			<10	<5	<5		<5
MW-25	Deep BR	5/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-25	Deep BR	11/1/2004	<5	<5	<5			<10	<5	<5		<5
MW-25	Deep BR	5/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-25	Deep BR	11/1/2005	<5	<5	<5			<10	<5	<5		<5
MW-25	Deep BR	5/1/2006	<5	<5	<5			<10	<5	<5		<5
MW-25	Deep BR	11/1/2006	<5	<5	<5			<10	<5	<5		<5
MW-25	Deep BR	5/1/2007	<5	<5	<5			<10	<5	<5		<5
MW-25	Deep BR	11/1/2007	<5	<5	<5			<10	<5	<5		<5
MW-25	Deep BR	5/1/2008	<5	<5	<5			<15	<5	<5		<2
MW-25	Deep BR	11/1/2008	<5	<5	<5			<15	<5	<5		<5
MW-25	Deep BR	2/1/2009	<	<	<			<	<	<		<
MW-25	Deep BR	5/1/2009	<	<	<			<	<	<		<
MW-25	Deep BR	8/1/2009	<	<	<			<	<	<		<
MW-25	Deep BR	11/1/2009	<5	<5	<5			<5	<5	<5		<5
MW-25	Deep BR	5/25/2011	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-25	Deep BR	5/10/2012	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-25	Deep BR	11/19/2012	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-25	Deep BR	5/15/2013	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-25	Deep BR	10/10/2013	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-25	Deep BR	5/29/2014	<5	<5	<5	<5	<5		<5	8	<5	<2
MW-25	Deep BR	11/25/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-25	Deep BR	5/21/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-25	Deep BR	11/20/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-26	Sap	5/1/2010	<5	<5	<5			<5	<5	11		<5
MW-26	Sap	11/1/2010	<5	<5	<5			<5	<5	6.2		<5
MW-26	Sap	5/24/2011	<5	<5	<5	<5	<5		<5	9.1	200	<2
MW-26	Sap	11/10/2011	<5	<5	<5	<5	<5		<5	7.2	110	<2
MW-26	Sap	5/15/2012	<5	<5	<5	<5	<5		<5	5.5	30	<2
MW-26	Sap	11/14/2012	<5	<5	<5	<5	<5		<5	<5	7	<2
MW-26	Sap	5/15/2013	<5	<5	<5	<5	<5		<5	<5	47	<2
MW-26	Sap	10/7/2013	<5	<5	<5	<5	<5		<5	6.4	200	<2
MW-26	Sap	2/18/2014	<5	<5	<5	<5	<5		<5	5	95	<2
MW-26	Sap	5/23/2014	<5	<5	<5	<5	<5		<5	<5	53	<2
MW-26	Sap	11/20/2014	<5	<5	<5	<5	<5		<5	13	120	<2
MW-26	Sap	5/19/2015	<5	<5	<5	<5	<5		<5	16	160	<2
MW-26	Sap	11/16/2015	<5	<5	<5	<5	<5		<5	<5	42	<2
MW-26	Sap	1/18/2017	<5	<5	<5	<5	<5		<5	48	530	<2
MW-27	Sap	5/1/2010	140	<5	<5			5.2	5.6	63		330
MW-27	Sap	11/1/2010	89	<5	<5			<5	<5	54		260
MW-27	Sap	5/24/2011	81	<5	<5	<5	<5		<5	76	2900	230
MW-27	Sap	11/10/2011	110	<5	<5	<5	<5		<5	95	3000	160
MW-27	Sap	5/15/2012	150	<5	<5	<5	<5		6	110	3900	200
MW-27	Sap	11/14/2012	18	<5	<5	<5	<5		<5	51	2300	59
MW-27	Sap	5/16/2013	32	<5	<5	<5	<5		<5	62	4000	73
MW-27	Sap	10/10/2013	<5	<5	<5	<5	<5		<5	58	2800	32

Table 6. Historical Groundwater Results for COCs

			BTEX						Chlorinated Hydrocarbons			
Location	Geologic Zone	Date Sampled	Benzene µg/L	Ethyl benzene µg/L	Toluene µg/L	m&p-Xylene µg/L	o-Xylene µg/L	Xylenes (unspecified) µg/L	Tetrachloro-ethene µg/L	Trichloro-ethene µg/L	cis-1,2-Dichloroethene µg/L	Vinyl chloride µg/L
Type 1 RRS			**5**	**700**	**1000**	**2**	**1**	**10000**	**5**	**5**	**70**	**2**
Residential RRS			**5.4**	**700**	**1000**	**58**	**58**	**10000**	**19**	**5**	**70**	**2**
NonResidential RRS			**8.7**	**700**	**5200**	**290**	**290**	**10000**	**98**	**5.2**	**200**	**2**
MW-27	Sap	2/19/2014	<5	<5	<5	<5	<5		<5	58	2700	17
MW-27	Sap	5/23/2014	<5	<5	<5	<5	<5		<5	39	870	22
MW-27	Sap	11/20/2014	<5	<5	<5	<5	<5		<5	69	1100	5.6
MW-27	Sap	5/19/2015	<5	<5	<5	<5	<5		<5	38	870	<2
MW-27	Sap	11/16/2015	<5	<5	<5	<5	<5		<5	23	630	<2
MW-28	Sap	5/1/2010	<5	<5	<5			<5	<5	78		<5
MW-28	Sap	11/1/2010	<5	<5	<5			<5	<5	91		<5
MW-28	Sap	5/24/2011	<5	<5	<5	<5	<5		<5	150	160	<2
MW-28	Sap	11/10/2011	<5	<5	<5	<5	<5		<5	160	160	<2
MW-28	Sap	5/16/2012	<5	<5	<5	<5	<5		<5	170	210	<2
MW-28	Sap	11/15/2012	<5	<5	<5	<5	<5		<5	130	160	<2
MW-28	Sap	5/16/2013	<5	<5	<5	<5	<5		<5	270	340	<2
MW-28	Sap	10/9/2013	<5	<5	<5	<5	<5		<5	560	700	<2
MW-28	Sap	5/28/2014	<5	<5	<5	<5	<5		<5	580	1100	2.3
MW-28	Sap	11/20/2014	<5	<5	<5	<5	<5		<5	470	2000	9.2
MW-28	Sap	5/19/2015	<5	<5	<5	<5	<5		<5	340	1500	10
MW-28	Sap	11/20/2015	<5	<5	<5	<5	<5		<5	280	1900	17
MW-28	Sap	1/20/2017	<5	<5	<5	<5	<5		<5	140	2500	6.2
MW-29	Sap	5/1/2010	<5	<5	<5			<5	<5	300		<5
MW-29	Sap	11/1/2010	<5	<5	<5			<5	<5	310		6.3
MW-29	Sap	5/24/2011	<5	<5	<5	<5	<5		<5	280	470	<2
MW-29	Sap	11/11/2011	<5	<5	<5	<5	<5		8.8	300	310	2.7
MW-29	Sap	5/16/2012	<5	<5	<5	<5	<5		11	430	530	<2
MW-29	Sap	11/15/2012	<5	<5	<5	<5	<5		<5	97	250	<2
MW-29	Sap	5/16/2013	<5	<5	<5	<5	<5		<5	180	340	<2
MW-29	Sap	10/9/2013	<5	<5	<5	<5	<5		<5	310	610	<2
MW-29	Sap	5/28/2014	<5	<5	<5	<5	<5		<5	440	1700	8.4
MW-29	Sap	11/20/2014	<5	<5	<5	<5	<5		<5	480	2900	23
MW-29	Sap	5/19/2015	<5	<5	<5	<5	<5		<5	430	2000	7.3
MW-29	Sap	11/20/2015	<5	<5	<5	<5	<5		<5	380	2000	27
MW-30	PWR / BR	10/8/2013	<5	<5	<5	<5	<5		<5	<5	<5	2.1
MW-30	PWR / BR	5/27/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-30	PWR / BR	11/24/2014	59	21	<5	54	<5		<5	<5	<5	2.1
MW-30	PWR / BR	5/19/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-30	PWR / BR	11/12/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-31	Sap ?	10/8/2013	<5	<5	<5	<5	<5		<5	<5	8.4	24
MW-31	Sap ?	5/27/2014	<5	<5	<5	<5	<5		<5	<5	<5	17
MW-31	Sap ?	11/20/2014	<5	<5	<5	<5	<5		<5	<5	6	32
MW-31	Sap ?	5/19/2015	<5	<5	<5	<5	<5		<5	<5	<5	18
MW-31	Sap ?	11/12/2015	<5	<5	<5	<5	<5		<5	<5	<5	31
MW-32	PWR / BR	10/8/2013	<5	280	3900	1100	290		17	170000	6.5	<2
MW-32	PWR / BR	2/19/2014	<5000	<5000	12000	<5000	<5000		<5000	500000	<5000	<2000
MW-32	PWR / BR	4/16/2014	<500	<500	1200	<500	<500		<500	67000	<500	<200
MW-32	PWR / BR	5/30/2014	21	510	11000	1900	510		26	470000	15	<2
MW-32	PWR / BR	11/20/2014	49	580	12000	2100	570		26	540000	14	<2
MW-32	PWR / BR	2/18/2015	<2500	<2500	<2500	<2500	<2500		<2500	59000	<2500	<1000
MW-32	PWR / BR	5/15/2015	<25000	<25000	<25000	<25000	<25000		<25000	84000	<25000	<10000
MW-32	PWR / BR	11/17/2015	<50	<50	<50	<50	<50		<50	26000	460	<20
MW-32	PWR / BR	1/19/2017	<5	<5	<5	<5	<5		<5	840	520	5.4
MW-33	Sap ?	10/8/2013	<5	170	840	270	180		<5	<5	1100	350
MW-33	Sap ?	5/29/2014	12	300	4700	930	290			47	1700	4.4
MW-33	Sap ?	11/24/2014	7.7	420	2000	920	380		<5	<5	660	90
MW-33	Sap ?	5/21/2015	21	290	12000	1300	730		<5	<5	4500	15
MW-33	Sap ?	11/16/2015	<5	7.2	<5	<5	<5		<5	<5	28	18
MW-34	PWR / BR	4/16/2014	<5	<5	21	<5	<5		<5	4900	7	<2
MW-34	PWR / BR	11/24/2014	<5	<5	<5	<5	<5		<5	400	<5	<2
MW-34	PWR / BR	2/18/2015	<5	<5	<5	<5	<5		<5	160	<5	<2
MW-34	PWR / BR	5/21/2015	<5	<5	<5	<5	<5		<5	120	<5	<2
MW-34	PWR / BR	11/16/2015	<5	<5	<5	<5	<5		<5	94	<5	<2
MW-35	PWR / BR	4/16/2014	<250	<250	340	<250	<250		<250	14000	<250	<100

Table 6. Historical Groundwater Results for COCs

Location	Geologic Zone	Date Sampled	BTEX						Chlorinated Hydrocarbons			
			Benzene µg/L	Ethyl benzene µg/L	Toluene µg/L	m&p-Xylene µg/L	o-Xylene µg/L	Xylenes (unspecified) µg/L	Tetrachloro-ethene µg/L	Trichloro-ethene µg/L	cis-1,2-Dichloroethene µg/L	Vinyl chloride µg/L
Type 1 RRS			**5**	**700**	**1000**	**2**	**1**	**10000**	**5**	**5**	**70**	**2**
Residential RRS			**5.4**	**700**	**1000**	**58**	**58**	**10000**	**19**	**5**	**70**	**2**
NonResidential RRS			**8.7**	**700**	**5200**	**290**	**290**	**10000**	**98**	**5.2**	**200**	**2**
MW-35	PWR / BR	11/24/2014	<500	<500	<500	<500	<500		<500	69000	<500	<200
MW-35	PWR / BR	2/18/2015	<5	<5	<5	<5	<5		<5	8400	45	<2
MW-35	PWR / BR	5/21/2015	<5	<5	<5	<5	<5		<5	12000	230	<2
MW-35	PWR / BR	11/16/2015	<5	<5	<5	<5	<5		<5	760	110	<2
MW-36	PWR / BR	4/17/2014	<250	<250	490	<250	<250		<250	16000	1600	<100
MW-36	PWR / BR	11/20/2014	<5	11	51	15	<5		<5	5500	9600	10
MW-36	PWR / BR	2/18/2015	<5	7	34	7.8	<5		<5	4800	9200	10
MW-36	PWR / BR	5/15/2015	<5	14	65	22	<5		<5	330	18000	13
MW-36	PWR / BR	11/17/2015	<50	<50	56	<50	<50		<50	1200	15000	78
MW-37	Sap ?	1/6/2016	<5	<5	<5	<5	<5		<5	26	520	<2
MW-37	Sap ?	1/17/2017	<5	<5	<5	<5	<5		<5	160	2500	4.8
MW-38	Sap ?	1/6/2016	<5	<5	<5	<5	<5		<5	5.5	11	<2
MW-38	Sap ?	1/17/2017	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-39	Sap	6/23/2016	<5	<5	10	<5	<5		<5	310	22	<2
MW-39	Sap	1/17/2017	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-40	PWR	6/23/2016	<5	<5	<5	<5	<5		<5	9	27	3.6
MW-40	PWR	1/17/2017	<5	<5	<5	<5	<5		<5	19	94	7.1
MW-41	BR	6/23/2016	31	740	4600	3100	650		33	130000	9600	36
MW-41	BR	1/17/2017	<500	1100	6300	5000	770		<500	150000	25000	<200
MW-42	Sap	6/23/2016	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-42	Sap	1/17/2017	<5	<5	<5	<5	<5		16	25	36	<2
MW-43	PWR	6/23/2016	<5	<5	<5	<5	<5		<5	32	110	<2
MW-44	BR	6/23/2016	<5	<5	60	14	<5		5.4	3700	2700	16
MW-45	PWR	6/23/2016	<5	<5	<5	<5	<5		<5	260	360	3.2
MW-45	PWR	1/17/2017	<5	<5	<5	<5	<5		<5	240	300	2.2
MW-46	BR	6/23/2016	<5	200	350	700	190		14	29000	500	4.5
MW-47	PWR	6/23/2016	<5	<5	<5	<5	<5		<5	620	630	6.8
MW-48	BR	6/23/2016	<5	<5	<5	<5	<5		<5	960	680	5.5
MW-48	BR	1/18/2017	<5	<5	<5	<5	<5		<5	660	590	5
MW-49	Sap	10/7/2016	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-50	PWR	10/7/2016	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-51	BR	10/7/2016	31	<5	<5	<5	<5		52	330	900	5.7
MW-51	BR	1/16/2017	28	<5	<5	<5	<5		46	240	660	4.9
MW-52	Sap	10/7/2016	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-52	Sap	1/16/2017	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-53	PWR	10/7/2016	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-54	BR	10/7/2016	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-54	BR	1/16/2017	<5	<5	<5	<5	<5		<5	<5	<5	<2
MW-55	Sap	10/7/2016	<5	<5	<5	<5	<5		<5	8.2	11	<2
MW-55	Sap	1/16/2017	<5	<5	<5	<5	<5		<5	9.5	8.9	<2
MW-56	PWR	10/7/2016	<5	<5	<5	<5	<5		<5	21	36	<2
MW-56	PWR	1/16/2017	<5	<5	<5	<5	<5		<5	27	44	<2
MW-57	BR	10/7/2016	<5	<5	<5	<5	<5		<5	57	100	<2
MW-57	BR	1/16/2017	<5	<5	<5	<5	<5		<5	21	49	<2
TW-01	Sap	3/3/2016	<5	<5	<5	<5	<5		10	8.2		<2
TW-01	Sap	6/23/2016	<5	<5	<5	<5	<5		6.4	19	230	2.6
TW-01	Sap	1/17/2017	6.1	<5	<5	<5	<5		<5	43	480	7.4
TW-02	Sap	3/3/2016	<5	<5	<5	<5	<5		<5	<5	<5	<2
TW-02	Sap	6/23/2016	<5	<5	<5	<5	<5		<5	<5	<5	<2
TW-02	Sap	1/17/2017	<5	<5	<5	<5	<5		<5	<5	<5	<2
TW-03	Sap	3/3/2016	<5	<5	<5	<5	<5		<5	<5	<5	<2
TW-03	Sap	6/23/2016	<5	<5	<5	<5	<5		<5	<5	<5	<2
TW-03	Sap	1/17/2017	<5	<5	<5	<5	<5		<5	<5	<5	<2
DPE-109	Sap	2/26/2014	<250	1100	9000	3400	1200		<250	1600	4100	<100
DPE-109	Sap	4/25/2014	52	170	12000	3700	1300		29	3000	5900	130
DPE-109	Sap	2/18/2015	<5	590	4100	2100	790		<5	56	940	5.2
DPE-118	Sap	2/26/2014	18	110	770	310	91		<5	11	610	6.2
DPE-118	Sap	4/25/2014	<250	<250	6700	1700	570		<250	1300	4400	<100
DPE-118	Sap	2/18/2015	<5	<5	<5	<5	<5		<5	33	63	<2
DPE-305	Sap	2/26/2014	3500	4500	99000	15000	4000		<250	1300	6800	<100

Table 6. Historical Groundwater Results for COCs

Location	Geologic Zone	Date Sampled	BTEX						Chlorinated Hydrocarbons			
			Benzene µg/L	Ethyl benzene µg/L	Toluene µg/L	m&p-Xylene µg/L	o-Xylene µg/L	Xylenes (unspecified) µg/L	Tetrachloro-ethene µg/L	Trichloro-ethene µg/L	cis-1,2-Dichloroethene µg/L	Vinyl chloride µg/L
Type 1 RRS			5	700	1000	2	1	10000	5	5	70	2
Residential RRS			5.4	700	1000	58	58	10000	19	5	70	2
NonResidential RRS			8.7	700	5200	290	290	10000	98	5.2	200	2
DPE-305	Sap	4/25/2014	3100	3400	93000	14000	3200		<250	8600	11000	<100
DPE-305	Sap	2/18/2015	<2500	<2500	27000	11000	2600		<2500	<2500	<2500	<1000
DPE-307	Sap	2/26/2014	3200	720	250000	2300	610		<250	<250	550	<100
DPE-307	Sap	4/25/2014	2700	540	200000	2000	510		<250	<250	400	<100
DPE-307	Sap	2/19/2015	<25000	<25000	160000	<25000	<25000		<25000	<25000	<25000	<10000
DPE-307	Sap	1/18/2017	140	150	43000	670	190		<5	7.8	21	<2
DPE-313	Sap	2/26/2014	610	840	64	2600	390		<5	<5	69	4.7
DPE-313	Sap	4/25/2014	360	220	1200	1900	400		<5	<5	28	<2
DPE-313	Sap	2/19/2015	110	950	890	2600	330		<5	<5	23	<2
DPE-408	Sap	2/26/2014	3300	750	15000	2600	720		<250	<250	970	<100
DPE-408	Sap	4/25/2014	3200	770	18000	3500	950		<250	<250	990	<100
DPE-408	Sap	2/18/2015	190	340	4100	1500	440		<5	19	660	5.4
RW-01	Sap	1/1/2002	<5	<5	<5			<10	<5	<5		<2
RW-01	Sap	6/1/2002	13	<2	<2			<5	<2	<2		<2
RW-01	Sap	9/1/2002	25	<2	<2			<5	<2	<2		<2
RW-01	Sap	12/1/2002	47	<5	<5			<5	<5	<5		<5
RW-01	Sap	5/1/2003	9.3	<5	<5			<10	<5	<5		<2
RW-02	Sap/PWR/BR	1/1/2002	1010	777	17500			2470	<5	2030		828
RW-02	Sap/PWR/BR	6/1/2002	280	400	6100			1800	10	1400		650
RW-02	Sap/PWR/BR	9/1/2002	<200	<200	700			<500	<200	1200		500
RW-02	Sap/PWR/BR	12/1/2002	74.1	6.3	642			160	<5	360		<5
RW-02	Sap/PWR/BR	5/1/2003	57.9	<5	344			87	<5	116		293
RW-02	Sap/PWR/BR	11/1/2003	540	280	7580			1132	<5	73		460
RW-02	Sap/PWR/BR	5/1/2004	306	447	487			1161	7	954		204
RW-02	Sap/PWR/BR	11/1/2004	78	138	10000			1448	<5	<5		93
RW-02	Sap/PWR/BR	5/1/2005	44	192	9080			1146	<5	<5		69
RW-02	Sap/PWR/BR	11/1/2005	200	380	9500			1310	<5	240		470
RW-02	Sap/PWR/BR	5/1/2006	68	30	900			238	<5	330		360
RW-02	Sap/PWR/BR	11/1/2006	96	48	2120			379	<5	233		1030
RW-02	Sap/PWR/BR	5/1/2007	42	7	269			170	<5	132		51
RW-02	Sap/PWR/BR	11/1/2007	130	45	2400			420	<5	420		1100
RW-02	Sap/PWR/BR	5/1/2008	140	62	3300			590	<5	230		910
RW-02	Sap/PWR/BR	11/1/2008	<5	<5	7.4			12	10	290		80
RW-02	Sap/PWR/BR	2/1/2009	18	180	190			48	<	170		260
RW-02	Sap/PWR/BR	5/1/2009	18	<	69			<	12	170		140
RW-02	Sap/PWR/BR	8/1/2009	28	<	190			92	11	350		490
RW-02	Sap/PWR/BR	11/1/2009	59	39	1100			286	9.1	65		390
RW-02	Sap/PWR/BR	5/1/2010	300	440	11000			1980	5.9	110		1400
RW-02	Sap/PWR/BR	11/1/2010	650	470	17000			2100	<100	<100		820
RW-02	Sap/PWR/BR	11/11/2011	<500	<500	8700	750	<500		<500	<500	12000	1100
RW-02	Sap/PWR/BR	5/8/2012	940	770	27000	2800	770		<5	44	12000	1300
RW-02	Sap/PWR/BR	11/19/2012	45	8.5	1100	140	51		<5	41	1300	120
RW-02	Sap/PWR/BR	5/13/2013	220	<100	7000	820	240		<100	<100	4700	500
RW-02	Sap/PWR/BR	10/14/2013	640	900	<2	2600	840	3400	<2	71	12000	1100
RW-02	Sap/PWR/BR	5/23/2014	<500	<500	13000	1200	<500		<500	<500	5700	940
RW-02	Sap/PWR/BR	11/25/2014	200	<5	4500	890	320		<5	180	3600	480
RW-02	Sap/PWR/BR	2/18/2015	<250	280	8900	1400	460		<250	<250	2000	420
RW-02	Sap/PWR/BR	5/18/2015	14	<5	260	120	90		<5	53	480	39
RW-02	Sap/PWR/BR	11/17/2015	70	88	2900	760	290		<5	32	470	370
RW-03	Sap/PWR/BR	1/1/2002	<5	<5	<5			<10	<5	44		<2
RW-03	Sap/PWR/BR	6/1/2002	<2	<2	<2			<5	2	310		3
RW-03	Sap/PWR/BR	9/1/2002	<10	<10	<10			<25	<10	530		<10
RW-03	Sap/PWR/BR	12/1/2002	<5	<5	<5			<5	<5	37		12.4
RW-03	Sap/PWR/BR	5/1/2003	<5	<5	<5			<10	<5	<5		<2
RW-03	Sap/PWR/BR	11/1/2003	<5	<5	<5			<10	<5	69		12
RW-03	Sap/PWR/BR	5/1/2004	<5	<5	<5			<10	10	895		<5
RW-03	Sap/PWR/BR	11/1/2004	<5	<5	<5			<10	<5	<5		<5
RW-03	Sap/PWR/BR	5/1/2005	<5	<5	338			<10	<5	<5		12
RW-03	Sap/PWR/BR	11/1/2005	10	<5	<5			<10	12	620		70
RW-03	Sap/PWR/BR	5/1/2006	16	<5	<5			<10	<5	510		44

Table 6. Historical Groundwater Results for COCs

Location	Geologic Zone	Date Sampled	BTEX						Chlorinated Hydrocarbons			
			Benzene µg/L	Ethyl benzene µg/L	Toluene µg/L	m&p-Xylene µg/L	o-Xylene µg/L	Xylenes (unspecified) µg/L	Tetrachloro-ethene µg/L	Trichloro-ethene µg/L	cis-1,2-Dichloroethene µg/L	Vinyl chloride µg/L
Type 1 RRS			5	700	1000	2	1	10000	5	5	70	2
Residential RRS			5.4	700	1000	58	58	10000	19	5	70	2
NonResidential RRS			8.7	700	5200	290	290	10000	98	5.2	200	2
RW-03	Sap/PWR/BR	11/1/2006	27	<5	<5			<10	5	717		195
RW-03	Sap/PWR/BR	5/1/2007	44	<5	<5			<10	8	766		77
RW-03	Sap/PWR/BR	11/1/2007	<5	<5	<5			<10	13	200		13
RW-03	Sap/PWR/BR	5/1/2008	<5	<5	<5			<15	5.2	100		15
RW-03	Sap/PWR/BR	11/1/2008	61	<5	<5			<15	<5	950		110
RW-03	Sap/PWR/BR	2/1/2009	61	<5	<5			<	<6	790		130
RW-03	Sap/PWR/BR	5/1/2009	120	<5	<5			<	6.6	1100		130
RW-03	Sap/PWR/BR	8/1/2009	170	<5	<5			<	6.1	850		200
RW-03	Sap/PWR/BR	11/1/2009	150	<5	<5			<5	<5	740		180
RW-03	Sap/PWR/BR	5/1/2010	39	<5	<5			<5	<5	120		100
RW-03	Sap/PWR/BR	11/1/2010	8	<5	<5			<5	<5	55		23
RW-03	Sap/PWR/BR	11/11/2011	<5	<5	<5	<5	<5		<5	26	220	6
RW-03	Sap/PWR/BR	5/8/2012	<5	<5	<5	<5	<5		<5	38	190	4.9
RW-03	Sap/PWR/BR	11/19/2012	<5	<5	<5	<5	<5		<5	52	210	4.6
RW-03	Sap/PWR/BR	5/13/2013	<5	<5	<5	<5	<5		<5	13	100	8.5
RW-03	Sap/PWR/BR	10/14/2013	<2	<2	4.3	<5	<5	<5	<2	5.1	44	7.8
RW-03	Sap/PWR/BR	5/23/2014	<5	<5	<5	<5	<5		<5	<5	20	6.7
RW-03	Sap/PWR/BR	11/17/2014	<5	<5	<5	<5	<5		<5	<5	9	8.8
RW-03	Sap/PWR/BR	5/20/2015	<5	<5	<5	<5	<5		<5	<5	15	4
RW-03	Sap/PWR/BR	11/17/2015	<5	<5	<5	<5	<5		<5	5.6	28	4.9
RW-04	Sap/PWR/BR	1/1/2002	<5	<5	<5			<10	<5	<5		<2
RW-04	Sap/PWR/BR	6/1/2002	4	<2	<2			<5	<2	6		<2
RW-04	Sap/PWR/BR	9/1/2002										
RW-04	Sap/PWR/BR	12/1/2002	<5	<5	<5			<5	<5	296		<5
RW-04	Sap/PWR/BR	5/1/2003	<5	<5	<5			<10	<5	<5		<2
RW-04	Sap/PWR/BR	11/1/2003	<5	<5	<5			<10	<5	<5		<5
RW-04	Sap/PWR/BR	5/1/2004	<5	<5	<5			<10	<5	21		<5
RW-04	Sap/PWR/BR	11/1/2004	<5	<5	<5			<10	<5	<5		<5
RW-04	Sap/PWR/BR	5/1/2005	<5	<5	<5			<10	<5	12		<5
RW-04	Sap/PWR/BR	11/1/2005	<5	<5	<5			<10	<5	68		<5
RW-04	Sap/PWR/BR	5/1/2006	<5	<5	<5			<10	<5	62		2
RW-04	Sap/PWR/BR	11/1/2006	<5	<5	<5			<10	<5	42		<5
RW-04	Sap/PWR/BR	5/1/2007	<5	<5	<5			<10	<5	52		<5
RW-04	Sap/PWR/BR	11/1/2007	<5	<5	<5			<10	7	64		<5
RW-04	Sap/PWR/BR	5/1/2008	<5	<5	<5			<15	5.5	51		<2
RW-04	Sap/PWR/BR	11/1/2008	<5	<5	<5			<15	6.2	83		68
RW-04	Sap/PWR/BR	2/1/2009	<	<	<			<	<	93		40
RW-04	Sap/PWR/BR	5/1/2009	<	<	<			<	<	91		16
RW-04	Sap/PWR/BR	8/1/2009	<	<	5.9			<	<	110		98
RW-04	Sap/PWR/BR	11/1/2009	<5	<5	<5			<5	<5	110		<5
RW-04	Sap/PWR/BR	5/1/2010	<5	<5	<5			<5	<5	72		25
RW-04	Sap/PWR/BR	11/1/2010	<5	<5	<5			<5	<5	52		<5
RW-04	Sap/PWR/BR	11/9/2011	<5	<5	<5	<5	<5		<5	47	49	<2
RW-04	Sap/PWR/BR	5/8/2012	<5	<5	<5	<5	<5		<5	46	63	<2
RW-04	Sap/PWR/BR	11/19/2012	<5	<5	<5	<5	<5		<5	52	63	<2
RW-04	Sap/PWR/BR	5/13/2013	<5	<5	<5	<5	<5		<5	32	48	<2
RW-04	Sap/PWR/BR	10/14/2013	<2	<2	<2	<5	<5	<5	<2	5.5	8.1	<2
RW-04	Sap/PWR/BR	5/23/2014	<5	<5	<5	<5	<5		<5	<5	<5	<2
RW-04	Sap/PWR/BR	11/17/2014	<5	<5	<5	<5	<5		<5	5.4	6.6	<2
RW-04	Sap/PWR/BR	5/20/2015	<5	<5	<5	<5	<5		<5	<5	<5	<2
RW-05	Sap/PWR/BR	1/1/2002	<5	<5	<5			<10	<5	<5		<2
RW-05	Sap/PWR/BR	6/1/2002	<2	<2	<2			<5	<2	<2		<2
RW-05	Sap/PWR/BR	9/1/2002										
RW-05	Sap/PWR/BR	12/1/2002	<5	<5	<5			<5	<5	<5		<5
RW-06	Sap/PWR/BR?	5/1/2004	<5	<5	<5			<10	<5	274		<5
RW-06	Sap/PWR/BR?	11/1/2004	<5	<5	74			<10	<5	<5		<5
RW-06	Sap/PWR/BR?	5/1/2005	<5	<5	78			<10	<5	5		<5
RW-06	Sap/PWR/BR?	11/1/2005	<5	<5	<5			<10	<5	5		<5
RW-06	Sap/PWR/BR?	5/1/2006	<5	<5	<5			<10	<5	6.7		<5
RW-06	Sap/PWR/BR?	11/1/2006	<5	<5	<5			<10	<5	30		14

Table 6. Historical Groundwater Results for COCs

Location	Geologic Zone	Date Sampled	BTEX						Chlorinated Hydrocarbons			
			Benzene µg/L	Ethyl benzene µg/L	Toluene µg/L	m&p-Xylene µg/L	o-Xylene µg/L	Xylenes (unspecified) µg/L	Tetrachloro-ethene µg/L	Trichloro-ethene µg/L	cis-1,2-Dichloroethene µg/L	Vinyl chloride µg/L
Type 1 RRS			**5**	**700**	**1000**	**2**	**1**	**10000**	**5**	**5**	**70**	**2**
Residential RRS			**5.4**	**700**	**1000**	**58**	**58**	**10000**	**19**	**5**	**70**	**2**
NonResidential RRS			**8.7**	**700**	**5200**	**290**	**290**	**10000**	**98**	**5.2**	**200**	**2**
RW-06	Sap/PWR/BR?	5/1/2007	<5	<5	<5			<10	<5	31		<5
RW-06	Sap/PWR/BR?	11/1/2007	<5	<5	<5			<10	<5	<5		<5
RW-06	Sap/PWR/BR?	5/1/2008	<5	<5	<5			<15	<5	<5		<5
RW-06	Sap/PWR/BR?	11/1/2008	<5	<5	<5			9.6	<5	<5		<2
RW-06	Sap/PWR/BR?	2/1/2009	<5	<5	<5			<10	<5	130		84
RW-06	Sap/PWR/BR?	5/1/2009	56	<5	<5			<10	<5	98		95
RW-06	Sap/PWR/BR?	8/1/2009	31	<5	<5			<10	<5	66		36
RW-06	Sap/PWR/BR?	11/1/2009	11	<5	<5			<10	<5	42		13
RW-06	Sap/PWR/BR?	5/1/2010	9.7	<5	<5			<5	<5	16		17
RW-06	Sap/PWR/BR?	11/1/2010	32	<5	<5			<5	<5	34		35
RW-06	Sap/PWR/BR?	11/11/2011	6.3	<5	<5	<5	<5		<5	16	180	11
RW-06	Sap/PWR/BR?	5/8/2012	<5	<5	<5	<5	<5		<5	<5	120	6.4
RW-06	Sap/PWR/BR?	11/19/2012	6	<5	<5	<5	<5		<5	17	340	18
RW-06	Sap/PWR/BR?	5/13/2013	<5	<5	<5	<5	<5		<5	12	210	16
RW-06	Sap/PWR/BR?	10/14/2013	7.1	<2	<2	<5	<5	<5	<2	17	420	16
RW-06	Sap/PWR/BR?	5/23/2014	10	<5	<5	<5	<5		<5	16	360	44
RW-06	Sap/PWR/BR?	11/17/2014	<5	<5	<5	<5	<5		<5	13	370	19
RW-06	Sap/PWR/BR?	5/18/2015	<5	<5	<5	<5	<5		<5	8.1	210	21
RW-06	Sap/PWR/BR?	11/17/2015	<5	<5	<5	<5	<5		<5	11	190	25
RW-07	Sap/PWR/BR?	5/1/2004	<5	<5	22			<10	<5	165		<5
RW-07	Sap/PWR/BR?	11/1/2004	6	<5	65			28	<5	4900		<5
RW-07	Sap/PWR/BR?	5/1/2005	14	<5	5			14	<5	4700		<5
RW-07	Sap/PWR/BR?	11/1/2005										
RW-07	Sap/PWR/BR?	5/1/2006	6.7	<5	<5			<10	<5	<5		<5
RW-07	Sap/PWR/BR?	11/1/2006	<5	<5	<5			<10	<5	<5		<5
RW-07	Sap/PWR/BR?	5/1/2007	<5	<5	<5			<10	<5	<5		<5
RW-07	Sap/PWR/BR?	11/1/2007	<5	<5	<5			<10	<5	<5		6
RW-07	Sap/PWR/BR?	5/1/2008	92	36	130			97	<5	<5		970
RW-07	Sap/PWR/BR?	11/1/2008	8.6	<5	9.1			6.1	<5	13		<5
RW-07	Sap/PWR/BR?	2/1/2009	5.2	<	<			<	<	5.7		<
RW-07	Sap/PWR/BR?	5/1/2009	<	<	<			<	<	5.2		<
RW-07	Sap/PWR/BR?	8/1/2009	<	<	<			<	<	5.3		<
RW-07	Sap/PWR/BR?	11/1/2009	<5	<5	10			<5	<5	<5		<5
RW-07	Sap/PWR/BR?	5/1/2010	550	850	4700			3040	<5	22		2900
RW-07	Sap/PWR/BR?	11/1/2010	32	31	330			124	<5	<5		120
RW-07	Sap/PWR/BR?	11/11/2011	<5	<5	31	17	10		<5	<5	33	8.8
RW-07	Sap/PWR/BR?	5/8/2012	6.1	<5	35	23	10		<5	<5	38	13
RW-07	Sap/PWR/BR?	11/19/2012	<5	<5	<5	<5	<5		<5	<5	<5	4.2
RW-07	Sap/PWR/BR?	5/13/2013	28	8.8	140	100	38		<5	<5	130	58
RW-07	Sap/PWR/BR?	10/14/2013	<2	<2	<2	<5	<5	<5	<2	2.5	36	6.4
RW-07	Sap/PWR/BR?	5/23/2014	<5	<5	<5	<5	<5		<5	<5	<5	17
RW-07	Sap/PWR/BR?	5/18/2015	<5	<5	<5	<5	<5		<5	<5	16	13
RW-07	Sap/PWR/BR?	11/17/2015	<5	<5	6	<5	<5		<5	<5	9.3	3.2
RW-07	Sap/PWR/BR?	1/18/2017	9	<5	<5	<5	<5		<5	6.7	280	140
RW-08	PWR / BR	10/7/2013	<5	<5	<5	6	<5		<5	3500	1400	20
RW-08	PWR / BR	2/19/2014	6.9	<5	<5	<5	<5		<5	400	700	48
RW-08	PWR / BR	11/17/2014	470	530	20000	2200	650		<5	120	9800	1000
RW-08	PWR / BR	2/18/2015	<5	<5	<5	<5	<5		<5	170	630	2.1
RW-08	PWR / BR	5/20/2015	<5	<5	<5	<5	<5		<5	410	830	4.9
RW-08	PWR / BR	11/17/2015	<5	<5	<5	<5	<5		<5	290	390	13
SP-1	Sap	1/5/2017	<5	<5	<5	<5	<5		<5	<5	<5	<2

BR - Bedrock
PWR - Partially Weathered Rock
Sap - Saprolite

Table 7. Mann-Kendall Results Summary Table for Plume Stability

Location	Geologic Zone	Plume location	BTEX				Chlorinated Ethenes				
			Benzene	Ethyl-benzene	Toluene	Total Xylenes	PCE	TCE	DCE	Vinyl Chloride	Total Chlorinated Ethenes 2011-2017 (molar)
MW-02	Saprolite	Release Area	Stable	Decreasing	Decreasing	Pr. Decreasing	--	--	--	No Trend	Decreasing
MW-03	Saprolite	Release Area	Decreasing	Decreasing	Decreasing	Decreasing	--	Decreasing	Decreasing	No Trend	Decreasing
MW-04	Sap/PWR	Release Area	Decreasing	Decreasing	Decreasing	Decreasing	--	Decreasing	Decreasing	Increasing	Decreasing
MW-05	Bedrock	Release Area	No Trend	Decreasing	Decreasing	Decreasing	--	No Trend	No Trend	--	No Trend
MW-07	Bedrock	Release Area	--	Decreasing	Decreasing	Decreasing	No Trend	Stable	No Trend	--	Pr. Decreasing
MW-08	Sap/PWR	Release Area	No Trend	Decreasing	Decreasing	Decreasing	--	Decreasing	Pr. Decreasing	No Trend	No Trend
MW-09	Bedrock	Mid-Plume	--	--	--	--	--	No Trend	Decreasing	--	Decreasing
MW-10	Sap/PWR	Mid-Plume	--	--	--	--	--	--	Decreasing	No Trend	Decreasing
MW-11	PWR	Mid-Plume	--	--	--	--	--	No Trend	Decreasing	--	Decreasing
MW-12	Sap/PWR	Mid-Plume	--	--	--	--	--	Increasing	Decreasing	--	Pr. Decreasing
MW-17	Sap/PWR	Release Area	Increasing	Increasing	--	Increasing	--	--	Decreasing	--	Decreasing
MW-17 (2013-2017)	Sap/PWR	Release Area	Decreasing	Decreasing	--	Decreasing					
MW-21	Saprolite	Release Area	Stable	--	Decreasing	Decreasing	--	Decreasing	Stable	Increasing	Stable
MW-23	PWR	Mid-Plume									Decreasing
MW-26	Saprolite	Mid-Plume	--	--	--	--	--	No Trend	No Trend	--	No Trend
MW-27	Saprolite	Mid-Plume	Decreasing	--	--	--	--	Decreasing	Decreasing	Decreasing	Decreasing
MW-28	Saprolite	Mid-Plume	--	--	--	--	--	Increasing	Increasing	Increasing	Increasing
MW-28 (2014-2017)	Saprolite	Mid-Plume	--	--	--	--	--	Decreasing	No Trend	No Trend	No Trend
MW-29	Saprolite	Mid-Plume	--	--	--	--	--	Pr. Increasing	Increasing	Pr. Increasing	Increasing
MW-29 (2014-2017)	Saprolite	Mid-Plume	--	--	--	--	--	Stable	No Trend	No Trend	No Trend
MW-32	PWR/Bedrock	Release Area	--	--	Stable	--	--	Decreasing	--	--	Decreasing
MW-33	Saprolite	Release Area	--	Stable	No Trend	No Trend	--	--	No Trend	No Trend	No Trend
MW-34	PWR/Bedrock	Release Area	--	--	--	--	--	Decreasing	--	--	Decreasing
MW-35	PWR/Bedrock	Release Area	--	--	--	--	--	No Trend	--	--	No Trend
MW-36	PWR/Bedrock	Release Area	--	--	No Trend	--	--	Decreasing	No Trend	No Trend	No Trend
RW-01	Saprolite	Release Area	No Trend	--	--	--	--	--	--	--	--
RW-02	Sap/PWR/BR	Release Area	No Trend	No Trend	No Trend	No Trend	--	Decreasing	Decreasing	No Trend	Decreasing
RW-03	Sap/PWR/BR	Release Area	--	--	--	--	--	Decreasing	Decreasing	No Trend	Decreasing
RW-04	Sap/PWR/BR	Release Area	--	--	--	--	--	No Trend	Decreasing	--	Decreasing
RW-06	Sap/PWR/BR	Release Area	--	--	--	--	--	No Trend	No Trend	Increasing	No Trend
RW-08	PWR/Bedrock	Release Area	--	--	--	--	--	No Trend	No Trend	No Trend	No Trend

Notes:
Sap - Saprolite
PWR - Partially Weathered Rock
BR - Bedrock
Pr. - "Probably"
-- Not sufficient detection data to perform Mann-Kendall analysis

Table 8. Surface Soil (0-2ft) Data Compared to RRSs

Location	Date Sampled	Sample Depth	Benzene	cis-1,2-Dichloro-ethene	Dichloro-methane (Methylene chloride)	Ethyl benzene	Lead	m&p-Xylene	o-Xylene	Toluene	Trichloro-ethene	Vinyl chloride
		(ft-bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Residential (Type 2) RRS			18	156	209	92	418	215	254	3581	1.4	3.4
Industrial Worker (Type 2) RRS			66	4088	3817	348	930	3180	3766	70228	21	13
Maximum			5.2	1.3	0.2	89	1520	28	0.82	27	8.1	0.032
95% UCL							372				1.0	
SB-1	3/9/2010	1-2	0.011	0.51	0.026	0.0044	36	0.013	<0.0044	0.39	1.3	
SB-102	5/20/2013	0					887					
SB-11	8/24/2010	1-2	<0.51	<0.51	<0.51	<0.51	180	1.6	0.6	6.7	<0.51	
SB-110	7/24/2013	0-1					374					
SB-111	7/24/2013	0-2					180					
SB-12	8/24/2010	1-2	<0.14	<0.14	<0.14	<0.14	25	<0.29	<0.14	<0.14	1.3	
SB-127	8/12/2013	0-1					364					
SB-128	8/12/2013	0-1					262					
SB-13	8/24/2010	1-2	<0.005	<0.005	<0.005	<0.005	350	<0.01	<0.005	<0.005	<0.005	
SB-130	8/15/2013	0-0.5					165					
SB-132	8/15/2013	0-2					241					
SB-135	8/15/2013	0-2					158					
SB-136	8/15/2013	0-0.5					531					
SB-137	8/15/2013	0-0.5					843					
SB-138	8/15/2013	0-0.5					425					
SB-14	8/24/2010	1-2	<8.4-02	<8.4-02	<8.4-02	<8.4-02	29	<0.17	<8.4-02	<8.4-02	1	
SB-140	8/22/2013	0-2					213					
SB-142	1/14/2015	0-1	<0.0075	<0.0075	<0.03	<0.0075	39J	0.056	0.019	<0.0075	<0.0075	<0.015
SB-142	1/14/2015	1-3	<0.0065	<0.0065	<0.026	<0.0065	339J	<0.0065	<0.0065	<0.0065	0.01J	<0.013
SB-143	1/14/2015	1-3					13.7					
SB-144	1/14/2015	0-1	<0.0066	<0.0066	<0.026	<0.0066	111J	<0.0066	<0.0066	<0.0066	<0.0066	<0.013
SB-144	1/14/2015	1-3					11.6J					
SB-145	1/14/2015	0-1	<0.0066	<0.0066	<0.026	<0.0066	20.4J	<0.0066	<0.0066	<0.0066	<0.0066	<0.013
SB-145	1/14/2015	1-3	<0.0077	<0.0077	<0.031	<0.0077	17.1J	<0.0077	<0.0077	<0.0077	<0.0077	<0.015
SB-146	1/14/2015	0-1	<0.0069	<0.0069	<0.028	<0.0069		<0.0069	<0.0069	<0.0069	<0.0069	<0.014
SB-146	1/14/2015	1-3					14.5J					
SB-147	1/14/2015	0-1	<0.0055	<0.0055	<0.022	<0.0055	141J	0.04	7.90E-03	<0.0055	<0.0055	<0.011
SB-147	1/14/2015	1-3					45.4J					
SB-148	1/14/2015	0-1	0.0055	<0.0039	<0.016	0.0097	148J	<0.0039	<0.0039	<0.0039	<0.0039	<7.9E-03
SB-148	1/14/2015	1-3	<2.4	<2.4	<9.700001	89	15.9J	28	<2.4	<2.4	<2.4	<4.8
SB-149	1/15/2015	0-1	<0.0055	<0.0055	<0.022	<0.0055	17.4J	<0.0055	<0.0055	<0.0055	<0.0055	<0.011
SB-149	1/15/2015	1-3					21.4J					
SB-15	8/25/2010	1-2	<0.11	<0.11	<0.11	<0.11	15	<0.22	<0.11	<0.11	<0.11	
SB-150	1/15/2015	0-1	<0.0041	<0.0041	<0.016	<0.0041	107J	<0.0041	<0.0041	<0.0041	<0.0041	<0.0082
SB-150	1/15/2015	1-3					141J					
SB-151	1/15/2015	0-1	<0.0052	<0.0052	<0.021	<0.0052	157J	<0.0052	<0.0052	<0.0052	<0.0052	<0.01

Table 8. Surface Soil (0-2ft) Data Compared to RRSs

Location	Date Sampled	Sample Depth	Benzene	cis-1,2-Dichloro-ethene	Dichloro-methane (Methylene chloride)	Ethyl benzene	Lead	m&p-Xylene	o-Xylene	Toluene	Trichloro-ethene	Vinyl chloride
		(ft-bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Residential (Type 2) RRS			18	156	209	92	418	215	254	3581	1.4	3.4
Industrial Worker (Type 2) RRS			66	4088	3817	348	930	3180	3766	70228	21	13
Maximum			5.2	1.3	0.2	89	1520	28	0.82	27	8.1	0.032
95% UCL							372				1.0	
SB-151	1/15/2015	1-3					254J					
SB-152	1/15/2015	0-1	<0.0044	<0.0044	<0.017	<0.0044	64J	<0.0044	<0.0044	<0.0044	<0.0044	<0.0087
SB-152	1/15/2015	1-3					13.9J					
SB-154	4/23/2015	0-1					193					
SB-154	4/23/2015	1-3					125					
SB-155	4/23/2015	0-1					83.5					
SB-155	4/23/2015	1-3					336					
SB-156	4/23/2015	0-1					275					
SB-156	7/29/2015	0-1					193					
SB-156	4/23/2015	1-3					471					
SB-156	7/29/2015	1-3					378					
SB-157	4/23/2015	0-1					53.6					
SB-157	4/23/2015	1-3					10.6					
SB-158	7/29/2015	0-1					18					
SB-158	7/29/2015	1-3					57					
SB-159	7/29/2015	0-1					118					
SB-159	7/29/2015	1-3					29					
SB-16	8/25/2010	1-2	<0.0058	<0.0058	<0.0058	<0.0058	100	<0.012	<0.0058	<0.0058	<0.0058	
SB-19	8/25/2010	1-2	<0.16	0.27	0.2	<0.16	27	0.53	<0.16	0.86	0.72	
SB-21	8/25/2010	1-2	<0.0052	<0.0052	<0.0052	0.027	12	<0.01	<0.0052	6.80E-03	<0.0052	
SB-23A	7/13/2012	0-2					270					
SB-24	8/25/2010	1-2	<0.14	0.38	<0.14	<0.14	22	<0.29	<0.14	<0.14	<0.14	
SB-25	8/25/2010	1-2	0.01	7.60E-02	0.046	<0.0076	13	0.032	0.01	0.2	0.082	
SB-26	8/25/2010	1-2	<0.0054	<0.0054	<0.0054	<0.0054	310	<0.011	<0.0054	<0.0054	<0.0054	
SB-29	8/25/2010	1-2	<0.0059	0.0065	<0.0059	<0.0059	18	<0.012	<0.0059	<0.0059	<0.0059	
SB-31	8/25/2010	1-2	<1.1	<1.1	<1.1	2.6	210	2.3	<1.1	<1.1	<1.1	
SB-33	8/26/2010	1-2	<0.21	<0.21	<0.21	<0.21	11	<0.42	<0.21	0.54	2	
SB-34	8/26/2010	1-2	<0.0051	<0.0051	<0.0051	<0.0051	28	<0.01	<0.0051	0.0089	0.0092	
SB-36	8/26/2010	1-2	<0.0045	<0.0045	<0.0045	<0.0045	30	<9.0E-03	<0.0045	<0.0045	<0.0045	
SB-37	8/26/2010	1-2	<0.0042	<0.0042	<0.0042	<0.0042	61	<0.0084	<0.0042	<0.0042	<0.0042	
SB-38	8/26/2010	1-2	0.021	<0.0042	<0.0042	0.016	12	<0.0085	<0.0042	<0.0042	<0.0042	
SB-39	8/26/2010	1-2	<0.54	<0.54	<0.54	<0.54	640	1.9	<0.54	3.8	8.1	
SB-42	8/27/2010	1-2	<0.0047	<0.0047	<0.0047	<0.0047		<9.3E-03	<0.0047	0.013	<0.0047	
SB-48	7/13/2012	0-2	<0.0049	<0.0049	<0.0049	<0.0049	22	<0.0098	<0.0049	<0.0049	<0.0049	
SB-49	7/13/2012	1-2					230					
SB-5	3/9/2010	1-2	<2.3	<2.3	<2.3	<2.3	255	<4.5	<2.3	27	2.7	

Table 8. Surface Soil (0-2ft) Data Compared to RRSs

Location	Date Sampled	Sample Depth	Benzene	cis-1,2-Dichloro-ethene	Dichloro-methane (Methylene chloride)	Ethyl benzene	Lead	m&p-Xylene	o-Xylene	Toluene	Trichloro-ethene	Vinyl chloride
		(ft-bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Residential (Type 2) RRS			18	156	209	92	418	215	254	3581	1.4	3.4
Industrial Worker (Type 2) RRS			66	4088	3817	348	930	3180	3766	70228	21	13
Maximum			5.2	1.3	0.2	89	1520	28	0.82	27	8.1	0.032
95% UCL							372				1.0	
SB-51	7/14/2012	1-2	<0.0047	<0.0047	<0.0047	<0.0047		<0.0093	<0.0047	<0.0047	<0.0047	
SB-56	7/15/2012	0-2					160					
SB-6	3/9/2010	1-2	<4.9E-03	<4.9E-03	<4.9E-03	<4.9E-03	102	<9.8E-03	<4.9E-03	0.022	0.019	
SB-60	7/13/2012	0-2					110					
SB-62	7/15/2012	0-2					15					
SB-63	7/15/2012	1-2	<0.0051	<0.0051	<0.0051	<0.0051		<0.01	<0.0051	<0.0051	<0.0051	
SB-65	7/15/2012	0-2					260					
SB-66	7/15/2012	0-2					53					
SB-67	7/15/2012	0-2					230					
SB-68	7/15/2012	0-2					380					
SB-69	7/15/2012	0-2					150					
SB-8	3/9/2010	1-2	<0.0039	<0.0039	<0.0039	<0.0039	139	<0.0077	<0.0039	0.0042	<0.0039	
Zone 1 - A1 - E Wall	4/23/2013	1-2					135					
Zone 1 - A2	4/23/2013	2					152					
Zone 1 - B1	4/24/2013	2					62.9					
Zone 1 - B3	4/23/2013	2					16.3					
Zone 1 - B3 - E Wall	4/23/2013	1-2					14.1					
Zone 1 - B4 - S Wall	4/23/2013	1-2					15.8					
Zone 1 - C1 - N Wall	4/23/2013	1-2					199					
Zone 1 - C2	4/23/2013	2	0.0021	0.12	<0.0018	0.0023	94.3	0.0045	0.0022	0.0038	0.046	<0.0037
Zone 1 - C4	4/24/2013	2					17					
Zone 1 - D1	4/23/2013	2					52.2					
Zone 1 - D3	4/24/2013	2					188					
Zone 1 - D4 - W Wall	4/24/2013	1-2					26.4					
Zone 1 - D5	4/24/2013	2					82.5					
Zone 1 - E2	4/24/2013	2					322					
Zone 1 - F1	4/24/2013	2					555					
Zone 1 - F1 - N Wall	4/24/2013	1-2					229					
Zone 1 - F3	4/24/2013	2					287					
Zone 1 - F3 - W Wall	4/24/2013	1-2					22.6					
Zone 2A - A1 - N Wall	6/20/2013	1-2					206					
Zone 2A - A2	6/20/2013	2					183					
Zone 2A - A2 - W Wall	6/20/2013	1-2					13.7					
Zone 2A - B1	6/20/2013	2					198					
Zone 2A - C1 - N Wall	6/20/2013	1-2					263					
Zone 2A - C2	6/20/2013	2	<0.0034	<0.0034	<0.013	<0.0034	422	<0.0034	<0.0034	<0.0034	<0.0034	<0.0067

Table 8. Surface Soil (0-2ft) Data Compared to RRSs

Location	Date Sampled	Sample Depth	Benzene	cis-1,2-Dichloro-ethene	Dichloro-methane (Methylene chloride)	Ethyl benzene	Lead	m&p-Xylene	o-Xylene	Toluene	Trichloro-ethene	Vinyl chloride
		(ft-bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Residential (Type 2) RRS			18	156	209	92	418	215	254	3581	1.4	3.4
Industrial Worker (Type 2) RRS			66	4088	3817	348	930	3180	3766	70228	21	13
Maximum			5.2	1.3	0.2	89	1520	28	0.82	27	8.1	0.032
95% UCL							372				1.0	
Zone 2A - C2 - S Wall	6/20/2013	1-2					187					
Zone 2A - D1	6/26/2013	2					469					
Zone 2A - D2 - S Wall	6/26/2013	1-2					1520					
Zone 2A - E2	6/26/2013	2					121					
Zone 2A - E2 - S Wall	6/26/2013	1-2					610					
Zone 3A - A2	5/10/2013	2					20.6					
Zone 3A - B1 N Wall	5/10/2013	1-2					310					
Zone 3A - D1	5/9/2013	2					575					
Zone 3A - E2	5/10/2013	2					322					
Zone 3A - E2	5/30/2013	2	<0.004	1.3	<0.016	0.017		0.087	0.016	0.47	0.64	0.032
Zone 3A - F1	5/9/2013	2					329					
Zone 3A - F1 N Wall	5/9/2013	1-2					229					
Zone 3A - G2	5/9/2013	2					285					
Zone 3A - G2 W Wall	5/9/2013	1-2					314					
Zone 3B - A1	5/29/2013	2					367					
Zone 3B - B2	5/29/2013	2					422					
Zone 3B - C1	5/29/2013	2					63.8					
Zone 3B - D2	5/29/2013	2					246					
Zone 3B - D2 S Wall	5/29/2013	1-2					185					
Zone 3B - E1	5/29/2013	2					561					
Zone 3B - F2	5/29/2013	2					576					
Zone 3B - F3 S Wall	5/29/2013	1-2					596					
Zone 3B - F4	5/29/2013	2					519					
Zone 3B - G1	5/29/2013	2					258					
Zone 3B - G3	5/29/2013	2					376					
Zone 3B - H2	5/29/2013	2					520					
Zone 3B - H4 W Wall	5/29/2013	1-2					640					
Zone 3B - I1	5/29/2013	2					443					
Zone 3B - I3	5/29/2013	2					569					
Zone 3B - J1 E Wall	5/29/2013	1-2					323					
Zone 3B - J2	5/29/2013	2					46.4					
Zone 3B - J4	5/29/2013	2					514					
Zone 3C - A1	6/11/2013	2	<0.18	<0.18	<0.72	0.99	27.6	0.68	<0.18	<0.18	<0.18	<0.36
Zone 3C - A3	6/12/2013	2					991					
Zone 3C - B4	6/12/2013	2					170					
Zone 3C - C1 S Wall	6/12/2013	1-2					243					

Table 8. Surface Soil (0-2ft) Data Compared to RRSs

Location	Date Sampled	Sample Depth	Benzene	cis-1,2-Dichloro-ethene	Dichloro-methane (Methylene chloride)	Ethyl benzene	Lead	m&p-Xylene	o-Xylene	Toluene	Trichloro-ethene	Vinyl chloride
		(ft-bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Residential (Type 2) RRS			18	156	209	92	418	215	254	3581	1.4	3.4
Industrial Worker (Type 2) RRS			66	4088	3817	348	930	3180	3766	70228	21	13
Maximum			5.2	1.3	0.2	89	1520	28	0.82	27	8.1	0.032
95% UCL							372				1.0	
Zone 3C - C3	6/12/2013	2					341					
Zone 3C - D4	6/12/2013	2					1190					
Zone 3C - E1	6/12/2013	2					667					
Zone 3C - E1 W Wall	6/12/2013	1-2					695					
Zone 3C - E3	6/12/2013	2					452					
Zone 3C - E4 W Wall	6/12/2013	1-2					228					
Zone 4 - A3 W Wall	5/21/2013	1-2					581					
Zone 4 - B1	5/21/2013	2					485					
Zone 4 - B3	5/21/2013	2	<0.0039	<0.0039	<0.016	<0.0039	29.5	<0.0039	<0.0039	<0.0039	<0.0039	<0.0078
Zone 4 - C2	5/21/2013	2					262					
Zone 5 - A2	6/13/2013	2	0.012	<0.003	<0.012	0.074	70.1	<0.003	<0.003	<0.003	<0.003	<0.006
Zone 5 - A4	6/13/2013	2	<0.13	<0.13	<0.5	5.4	128	<0.13	<0.13	<0.13	<0.13	<0.25
Zone 5 - B1	6/13/2013	2					1020					
Zone 5 - B3	6/13/2013	2					1200					
Zone 5 - B3 W Wall	6/13/2013	1-2	0.043	<0.0036	<0.015	4.8	19.3	<0.0036	<0.0036	<0.0036	<0.0036	<0.0073
Zone 5 - B4 E Wall	6/13/2013	1-2					1420					
Zone 5 - C2	6/13/2013	2					212					
Zone 5 - D1	6/13/2013	2	0.017	<0.0035	<0.014	0.027	177	<0.0035	<0.0035	<0.0035	<0.0035	<0.0071
Zone 5 - D1 N Wall	6/13/2013	1-2					135					
Zone 5 - D3	6/13/2013	2					82					
Zone 5 - D3 S Wall	6/13/2013	1-2	5.2	<0.4	<1.6	6.3	238	3.5	0.82	0.94	<0.4	<0.81

Table 9. Surface and Subsurface Soil (0-10ft) Data Compared to RRSs

Location	Date Sampled	Sample Depth	Benzene	cis-1,2-Dichloro-ethene	Dichloro-methane (Methylene chloride)	Ethyl benzene	Lead	m&p-Xylene	o-Xylene	Toluene	Trichloro-ethene	Vinyl chloride
		(ft-bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Construction Worker RRS			802	1239	2783	12670	930	6095	7162	41249	38	345
Maximum			5.2	3.9	13	110	2100	410	100	280	27	0.032
95% UCL South exposure domain							337					
SB-1	3/9/2010	1-2	0.011	0.51	0.026	0.0044	36	0.013	<0.0044	0.39	1.3	
SB-102	5/20/2013	0					887					
SB-11	8/24/2010	1-2	<0.51	<0.51	<0.51	<0.51	180	1.6	0.6	6.7	<0.51	
SB-110	7/24/2013	0-1					374					
SB-111	7/24/2013	0-2					180					
SB-12	8/24/2010	1-2	<0.14	<0.14	<0.14	<0.14	25	<0.29	<0.14	<0.14	1.3	
SB-127	8/12/2013	0-1					364					
SB-128	8/12/2013	0-1					262					
SB-13	8/24/2010	1-2	<0.005	<0.005	<0.005	<0.005	350	<0.01	<0.005	<0.005	<0.005	
SB-130	8/15/2013	0-0.5					165					
SB-132	8/15/2013	0-2					241					
SB-135	8/15/2013	0-2					158					
SB-136	8/15/2013	0-0.5					531					
SB-137	8/15/2013	0-0.5					843					
SB-138	8/15/2013	0-0.5					425					
SB-14	8/24/2010	1-2	<8.4E-02	<8.4E-02	<8.4E-02	<8.4E-02	29	<0.17	<8.4E-02	<8.4E-02	1	
SB-140	8/22/2013	0-2					213					
SB-142	1/14/2015	0-1	<0.0075	<0.0075	<0.03	<0.0075	39J	0.056	0.019	<0.0075	<0.0075	<0.015
SB-142	1/14/2015	1-3	<0.0065	<0.0065	<0.026	<0.0065	339J	<0.0065	<0.0065	<0.0065	0.01J	<0.013
SB-143	1/14/2015	1-3					13.7					
SB-144	1/14/2015	0-1	<0.0066	<0.0066	<0.026	<0.0066	111J	<0.0066	<0.0066	<0.0066	<0.0066	<0.013
SB-144	1/14/2015	1-3					11.6J					
SB-145	1/14/2015	0-1	<0.0066	<0.0066	<0.026	<0.0066	20.4J	<0.0066	<0.0066	<0.0066	<0.0066	<0.013
SB-145	1/14/2015	1-3	<0.0077	<0.0077	<0.031	<0.0077	17.1J	<0.0077	<0.0077	<0.0077	<0.0077	<0.015
SB-146	1/14/2015	0-1	<0.0069	<0.0069	<0.028	<0.0069		<0.0069	<0.0069	<0.0069	<0.0069	<0.014
SB-146	1/14/2015	1-3					14.5J					
SB-147	1/14/2015	0-1	<0.0055	<0.0055	<0.022	<0.0055	141J	0.04	7.90E-03	<0.0055	<0.0055	<0.011
SB-147	1/14/2015	1-3					45.4J					
SB-148	1/14/2015	0-1	0.0055	<0.0039	<0.016	0.0097	148J	<0.0039	<0.0039	<0.0039	<0.0039	<7.900001E-03
SB-148	1/14/2015	1-3	<2.4	<2.4	<9.700001	89.00001	15.9J	28	<2.4	<2.4	<2.4	<4.8
SB-149	1/15/2015	0-1	<0.0055	<0.0055	<0.022	<0.0055	17.4J	<0.0055	<0.0055	<0.0055	<0.0055	<0.011
SB-149	1/15/2015	1-3					21.4J					
SB-15	8/25/2010	1-2	<0.11	<0.11	<0.11	<0.11	15	<0.22	<0.11	<0.11	<0.11	
SB-150	1/15/2015	0-1	<0.0041	<0.0041	<0.016	<0.0041	107J	<0.0041	<0.0041	<0.0041	<0.0041	<0.0082
SB-150	1/15/2015	1-3					141J					
SB-151	1/15/2015	0-1	<0.0052	<0.0052	<0.021	<0.0052	157J	<0.0052	<0.0052	<0.0052	<0.0052	<0.01
SB-151	1/15/2015	1-3					254J					

Table 9. Surface and Subsurface Soil (0-10ft) Data Compared to RRSs

Location	Date Sampled	Sample Depth	Benzene	cis-1,2-Dichloro-ethene	Dichloro-methane (Methylene chloride)	Ethyl benzene	Lead	m&p-Xylene	o-Xylene	Toluene	Trichloro-ethene	Vinyl chloride
		(ft-bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Construction Worker RRS			802	1239	2783	12670	930	6095	7162	41249	38	345
Maximum			5.2	3.9	13	110	2100	410	100	280	27	0.032
95% UCL South exposure domain							337					
SB-152	1/15/2015	0-1	<0.0044	<0.0044	<0.017	<0.0044	64J	<0.0044	<0.0044	<0.0044	<0.0044	<0.0087
SB-152	1/15/2015	1-3					13.9J					
SB-154	4/23/2015	0-1					193					
SB-154	4/23/2015	1-3					125					
SB-155	4/23/2015	0-1					83.5					
SB-155	4/23/2015	1-3					336					
SB-156	4/23/2015	0-1					275					
SB-156	7/29/2015	0-1					193					
SB-156	4/23/2015	1-3					471					
SB-156	7/29/2015	1-3					378					
SB-157	4/23/2015	0-1					53.6					
SB-157	4/23/2015	1-3					10.6					
SB-158	7/29/2015	0-1					18					
SB-158	7/29/2015	1-3					57					
SB-159	7/29/2015	0-1					118					
SB-159	7/29/2015	1-3					29					
SB-16	8/25/2010	1-2	<0.0058	<0.0058	<0.0058	<0.0058	100	<0.012	<0.0058	<0.0058	<0.0058	
SB-19	8/25/2010	1-2	<0.16	0.27	0.2	<0.16	27	0.53	<0.16	0.86	0.72	
SB-21	8/25/2010	1-2	<0.0052	<0.0052	<0.0052	0.027	12	<0.01	<0.0052	6.80E-03	<0.0052	
SB-23A	7/13/2012	0-2					270					
SB-24	8/25/2010	1-2	<0.14	0.38	<0.14	<0.14	22	<0.29	<0.14	<0.14	<0.14	
SB-25	8/25/2010	1-2	0.01	7.60E-02	0.046	<0.0076	13	0.032	0.01	0.2	0.082	
SB-26	8/25/2010	1-2	<0.0054	<0.0054	<0.0054	<0.0054	310	<0.011	<0.0054	<0.0054	<0.0054	
SB-29	8/25/2010	1-2	<0.0059	0.0065	<0.0059	<0.0059	18	<0.012	<0.0059	<0.0059	<0.0059	
SB-31	8/25/2010	1-2	<1.1	<1.1	<1.1	2.6	210	2.3	<1.1	<1.1	<1.1	
SB-33	8/26/2010	1-2	<0.21	<0.21	<0.21	<0.21	11	<0.42	<0.21	0.54	2	
SB-34	8/26/2010	1-2	<0.0051	<0.0051	<0.0051	<0.0051	28	<0.01	<0.0051	0.0089	0.0092	
SB-36	8/26/2010	1-2	<0.0045	<0.0045	<0.0045	<0.0045	30	<9.0E-03	<0.0045	<0.0045	<0.0045	
SB-37	8/26/2010	1-2	<0.0042	<0.0042	<0.0042	<0.0042	61	<0.0084	<0.0042	<0.0042	<0.0042	
SB-38	8/26/2010	1-2	0.021	<0.0042	<0.0042	0.016	12	<0.0085	<0.0042	<0.0042	<0.0042	
SB-39	8/26/2010	1-2	<0.54	<0.54	<0.54	<0.54	640	1.9	<0.54	3.8	8.1	
SB-42	8/27/2010	1-2	<0.0047	<0.0047	<0.0047	<0.0047		<9.3E-03	<0.0047	0.013	<0.0047	
SB-48	7/13/2012	0-2	<0.0049	<0.0049	<0.0049	<0.0049	22	<0.0098	<0.0049	<0.0049	<0.0049	
SB-49	7/13/2012	1-2					230					
SB-5	3/9/2010	1-2	<2.3	<2.3	<2.3	<2.3	255	<4.5	<2.3	27	2.7	
SB-51	7/14/2012	1-2	<0.0047	<0.0047	<0.0047	<0.0047		<0.0093	<0.0047	<0.0047	<0.0047	
SB-56	7/15/2012	0-2					160					

Table 9. Surface and Subsurface Soil (0-10ft) Data Compared to RRSs

Location	Date Sampled	Sample Depth	Benzene	cis-1,2-Dichloro-ethene	Dichloro-methane (Methylene chloride)	Ethyl benzene	Lead	m&p-Xylene	o-Xylene	Toluene	Trichloro-ethene	Vinyl chloride
		(ft-bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Construction Worker RRS			802	1239	2783	12670	930	6095	7162	41249	38	345
Maximum			5.2	3.9	13	110	2100	410	100	280	27	0.032
95% UCL South exposure domain							337					
SB-6	3/9/2010	1-2	<4.9E-03	<4.9E-03	<4.9E-03	<4.9E-03	102	<9.8E-03	<4.9E-03	0.022	0.019	
SB-60	7/13/2012	0-2					110					
SB-62	7/15/2012	0-2					15					
SB-63	7/15/2012	1-2	<0.0051	<0.0051	<0.0051	<0.0051		<0.01	<0.0051	<0.0051	<0.0051	
SB-65	7/15/2012	0-2					260					
SB-66	7/15/2012	0-2					53					
SB-67	7/15/2012	0-2					230					
SB-68	7/15/2012	0-2					380					
SB-69	7/15/2012	0-2					150					
SB-8	3/9/2010	1-2	<0.0039	<0.0039	<0.0039	<0.0039	139	<0.0077	<0.0039	0.0042	<0.0039	
Zone 1 - A1 - E Wall	4/23/2013	1-2					135					
Zone 1 - A2	4/23/2013	2					152					
Zone 1 - B1	4/24/2013	2					62.9					
Zone 1 - B3	4/23/2013	2					16.3					
Zone 1 - B3 - E Wall	4/23/2013	1-2					14.1					
Zone 1 - B4 - S Wall	4/23/2013	1-2					15.8					
Zone 1 - C1 - N Wall	4/23/2013	1-2					199					
Zone 1 - C2	4/23/2013	2	0.0021	0.12	<0.0018	0.0023	94.3	0.0045	0.0022	0.0038	0.046	<0.0037
Zone 1 - C4	4/24/2013	2					17					
Zone 1 - D1	4/23/2013	2					52.2					
Zone 1 - D3	4/24/2013	2					188					
Zone 1 - D4 - W Wall	4/24/2013	1-2					26.4					
Zone 1 - D5	4/24/2013	2					82.5					
Zone 1 - E2	4/24/2013	2					322					
Zone 1 - F1	4/24/2013	2					555					
Zone 1 - F1 - N Wall	4/24/2013	1-2					229					
Zone 1 - F3	4/24/2013	2					287					
Zone 1 - F3 - W Wall	4/24/2013	1-2					22.6					
Zone 2A - A1 - N Wall	6/20/2013	1-2					206					
Zone 2A - A2	6/20/2013	2					183					
Zone 2A - A2 - W Wall	6/20/2013	1-2					13.7					
Zone 2A - B1	6/20/2013	2					198					
Zone 2A - C1 - N Wall	6/20/2013	1-2					263					
Zone 2A - C2	6/20/2013	2	<0.0034	<0.0034	<0.013	<0.0034	422	<0.0034	<0.0034	<0.0034	<0.0034	<0.0067
Zone 2A - C2 - S Wall	6/20/2013	1-2					187					
Zone 2A - D1	6/26/2013	2					469					
Zone 2A - D2 - S Wall	6/26/2013	1-2					1520					

Table 9. Surface and Subsurface Soil (0-10ft) Data Compared to RRSs

Location	Date Sampled	Sample Depth	Benzene	cis-1,2-Dichloro-ethene	Dichloro-methane (Methylene chloride)	Ethyl benzene	Lead	m&p-Xylene	o-Xylene	Toluene	Trichloro-ethene	Vinyl chloride
		(ft-bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Construction Worker RRS			802	1239	2783	12670	930	6095	7162	41249	38	345
Maximum			5.2	3.9	13	110	2100	410	100	280	27	0.032
95% UCL South exposure domain							337					
Zone 2A - E2	6/26/2013	2					121					
Zone 2A - E2 - S Wall	6/26/2013	1-2					610					
Zone 3A - A2	5/10/2013	2					20.6					
Zone 3A - B1 N Wall	5/10/2013	1-2					310					
Zone 3A - D1	5/9/2013	2					575					
Zone 3A - E2	5/10/2013	2					322					
Zone 3A - E2	5/30/2013	2	<0.004	1.3	<0.016	0.017		0.087	0.016	0.47	0.64	0.032
Zone 3A - F1	5/9/2013	2					329					
Zone 3A - F1 N Wall	5/9/2013	1-2					229					
Zone 3A - G2	5/9/2013	2					285					
Zone 3A - G2 W Wall	5/9/2013	1-2					314					
Zone 3B - A1	5/29/2013	2					367					
Zone 3B - B2	5/29/2013	2					422					
Zone 3B - C1	5/29/2013	2					63.8					
Zone 3B - D2	5/29/2013	2					246					
Zone 3B - D2 S Wall	5/29/2013	1-2					185					
Zone 3B - E1	5/29/2013	2					561					
Zone 3B - F2	5/29/2013	2					576					
Zone 3B - F3 S Wall	5/29/2013	1-2					596					
Zone 3B - F4	5/29/2013	2					519					
Zone 3B - G1	5/29/2013	2					258					
Zone 3B - G3	5/29/2013	2					376					
Zone 3B - H2	5/29/2013	2					520					
Zone 3B - H4 W Wall	5/29/2013	1-2					640					
Zone 3B - I1	5/29/2013	2					443					
Zone 3B - I3	5/29/2013	2					569					
Zone 3B - J1 E Wall	5/29/2013	1-2					323					
Zone 3B - J2	5/29/2013	2					46.4					
Zone 3B - J4	5/29/2013	2					514					
Zone 3C - A1	6/11/2013	2	<0.18	<0.18	<0.72	0.99	27.6	0.68	<0.18	<0.18	<0.18	<0.36
Zone 3C - A3	6/12/2013	2					991					
Zone 3C - B4	6/12/2013	2					170					
Zone 3C - C1 S Wall	6/12/2013	1-2					243					
Zone 3C - C3	6/12/2013	2					341					
Zone 3C - D4	6/12/2013	2					1190					
Zone 3C - E1	6/12/2013	2					667					
Zone 3C - E1 W Wall	6/12/2013	1-2					695					

Table 9. Surface and Subsurface Soil (0-10ft) Data Compared to RRSs

Location	Date Sampled	Sample Depth	Benzene	cis-1,2-Dichloro-ethene	Dichloro-methane (Methylene chloride)	Ethyl benzene	Lead	m&p-Xylene	o-Xylene	Toluene	Trichloro-ethene	Vinyl chloride
		(ft-bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Construction Worker RRS			802	1239	2783	12670	930	6095	7162	41249	38	345
Maximum			5.2	3.9	13	110	2100	410	100	280	27	0.032
95% UCL South exposure domain							337					
Zone 3C - E3	6/12/2013	2					452					
Zone 3C - E4 W Wall	6/12/2013	1-2					228					
Zone 4 - A3 W Wall	5/21/2013	1-2					581					
Zone 4 - B1	5/21/2013	2					485					
Zone 4 - B3	5/21/2013	2	<0.0039	<0.0039	<0.016	<0.0039	29.5	<0.0039	<0.0039	<0.0039	<0.0039	<0.0078
Zone 4 - C2	5/21/2013	2					262					
Zone 5 - A2	6/13/2013	2	0.012	<0.003	<0.012	0.074	70.1	<0.003	<0.003	<0.003	<0.003	<0.006
Zone 5 - A4	6/13/2013	2	<0.13	<0.13	<0.5	5.4	128	<0.13	<0.13	<0.13	<0.13	<0.25
Zone 5 - B1	6/13/2013	2					1020					
Zone 5 - B3	6/13/2013	2					1200					
Zone 5 - B3 W Wall	6/13/2013	1-2	0.043	<0.0036	<0.015	4.8	19.3	<0.0036	<0.0036	<0.0036	<0.0036	<0.0073
Zone 5 - B4 E Wall	6/13/2013	1-2					1420					
Zone 5 - C2	6/13/2013	2					212					
Zone 5 - D1	6/13/2013	2	0.017	<0.0035	<0.014	0.027	177	<0.0035	<0.0035	<0.0035	<0.0035	<0.0071
Zone 5 - D1 N Wall	6/13/2013	1-2					135					
Zone 5 - D3	6/13/2013	2					82					
Zone 5 - D3 S Wall	6/13/2013	1-2	5.2	<0.4	<1.6	6.3	238	3.5	0.82	0.94	<0.4	<0.81
SB-58	7/14/2012	2-3					15					
SB-56	7/15/2012	2-4					81					
SB-57	7/14/2012	2-4					2100					
SB-154	4/23/2015	3-5					20.2					
SB-155	4/23/2015	3-5					125					
SB-156	4/23/2015	3-5					534					
SB-156	7/29/2015	3-5					1130					
SB-157	4/23/2015	3-5					9.07					
SB-158	7/29/2015	3-5					234					
SB-159	7/29/2015	3-5					40					
SB-156	7/29/2015	5-7					23.5					
SB-158	7/29/2015	5-7					17.9					
SB-159	7/29/2015	5-7					15.8					
SB-9	3/9/2010	5-7	<2.1	<2.1	<2.1	<2.1	21.2	<4.2	<2.1	<2.1	27	
SB-43	8/27/2010	5-7.5	<6.3	<6.3	<6.3	41		120	13	<6.3	<6.3	
SB-143	1/14/2015	6-8	<0.0057	<0.0057	<0.023	<0.0057		<0.0057	<0.0057	<0.0057	<0.0057	<0.011
SB-13	8/24/2010	7.5-10	<16	<16	<16	60		260	62	160	<16	
SB-142	1/14/2015	8-10					21.2J					
SB-143	1/14/2015	8-10					9.65J					
SB-144	1/14/2015	8-10					8.5J					

Table 9. Surface and Subsurface Soil (0-10ft) Data Compared to RRSs

Location	Date Sampled	Sample Depth	Benzene	cis-1,2-Dichloro-ethene	Dichloro-methane (Methylene chloride)	Ethyl benzene	Lead	m&p-Xylene	o-Xylene	Toluene	Trichloro-ethene	Vinyl chloride
		(ft-bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Construction Worker RRS			802	1239	2783	12670	930	6095	7162	41249	38	345
Maximum			5.2	3.9	13	110	2100	410	100	280	27	0.032
95% UCL South exposure domain							337					
SB-145	1/14/2015	8-10					13J					
SB-146	1/14/2015	8-10					6.77J					
SB-147	1/14/2015	8-10					<6.26					
SB-148	1/14/2015	8-10					15.7J					
SB-149	1/15/2015	8-10					23.6J					
SB-15	8/25/2010	8-10	0.026	0.043	<0.0061	0.078		0.19	0.011	0.36E	<0.0061	
SB-150	1/15/2015	8-10					61.3J					
SB-151	1/15/2015	8-10					<5.84					
SB-152	1/15/2015	8-10					12.3J					
SB-153	1/15/2015	8-10					<6.11					
SB-16	8/25/2010	8-10	<0.0058	0.022	<0.0058	<0.0058		<0.012	<0.0058	<0.0058	0.056	
SB-17	8/25/2010	7.5-10	<0.18	0.46	0.31	<0.18		<0.36	<0.18	0.78	0.38	
SB-18	8/25/2010	7.5-10	<0.16	2.2	0.65	0.29		0.7	0.31	1.4	1.4	
SB-19	8/25/2010	7.5-10	<0.16	0.44	0.47	<0.16		0.53	<0.16	0.85	<0.16	
SB-21	8/25/2010	7.5-10	<0.54	3.9	<0.54	<0.54		<1.1	<0.54	7	0.85	
SB-24	8/25/2010	7.5-10	<0.17	0.83	<0.17	<0.17		<0.34	<0.17	0.22	<0.17	
SB-27	8/25/2010	7.5-10	<0.006	<0.006	<0.006	<0.006		<0.012	<0.006	<0.006	<0.006	
SB-28	8/25/2010	7.5-10	<0.006	<0.006	<0.006	<0.006		<0.012	<0.006	<0.006	<0.006	
SB-29	8/25/2010	7.5-10	<0.0065	0.17	<0.0065	<0.0065		<0.013	<0.0065	0.0077	0.024	
SB-3	3/9/2010	8-10	0.016	8.40E-02	0.0062	0.0069	14.2	0.019	0.0037	0.74	1.1	
SB-31	8/25/2010	7.5-10	2.9	<2.8	<2.8	6		30	5.7	<2.8	<2.8	
SB-33	8/26/2010	7.5-10	<0.26	0.52	13	<0.26		<0.52	<0.26	3.3	5.3	
SB-34	8/26/2010	7.5-10	<0.0054	<0.0054	<0.0054	<0.0054		<0.011	<0.0054	0.0077	0.0087	
SB-35	8/26/2010	7.5-10	<0.28	2.1	1.8*	<0.28		0.8800001	<0.28	4.4	1.9	
SB-36	8/26/2010	7.5-10	<0.005	<0.005	<0.005	<0.005		<0.01	<0.005	<0.005	<0.005	
SB-37	8/26/2010	7.5-10	<4.9E-03	<4.9E-03	<4.9E-03	<4.9E-03		<0.0099	<4.9E-03	<4.9E-03	<4.9E-03	
SB-46	7/13/2012	8-10	<4.6	<4.6	<4.6	<4.6		<9.2	<4.6	<4.6	<4.6	
SB-47	7/13/2012	8-10	<3.7	<3.7	<3.7	20		65	14	230	<3.7	
SB-63	7/15/2012	8-10	<5.8	<5.8	<5.8	<5.8		<12	<5.8	29	<5.8	
SB-7	3/9/2010	8-10	<23	<23	<23	110	20.6	410	100	280	<23	

Table 10. Indoor Air Results Compared to Target Indoor Air Concentrations

Parameter		VISL Target Indoor Air		Location/Sample														
		Residential	Commercial	Jefferson Bldg						West		Central				Hwy Products		
		ELCR 10^{-5}, HI 1	ELCR 10-5, HI 1	AS-1	AS-2	AS-3	AS-4	AS-5	AS-6	AS-7	AS-8	AS-9	AS-10	AS-11	AS-12	AS-13	AS-14	AS-15
1,2,4-Trimethylbenzene	$\mu g/m^3$	7.3	31	0.98	0.98	0.79	1.9	1.4	0.59	3.8	3.6	0.59	2.8	5.9	3.5	4.2	4.2	<0.98
1,3,5-Trimethylbenzene	$\mu g/m^3$	NA	NA	<0.98	<0.98	<0.98	0.49	<0.98	<0.98	1	1.1	<0.98	0.74	1.6	0.98	1.1	1.2	<0.98
2-Butanone (MEK)	$\mu g/m^3$	5200	22000	2	2.6	1.3	12	1.7	0.65	1	1.7	6.2	0.77	0.86	0.68	1.4	1.4	1.7
4-Methyl-2-pentanone	$\mu g/m^3$	3100	13000	<0.82	<0.82	<0.82	<0.82	<0.82	<0.82	<0.82	<0.82	<0.82	<0.82	<0.82	<0.82	0.49	0.53	0.49
Acetone	$\mu g/m^3$	32000	140000	5.2	10	6.2	42	77.7	5.2	<0.48	<0.48	49.4	8.1	7.8	7.4	40.9	42.3	67.5
Benzene	$\mu g/m^3$	3.6	16	1.2	1.2	1.1	1.7	1.6	0.86	2	2.4	1.2	3.5	4.5	3.5	2.3	2.3	2.2
Chloromethane	$\mu g/m^3$	94	390	0.72	0.68	0.66	0.97	0.97	0.95	0.91	0.99	1	0.93	0.97	0.89	1	0.99	0.99
cis-1,2-Dichloroethene	$\mu g/m^3$	NA	NA	15	20	16	5.9	2.1	<0.79	0.56	0.48	<0.79	2.3	2.2	1.8	<0.79	<0.79	<0.79
Cyclohexane	$\mu g/m^3$	6300	26000	<0.69	<0.69	<0.69	<0.69	<0.69	<0.69	0.55	<0.69	<0.69	<0.69	0.83	<0.69	<0.69	<0.69	<0.69
Dichloromethane	$\mu g/m^3$	NA	NA	<0.69	<0.69	<0.69	<0.69	0.73	<0.69	1.6	4.9	<0.69	0.69	<0.69	<0.69	0.73	0.8	1
Ethyl acetate	$\mu g/m^3$	73	310	<0.72	<0.72	<0.72	<0.72	<0.72	4.7	<0.72	<0.72	<0.72	<0.72	<0.72	<0.72	<0.72	<0.72	<0.72
Ethyl benzene	$\mu g/m^3$	11	49	0.65	0.56	0.48	1	0.83	<0.87	1.2	1.5	0.61	1.3	2.3	1.5	1.7	1.7	0.56
Freon-11	$\mu g/m^3$	NA	NA	1.2	1.2	1.2	1.1	1.2	1.1	1.1	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.2
Freon-12	$\mu g/m^3$	100	440	2	2	2	2	2	1.9	1.9	1.9	2	2	2.1	1.9	2	2	2
Isopropyl Alcohol	$\mu g/m^3$	210	880	<0.49	1.1	0.93	3.4	6.9	0.88	<0.49	<0.49	1.5	16	15	20	3.4	2.7	2.7
n-Hexane	$\mu g/m^3$	7300	3100	0.85	0.81	0.74	1.1	1.1	0.56	3.9	4.9	1.1	1.8	2.4	1.7	11	12	19
o-Xylene	$\mu g/m^3$	100	440	0.69	0.65	0.56	1	0.91	<0.87	1.7	1.8	0.61	1.6	3	1.9	2.1	2.1	<0.87
Propylene	$\mu g/m^3$	3100	13000	3.1	2.9	2.7	<0.86	9.1	<0.86	2.4	2.7	<0.86	<0.86	<0.86	<0.86	<0.86	<0.86	<0.86
Styrene	$\mu g/m^3$	1000	4400	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	0.47	<0.85	<0.85	<0.85	<0.85
Tetrachloroethene	$\mu g/m^3$	42	290	<0.27	0.46	<0.27	<0.27	0.35	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27
Tetrahydrofuran	$\mu g/m^3$	2100	8800	2.1	1.3	0.77	5.3	0.35	<0.59	<0.59	<0.59	1.2	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59
Toluene	$\mu g/m^3$	5200	22000	2.7	2.6	2.1	4.1	4.5	1.8	6.8	10	2.7	6.4	11	7.2	41.5	44.1	34
Trichloroethene	$\mu g/m^3$	2.1	8.8	0.81	1.2	0.86	0.75	0.7	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21

Table 11. Risk Evaluation for Soil

COC	Industrial Worker (0-2 ft)						Construction Worker (0-10 ft)					
			Carcinogenic		NonCarcinogenic				Carcinogenic		NonCarcinogenic	
	EPC (mg/kg)[1]		Soil Conc[3] (mg/kg)	ELCR[5]	Soil Conc[4] (mg/kg)	HQ[6]	EPC (mg/kg)[2]		Soil Conc[3] (mg/kg)	ELCR[5]	Soil Conc[4] (mg/kg)	HQ[6]
Benzene	0.84	UCL	66	1.3E-07	553	1.5E-03	0.50	UCL	2448	2.0E-09	802	6.2E-04
cis-DCE	0.120	UCL			4088	2.9E-05	0.40	UCL			1239	3.2E-04
Ethylbenzene	1.8	UCL	348	5.0E-08	28667	6.1E-05	11	UCL	12670	8.8E-09	32113	3.5E-04
Methylene chloride	0.020	UCL	13585	1.4E-11	3817	5.1E-06	1.1	UCL	185661	5.8E-11	2783	3.8E-04
Lead	372	UCL					337	UCL				
Trichloroethene	1.0	UCL	69	1.5E-07	21	5.0E-02	2.0	UCL	2628	7.8E-09	38	5.4E-02
Toluene	3.6	UCL			70228	5.1E-05	43	UCL			41249	1.0E-03
o-Xylene	0.18	UCL			3766	4.9E-05	8.7	UCL			7162	1.2E-03
m&p-Xylene	0.57	UCL			3180	1.8E-04	54	UCL			6095	8.9E-03
Vinyl chloride	0.032	Max	13.4	2.4E-08	244	1.3E-04	0.032	Max	345	9.3E-10	399	8.0E-05
Total:				**3.5E-07**		**0.052**				**2.0E-08**		**0.067**

UCL: 95% UCL from ProUCL

Max: maximum detected concentration

ND: not detected

1) EPC: Exposure point concentration for surface soils (0-2 ft)

2) EPC: Exposure point concentration for 0-10 ft surface and subsurface soils

3) Soil concentration from RAGS equation (see Table 6 of Appendix E)

4) Soil concentration from RAGS equation (see Table 7 of Appendix E)

5) ELCR = (EPC x 10^{-5})/Soil Conc

6) HQ = (EPC x 1)/Soil Conc

Table 12. Risk Evaluation for Vapor Intrusion

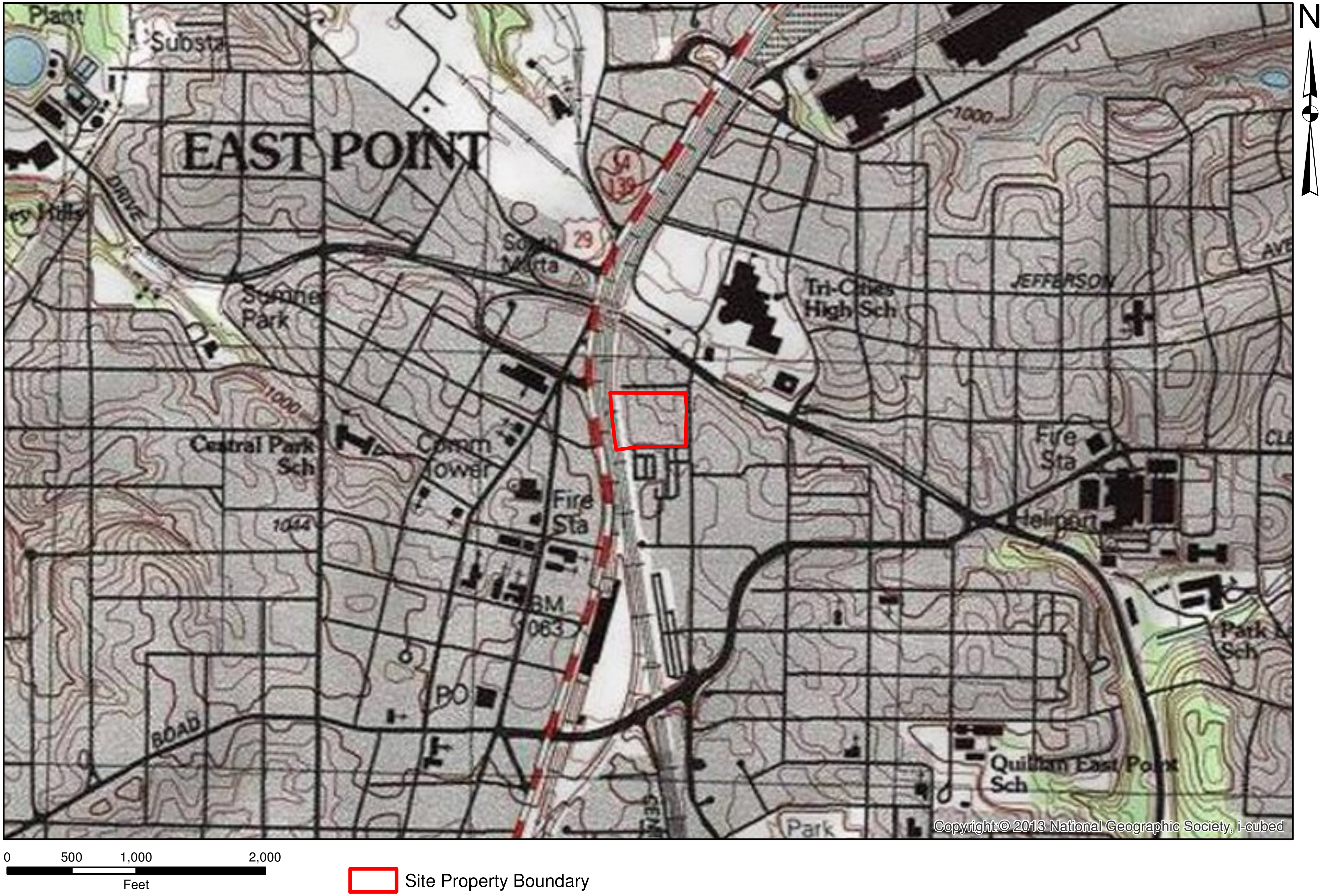
COC	Resident		Worker	
	ELCR	HQ	ELCR	HQ
On-Site				
Benzene			2.1E-06	2.5E-02
Ethylbenzene			3.5E-07	3.9E-04
Tetrachloroethene			ND	ND
Toluene			No IUR	1.8E-03
Trichloroethene			ND	ND
o-Xylene			No IUR	5.0E-03
Vinyl chloride			1.6E-07	1.0E-03
cis-DCE			NV	NV
Total On-Site:			**2.6E-06**	**0.033**
Off-Site				
Benzene	4.2E-06	4.8E-02	9.5E-07	1.1E-02
Ethylbenzene	7.7E-07	8.3E-04	1.8E-07	2.0E-04
Tetrachloroethene	3.7E-08	9.6E-03	8.5E-09	2.3E-03
Toluene	No IUR	7.5E-04	No IUR	1.8E-04
Trichloroethene	2.1E-06	4.8E-01	3.3E-07	1.1E-01
o-Xylene	No IUR	8.5E-03	No IUR	2.0E-03
Vinyl chloride	ND	ND	ND	ND
cis-DCE	NV	NV	NV	NV
Total Off-Site:	**7.1E-06**	**0.55**	**1.5E-06**	**0.13**

NV: Not volatile
No IUR: No inhalation unit risk
ND: Not detected
NA: Not analyzed

Table 13. Cumulative Risk Evaluation

Receptor	Medium	On-Site		Off-Site	
		ELCR	HI	ELCR	HI
On-Site Worker					
	Soil	3.5E-07	0.052		
	Vapor	2.6E-06	0.033		
	Cumulative	3.0E-06	0.085		
On-Site Construction Worker					
	Soil	2.0E-08	0.067		
Off-Site Worker					
	Vapor			1.5E-06	0.13
Off-Site Resident					
	Vapor			7.1E-06	0.55

FIGURES

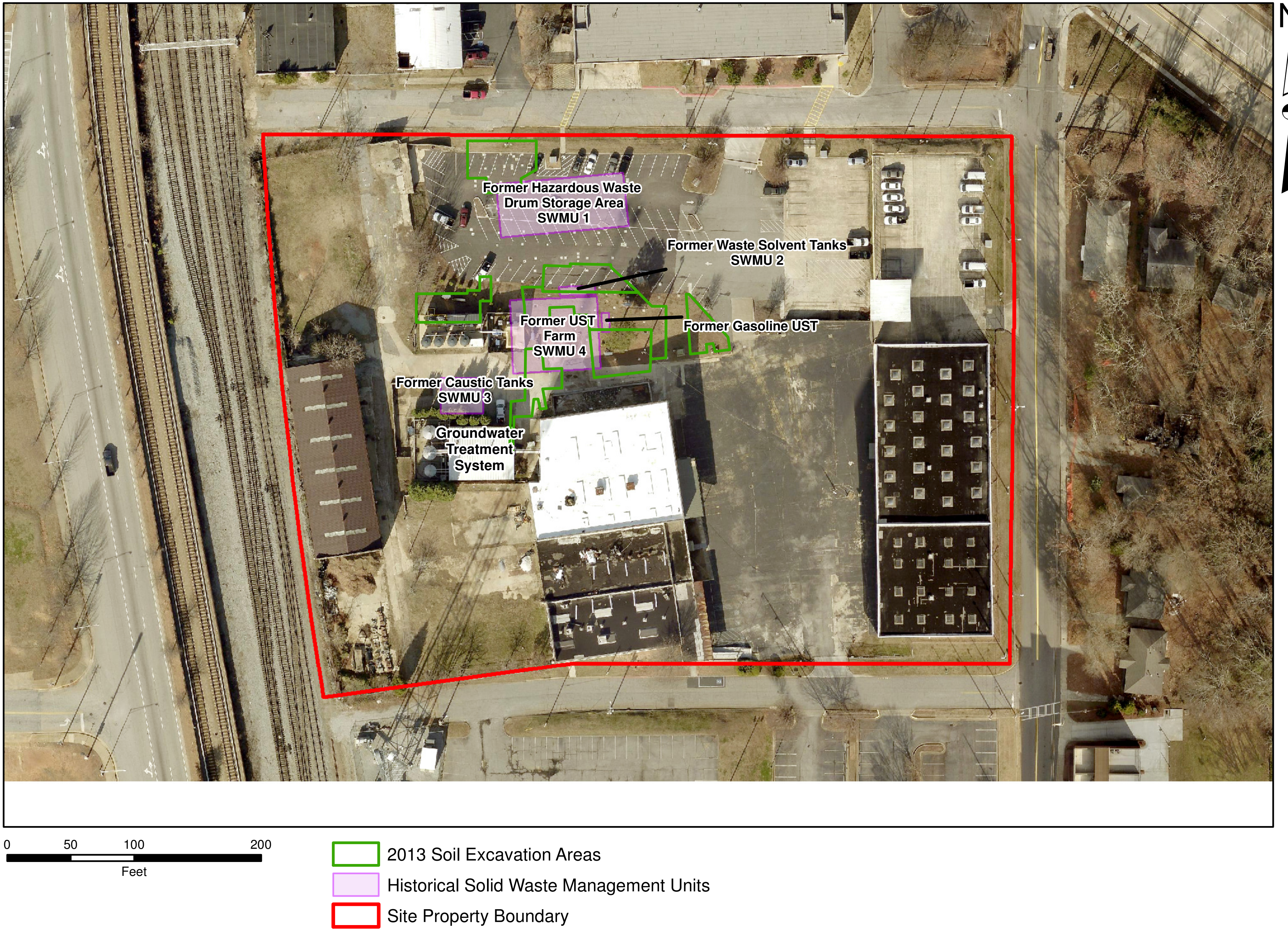


Source: USGS SW Atlanta, GA 7.5 Minute Quadrangle from ArcGIS Online Services

Site Location - Topographic Map

EPS
F:\Lafarge\GIS\mxd\CSR\Location.mxd

Figure No.1



Former SWMUs and Soil Remediation Areas

EPS
F:\Lafarge\GIS\mxd\CSR\SiteFeatures.mxd

Figure No.2

Groundwater P&T System

Figure No. 3

EPS

F:\Lafarge\GIS\mxd\CSR\P&T.mxd

0 50 100 200
Feet

AS DPE SVE Site Property Boundary

AS/SVE/DPE/ System

Figure No.4

EPS
F:\Lafarge\GIS\mxd\CSR\ASSVEDPE.mxd

Well Location Map

Figure No.5

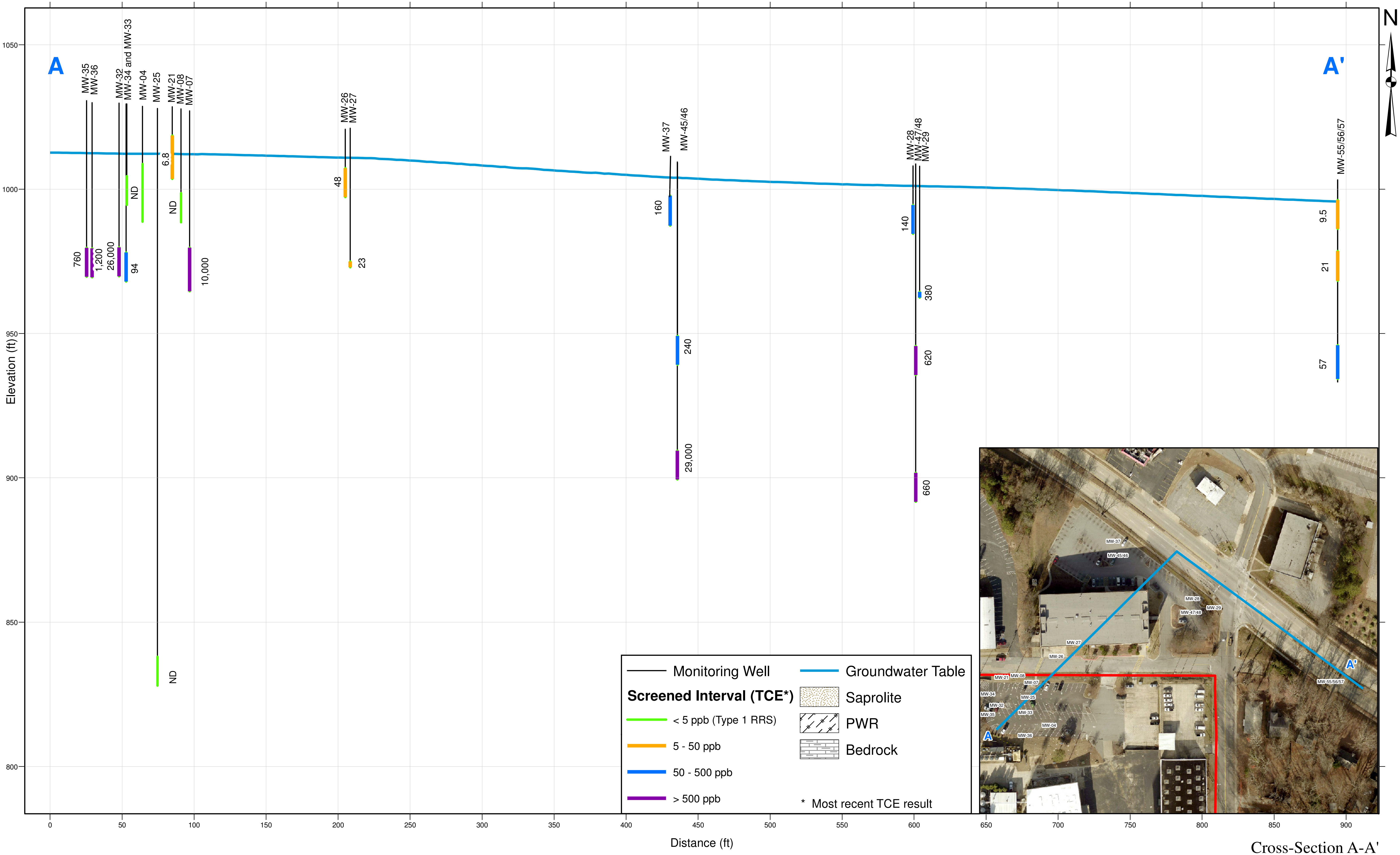
EPS

F:\Lafarge\GIS\mxd\CSR\Wells.mxd

Soil Gas Sample Locations

Figure No. 6

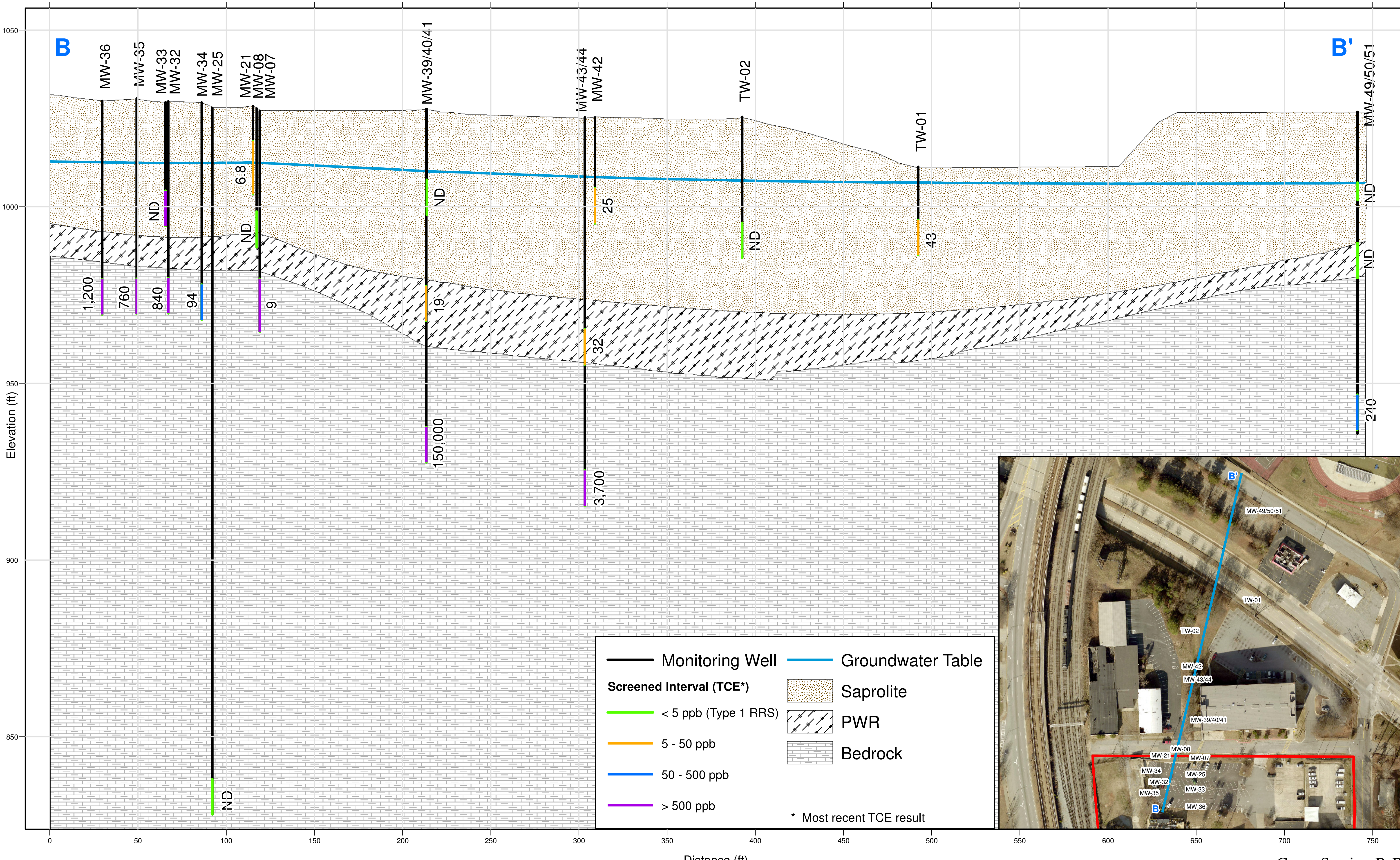
EPS
F:\Lafarge\GIS\mxd\CSR\Soil Gas.mxd



Cross-Section A-A'

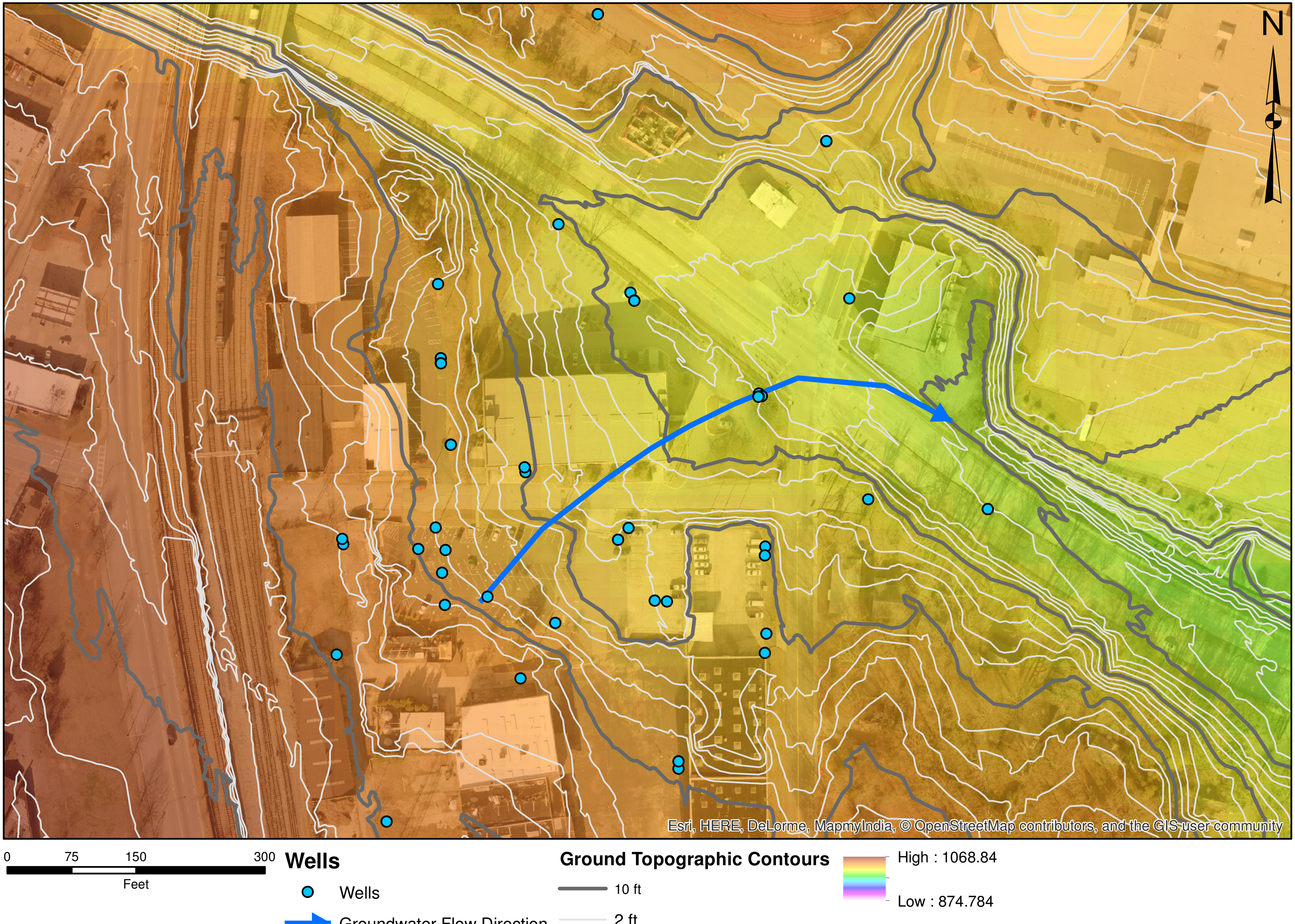
EPS
F:\Lafarge\GIS\mxd\CSR\AA.mxd

Figure No. 7



Cross-Section B-B'

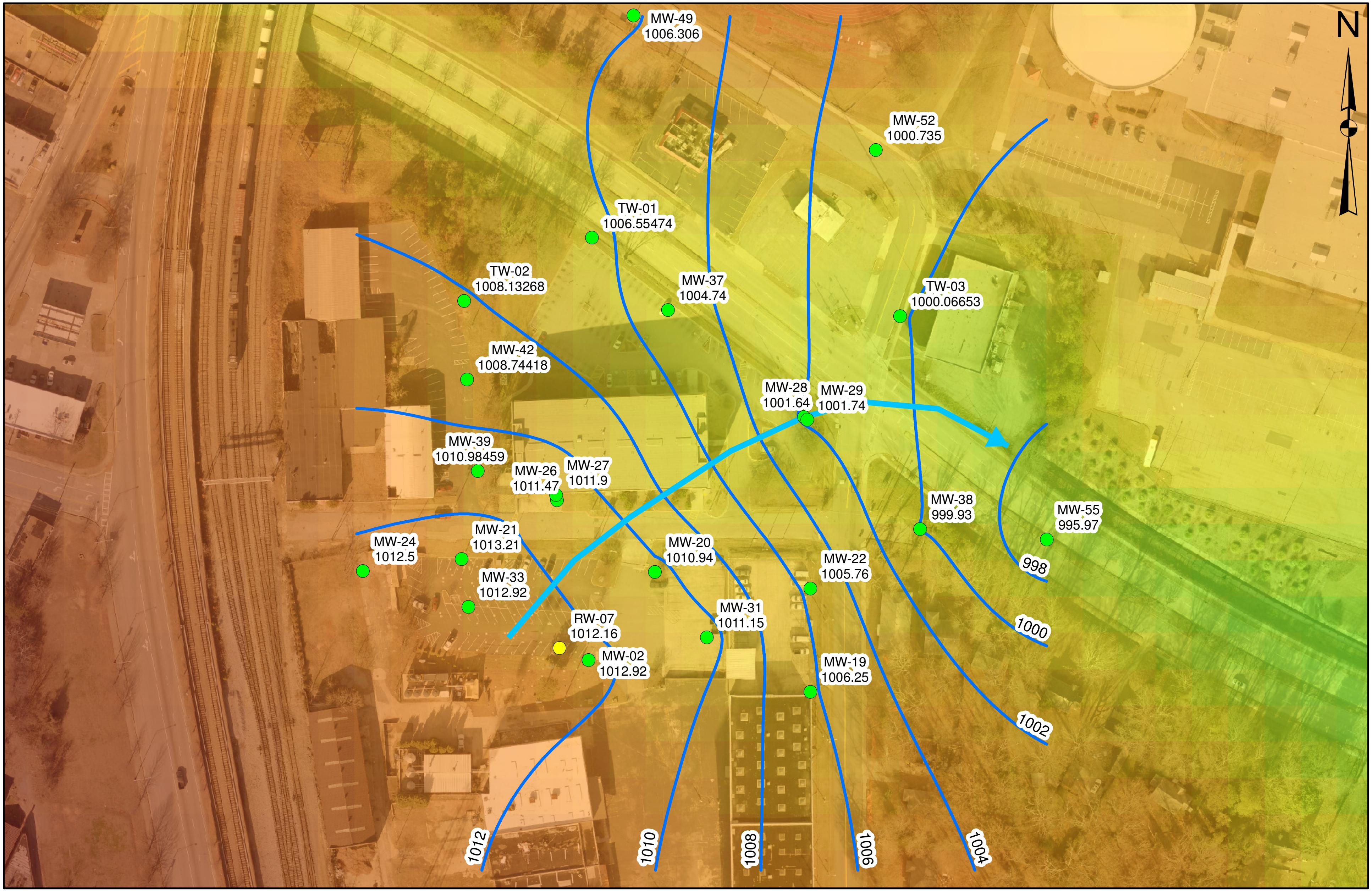
Figure No. 8



Topographic Divide

EPS
F:\Lafarge\GIS\mxd\CSR\Topo local.mxd

Figure No. 9



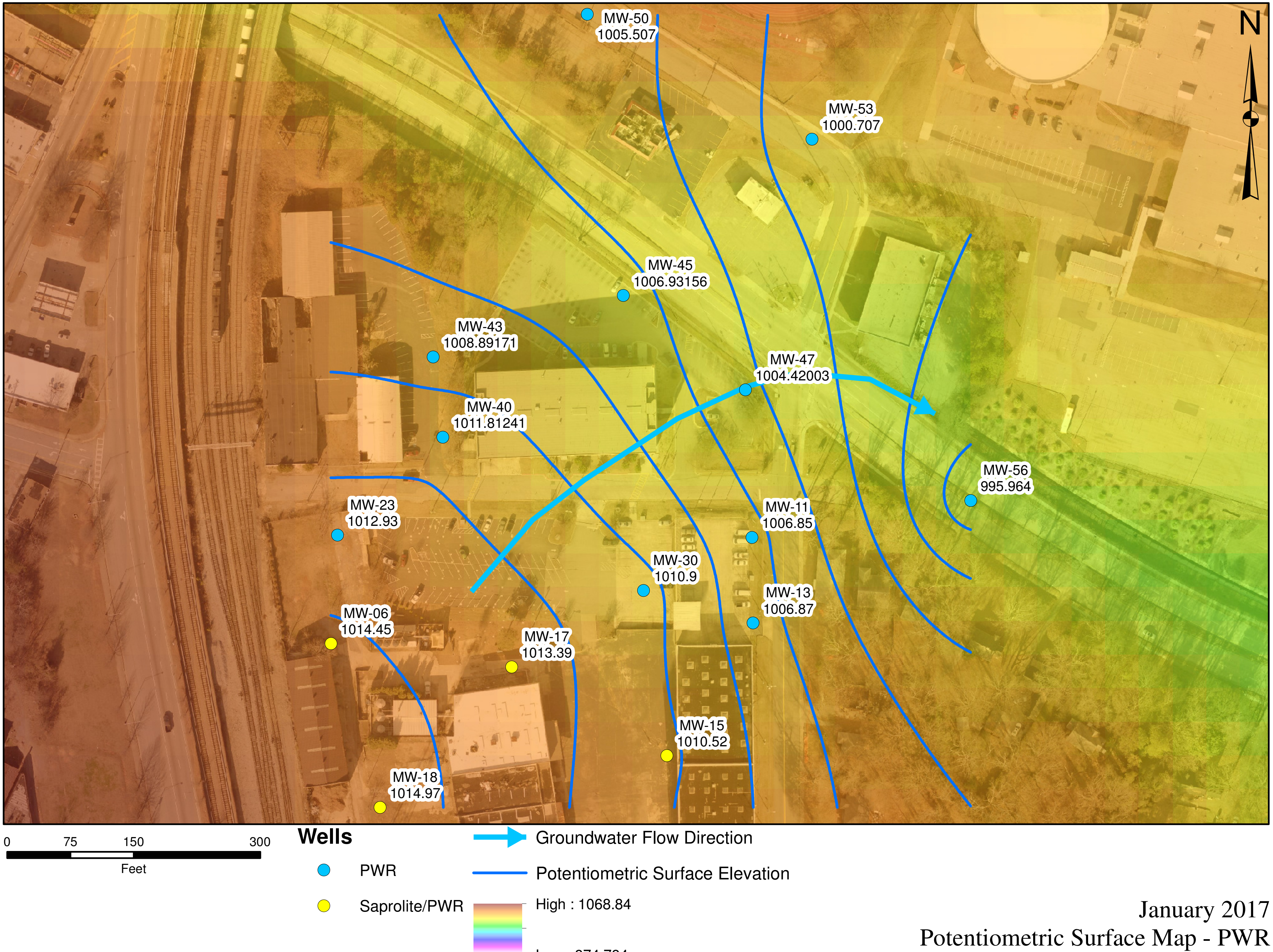
January 2017

Potentiometric Surface Map - Saprolite

Figure No. 10

EPS

F:\Lafarge\GIS\mxd\CSR\POT_Saprolite.mxd



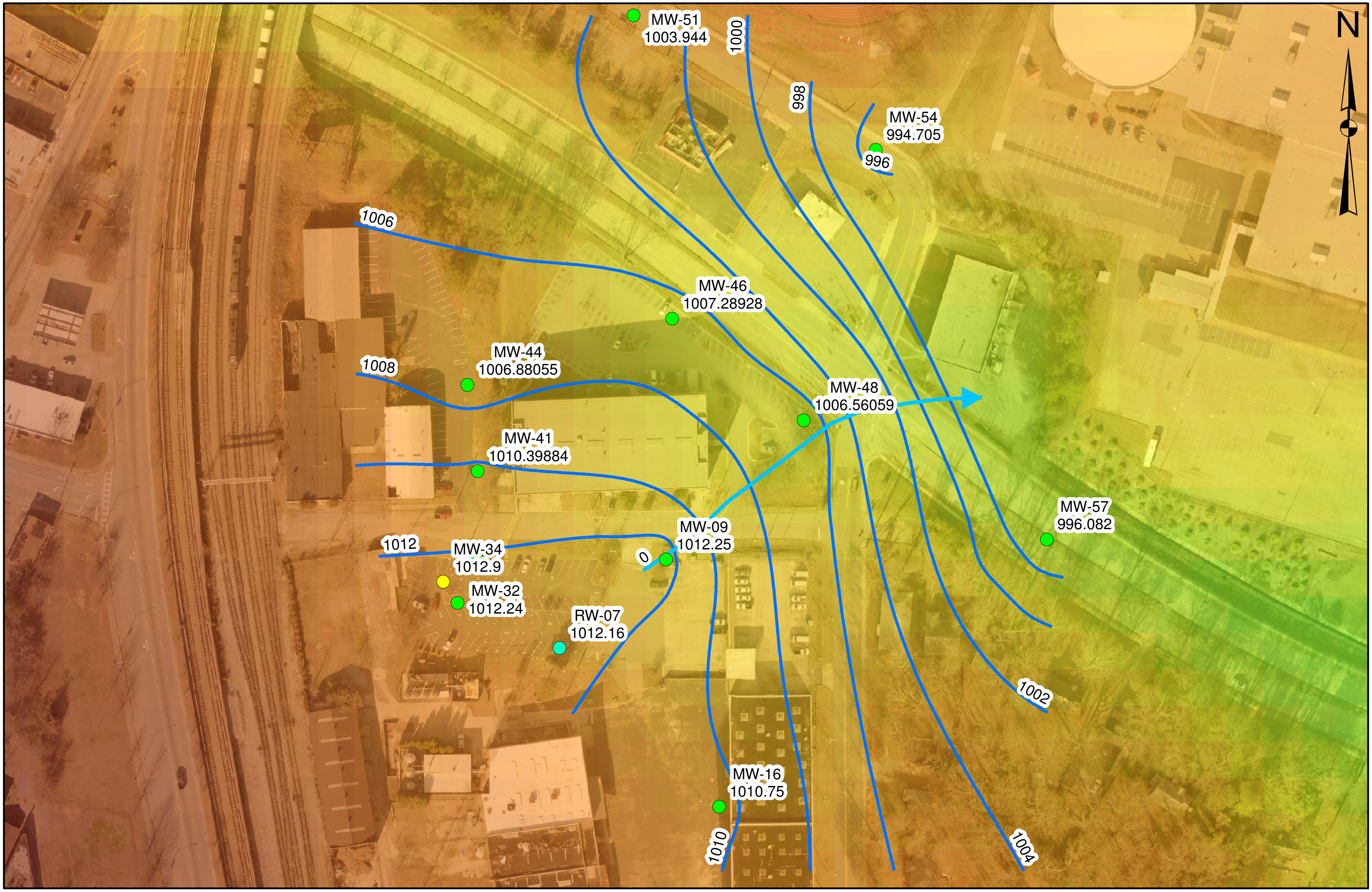
January 2017

Potentiometric Surface Map - PWR

EPS

F:\Lafarge\GIS\mxd\CSR\POT_PWR.mxd

Figure No. 11



0 75 150 300
Feet

Wells

- Bedrock
- PWR and/or Bedrock
- Saprolite/PWR/Bedrock

Groundwater Flow Direction

Potentiometric Surface Elevation

High : 1068.84

Low : 874.784

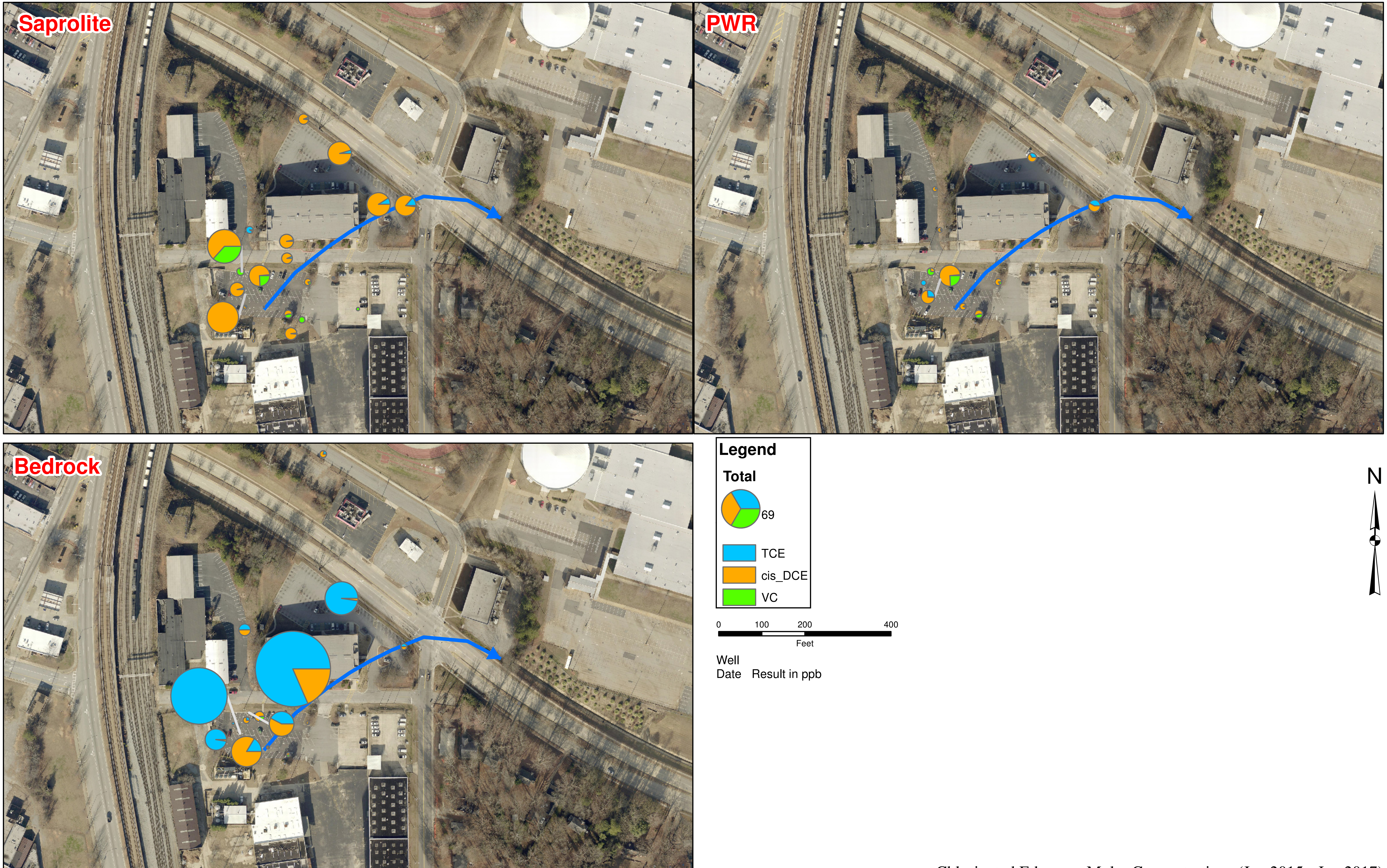
January 2017

Potentiometric Surface Map - Bedrock

Figure No. 12

EPS

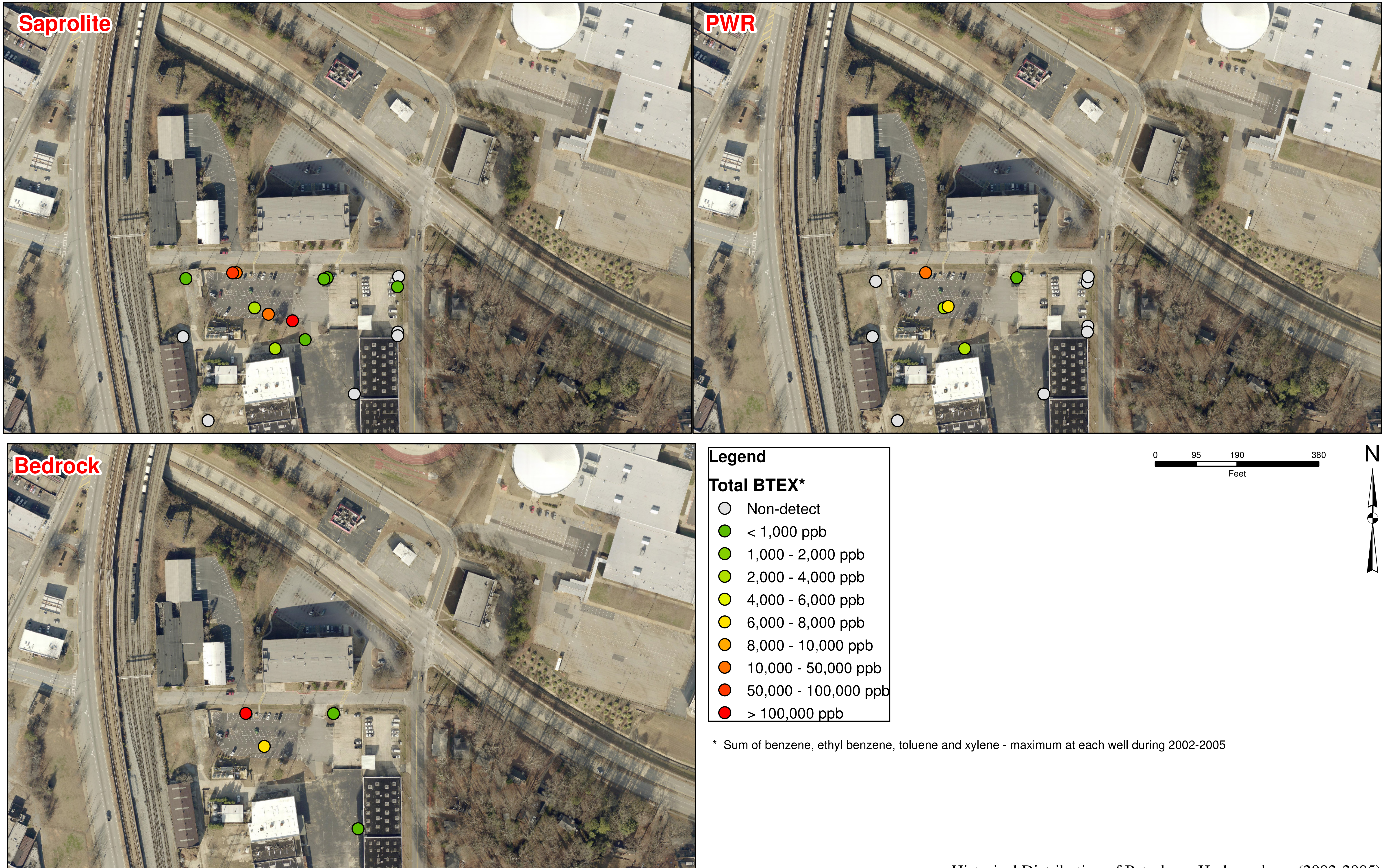
F:\Lafarge\GIS\mxd\CSR\POT_BR.mxd



Chlorinated Ethenes - Molar Concentrations (Jan 2015 - Jan 2017)

EPS
F:\Lafarge\GIS\mxd\CSR\molar_pie.mxd

Figure No. 13

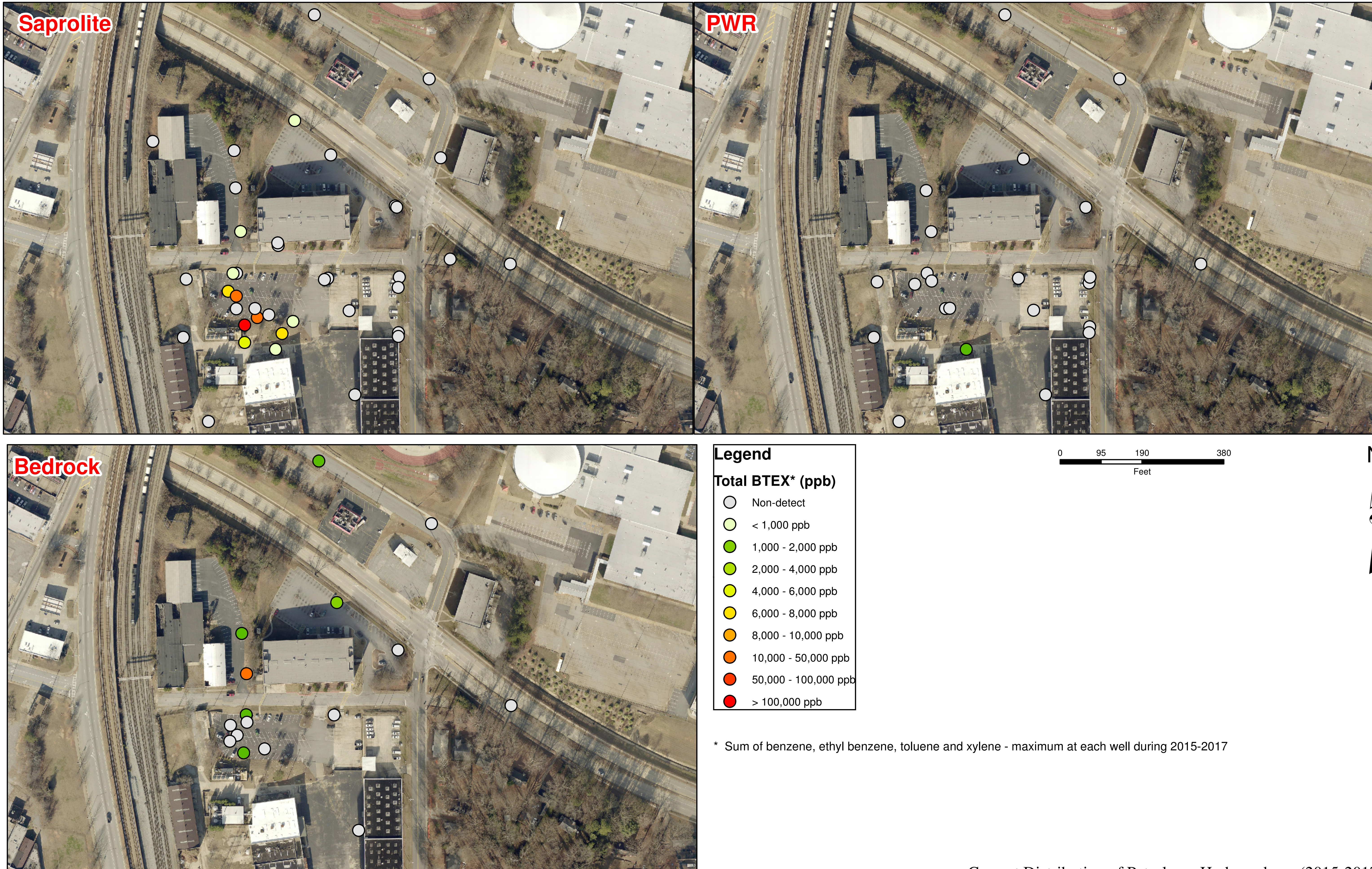


* Sum of benzene, ethyl benzene, toluene and xylene - maximum at each well during 2002-2005

Historical Distribution of Petroleum Hydrocarbons (2002-2005)

Figure No.14

EPS
F:\Lafarge\GIS\mxd\CSR\Hist BTEX.mxd

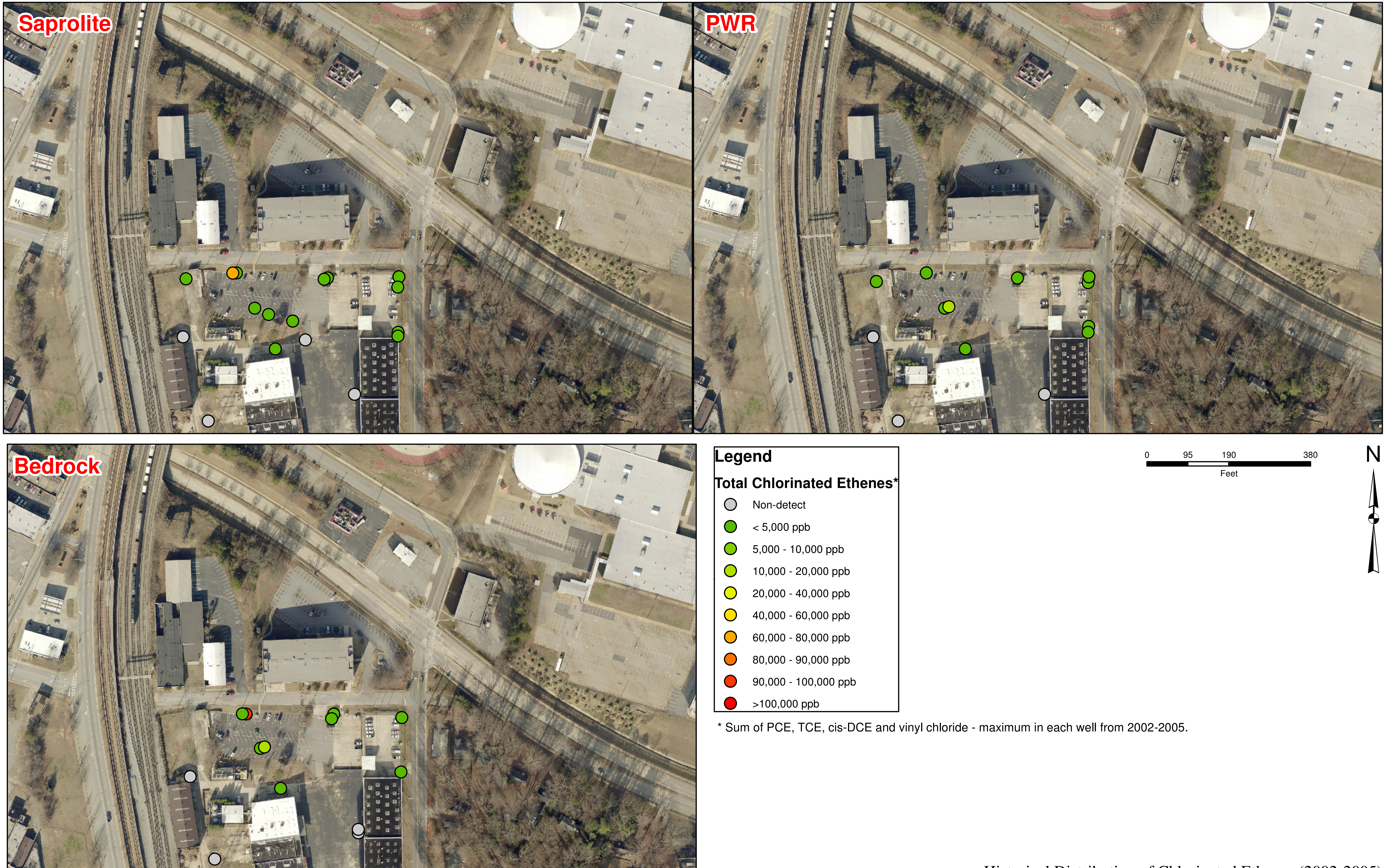


* Sum of benzene, ethyl benzene, toluene and xylene - maximum at each well during 2015-2017

Current Distribution of Petroleum Hydrocarbons (2015-2017)

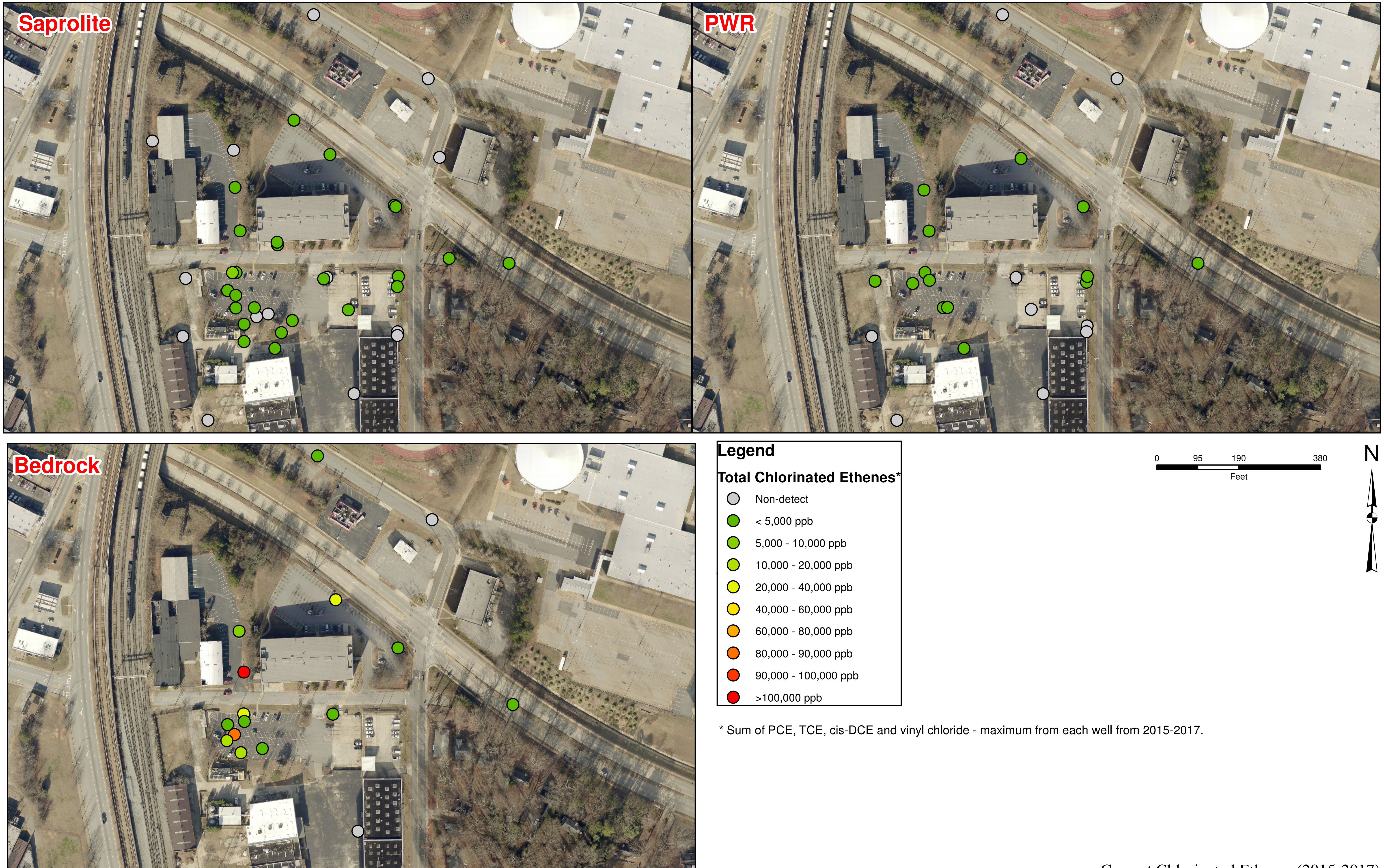
EPS
F:\Lafarge\GIS\mxd\CSR\Current BTEX.mxd

Figure No. 15



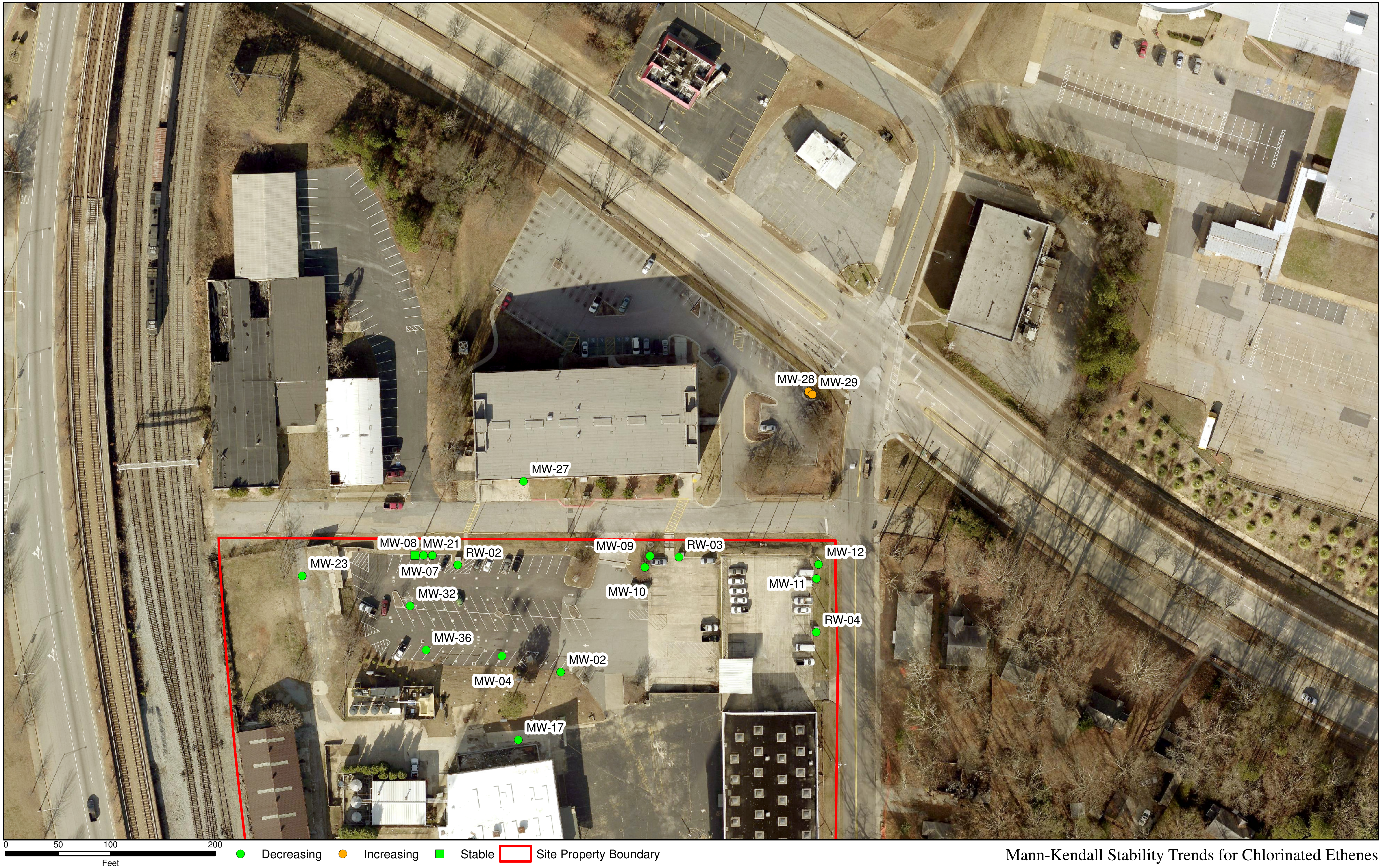
Historical Distribution of Chlorinated Ethenes (2002-2005)

Figure No. 16



* Sum of PCE, TCE, cis-DCE and vinyl chloride - maximum from each well from 2015-2017.

Current Chlorinated Ethenes (2015-2017)



Mann-Kendall Stability Trends for Chlorinated Ethenes

EPS
F:\Lafarge\GIS\mxd\CSR\Well Stability.mxd

Figure No. 18

Wells used in Flow Path Graphs

EPS
F:\Lafarge\GIS\mxd\CSR\Flowpath.mxd

Figure No. 19

Soil Sample | Soil Excavation Areas | Site Property Boundary

Lead Soil Sample Locations (remaining after remediation)

EPS

F:\Lafarge\GIS\mxd\CSR Revised\Soil_Leadl.mxd

Figure No. 20

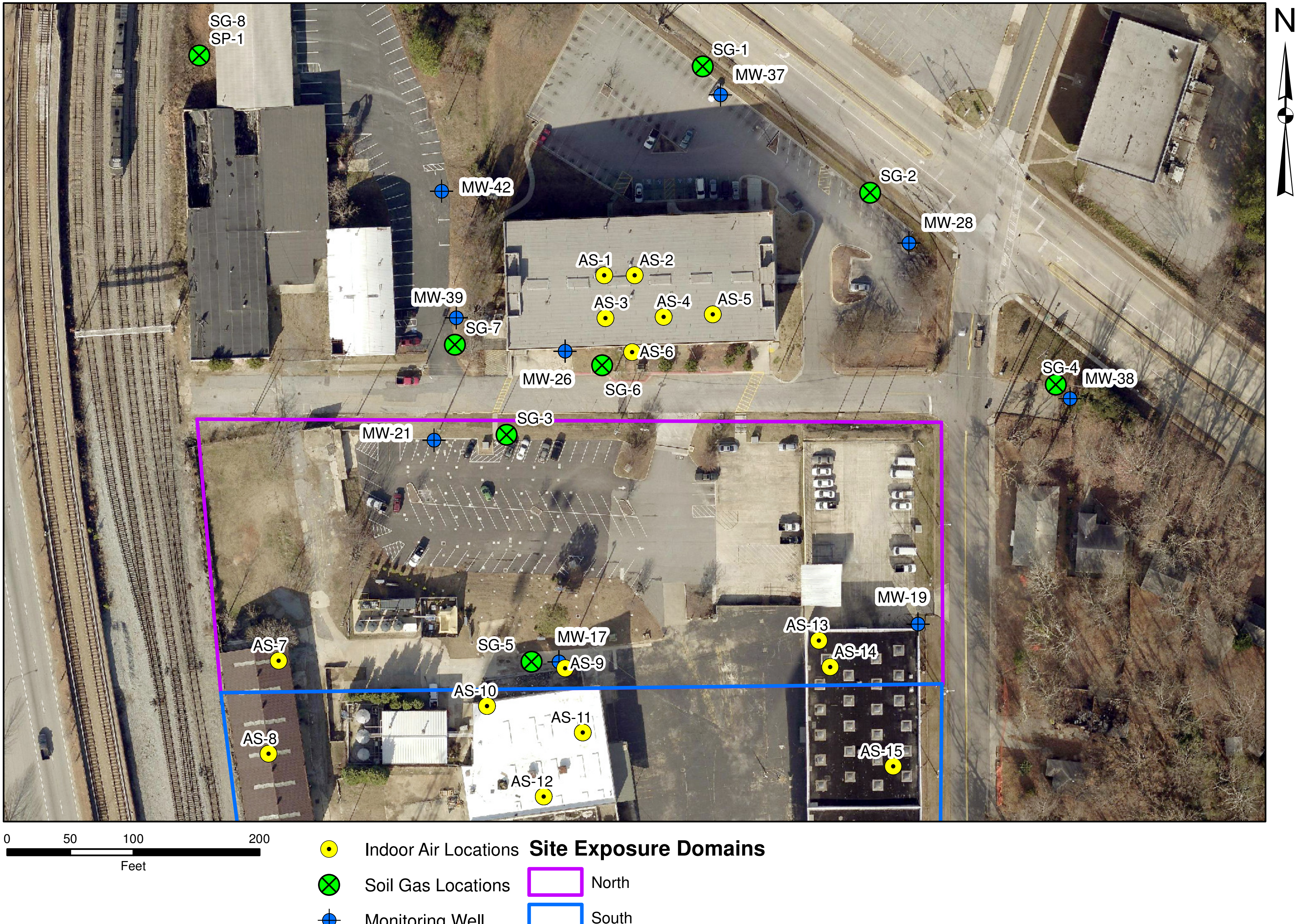
0 15 30 60
Feet

Soil Samples | Soil Excavation Areas | Site Property Boundary

VOC Soil Sample Locations (remaining after remediation)

EPS
F:\Lafarge\GIS\mxd\CSR Revised\Soil_VOC.mxd

Figure No. 21

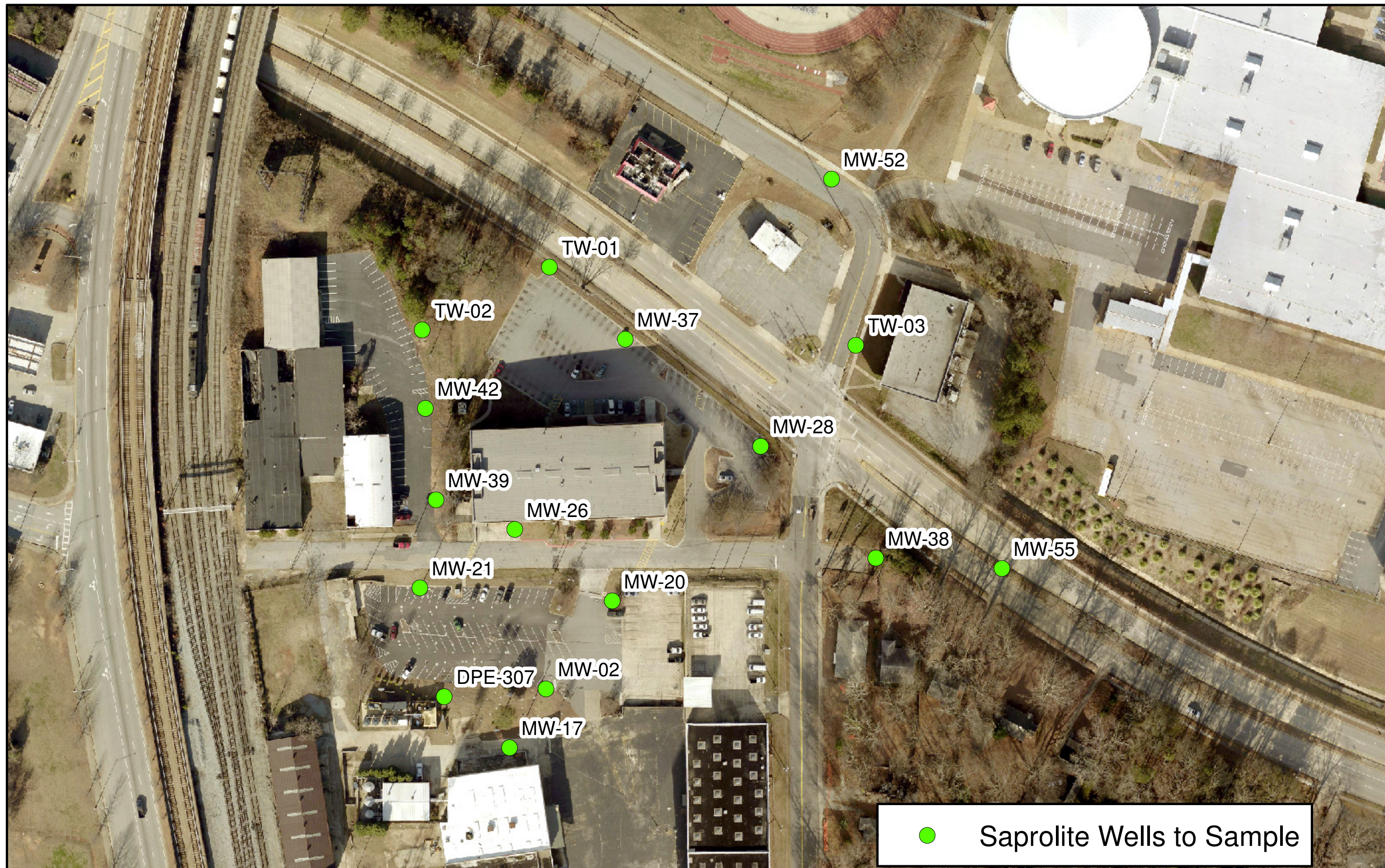


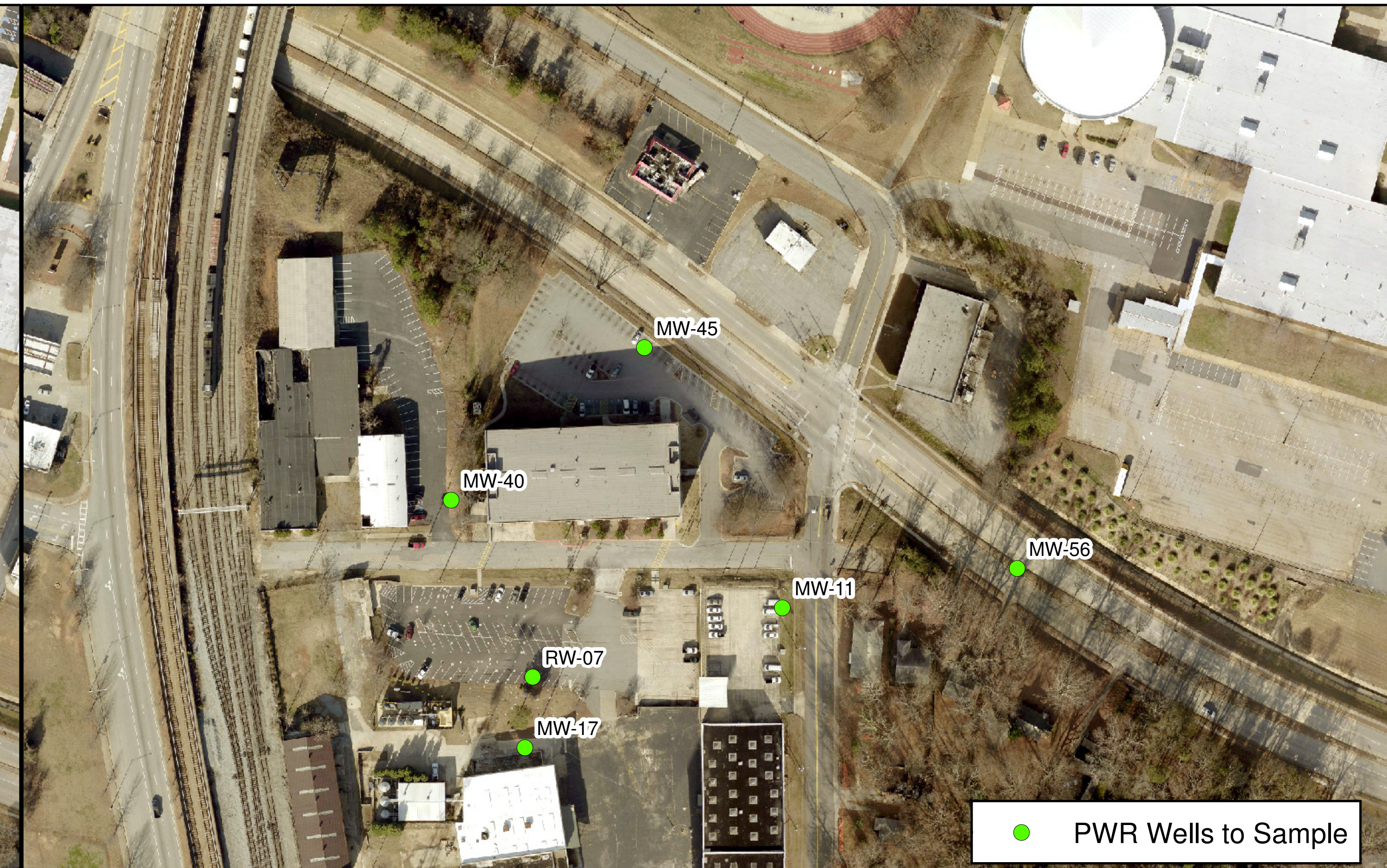
Locations Evaluated for Vapor Intrusion Potential

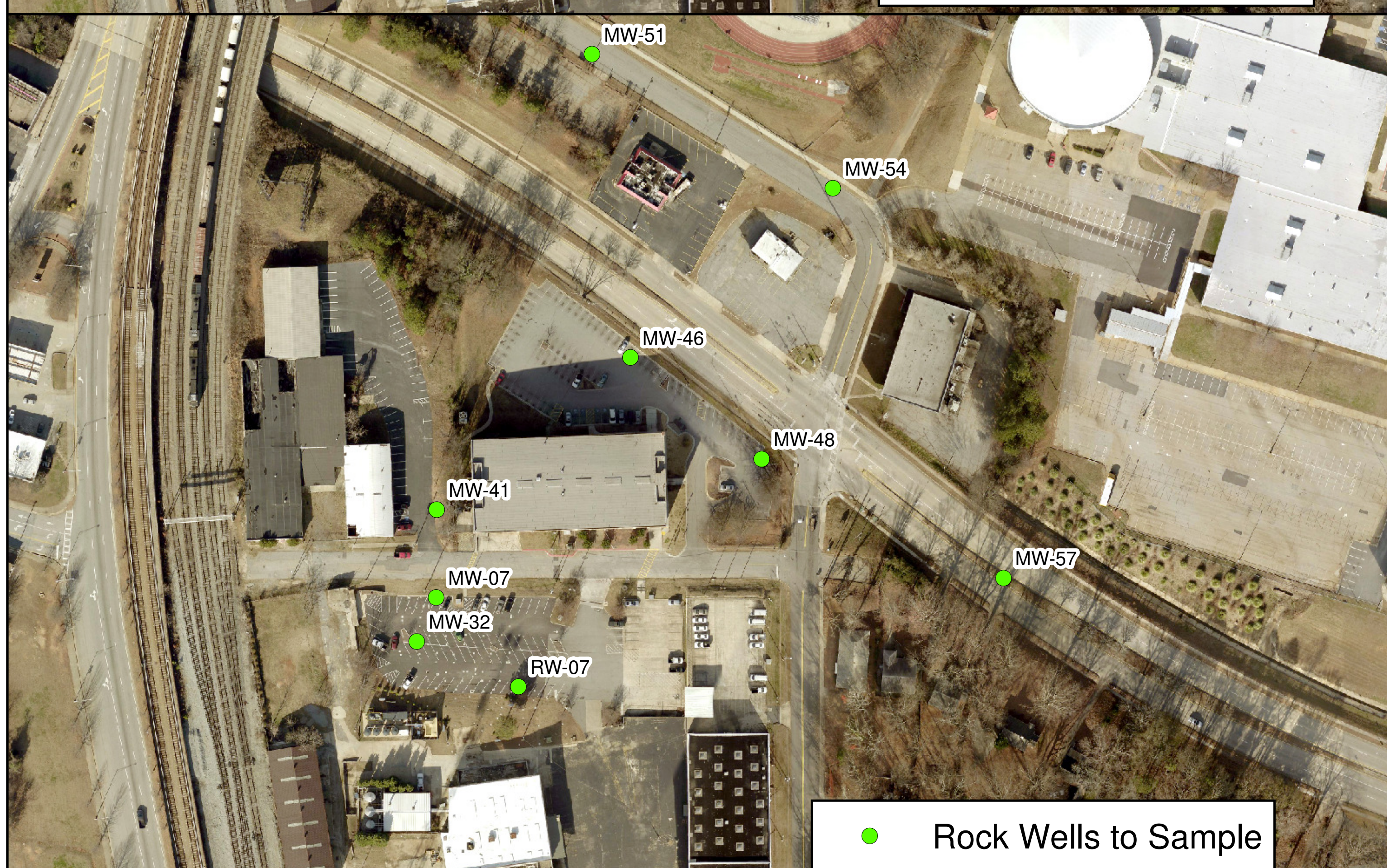
Figure No. 22

EPS

F:\Lafarge\GIS\mxd\CSR Revised\VI.mxd







Wells in Groundwater Monitoring Program

EPS

F:\Lafarge\GIS\mxd\CSR Revised\Prop GW.mxd

Figure No. 23

APPENDIX A
Professional Geologist
Summary of Hours

Environmental Planning Specialists, Inc.
LRM East Point - PG Hours (Kirk Kessler)
November 2016 through April 15, 2018

	Nov 16	Dec 16	Jan 17	Feb 17	Mar 17	Apr 17	May 17	Jun 17	Jul 17	Aug 17
King & Spalding:LRM:East Point Facility:EPD Interaction										
SP-Senior Principal:SP-Planning / Preparation	0.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SP-Senior Principal:SP-Project Support	22.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total King & Spalding:LRM:East Point Facility:EPD Interaction	22.00	18.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
King & Spalding:LRM:East Point Facility:Project Management										
SP-Senior Principal:SP-Project Management	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
SP-Senior Principal:SP-Project Support	0.00	3.00	0.00	1.00	1.00	0.00	7.00	0.00	0.50	0.50
Total King & Spalding:LRM:East Point Facility:Project Management	0.00	3.00	0.00	1.00	1.00	0.00	8.00	1.00	0.50	0.50
King & Spalding:LRM:East Point Facility:Reporting										
SP-Senior Principal:SP-Document Preparation	0.00	0.00	0.00	0.00	5.00	4.00	0.00	0.00	0.00	0.00
SP-Senior Principal:SP-Document Review	0.00	0.00	0.00	0.00	8.00	5.50	0.00	0.00	0.00	0.00
SP-Senior Principal:SP-Project Support	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00
Total King & Spalding:LRM:East Point Facility:Reporting	0.00	0.00	0.00	0.00	13.00	10.00	0.00	0.00	0.00	0.00
TOTAL	**22.00**	**21.00**	**0.00**	**1.00**	**14.00**	**10.00**	**8.00**	**1.00**	**0.50**	**0.50**

Environmental Planning Specialists, Inc.
LRM East Point - PG Hours (Kirk Kessler)
November 2016 through April 15, 2018

	Sep 17	Oct 17	Nov 17	Dec 17	Jan 18	Feb 18	Mar 18	Apr 1 - 15, 18	TOTAL
King & Spalding:LRM:East Point Facility:EPD Interaction									
SP-Senior Principal:SP-Planning / Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00
SP-Senior Principal:SP-Project Support	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	39.00
Total King & Spalding:LRM:East Point Facility:EPD Interaction	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	43.00
King & Spalding:LRM:East Point Facility:Project Management									
SP-Senior Principal:SP-Project Management	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	4.00
SP-Senior Principal:SP-Project Support	0.00	4.50	0.00	0.00	1.00	0.00	0.00	0.00	18.50
Total King & Spalding:LRM:East Point Facility:Project Management	0.00	4.50	1.00	0.00	1.00	0.00	1.00	0.00	22.50
King & Spalding:LRM:East Point Facility:Reporting									
SP-Senior Principal:SP-Document Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.00
SP-Senior Principal:SP-Document Review	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50	15.00
SP-Senior Principal:SP-Project Support	0.00	0.00	0.00	0.00	0.00	0.50	2.00	0.00	3.00
Total King & Spalding:LRM:East Point Facility:Reporting	0.00	0.00	0.00	0.00	0.00	0.50	2.00	1.50	27.00
TOTAL	**0.00**	**4.50**	**1.00**	**0.00**	**4.00**	**0.50**	**3.00**	**1.50**	**92.50**

APPENDIX B
Former Atwood Canvas Facility PPCSR

Brownfields Program
Prospective Purchaser Compliance Status Report

Applicant:

Kairos Development Corporation
Former Attwood Canvas Facility
1526 East Forrest Avenue
Atlanta, Fulton County, Georgia
Project No. 2000.4227.05

Delivered to:

Ms. Madeleine Kellam
Brownfields Coordinator
Hazardous Waste Management Branch
Environmental Protection Division
Floyd Towers East, Suite 1154
2 Martin Luther King, Jr. Drive SE
Atlanta, Georgia 30334

Prepared by:

United Consulting
625 Holcomb Bridge Road
Norcross, Georgia 30071

Project No. 2000.4227.06

November 11, 2005

UNITED CONSULTING

We're here for you
UNITED CONSULTING

November 11, 2005

FILE COPY

Ms. Madeleine Kellam
Brownfields Coordinator
Hazardous Waste Management Branch
Environmental Protection Division
Floyd Towers East, Suite 1154
2 Martin Luther King, Jr. Drive SE
Atlanta, Georgia 30334

RE: Brownfields Program – Proposed Purchaser Compliance Status Report
Former Attwood Canvas Facility
1526 East Forrest Avenue
Atlanta, Fulton County, Georgia
Project No. 2000.4227.06

Dear Ms. Kellam:

On behalf of Kairos Development Corporation (Kairos), United Consulting is pleased to submit this Proposed Purchaser Compliance Status Report (PPCSR) for the above-referenced Project Site pursuant to the Georgia Hazardous Site Reuse and Redevelopment Act, Section 12-8-200 et. seq. (the "Brownfields Act"). Kairos has implemented the remedial action as set forth in the September 29, 2005, Proposed Purchaser Corrective Action Plan (PPCAP), approved in writing by the Environmental Protection Division (EPD) on September 29, 2005, through issuance of a conditional limitation of liability letter.

We appreciate your attention to this submittal. This PPCSR is submitted in connection with the redevelopment of the property. We believe that this is a prime example of a redevelopment project that the Brownfields Act was intended to facilitate. We would very much appreciate receiving a letter from you as soon as possible to confirm EPD's concurrence with the PPCSR and the satisfaction of the conditions to finalization of the limitation of liability. Please contact John Clerici or Kalen Kramer with United Consulting at 770-582-2819 or 2833, if you have any questions or if we can be of further assistance.

Sincerely,

UNITED CONSULTING

Kalen J. Kramer, P.G.
Senior Environmental Specialist

John F. Clerici, P.E.
Chief Environmental Consultant

KJK/JFC/ljr
H:\geoenvir\reports\2000\2000.4227.06.ppcsr

625 HOLCOMB BRIDGE ROAD ♦ NORCROSS, GEORGIA 30071
Tel: 770/209-0029 ♦ Fax: 770/582-2900 ♦ Client Service: 800/266-0990
Web: http://www.unitedconsulting.com ♦ E-mail: united@unitedconsulting.com

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

STATEMENT OF FINDINGS

Background

This report is for the former Attwood Canvas Project Site, which is referenced by the address of 1526 East Forrest Avenue in Atlanta, Fulton County, Georgia. This Project Site location is shown on Figure 1. An application for a Brownfield limitation of liability (LoL) was previously submitted to the Environmental Protection Division (EPD), in the form of a Proposed Purchaser Corrective Action Plan (PPCAP) for this Project Site, pursuant to the Georgia Hazardous Site Reuse and Redevelopment Act, Section 12-8-200 et. seq. (the Brownfields Act). The September 29, 2005, PPCAP was approved in writing by the EPD on September 29, 2005. The PPCAP has now been fully implemented, and these activities are summarized herein, along with certification of compliance with the applicable Type 1 soil residential risk reduction standards (RRS) under HSRA and the Brownfields Act for the chemicals of concern (COC) in the soil and groundwater.

Investigations

As stated in the PPCAP, United Consulting has conducted previous subsurface investigations at the Project Site. The results of these investigations were used to prepare the PPCAP and this PPCSR. The extent of soil and groundwater impacts on the Project Site have been assessed through various sampling, as reported herein.

The groundwater impacts at the Project Site were initially assessed in a Phase II Environmental Assessment (Phase II) and then, recently, in the PPCAP investigation. Since no obvious sources were observed on-site, soil impacts were not initially assessed during the Phase II. However, soil impacts were assessed in association with the PPCAP investigation. Seven borings, designated B-1 through B-3 and MW-1 through MW-4, were drilled around the building on the Project Site. Four borings were drilled next to the southern property line with LRM and two borings were drilled next to the western property line with the cabinet shop (currently Atlanta Kitchen and Bath). A single boring was also drilled interior to the property, next to the northeastern corner of the building. Four of the borings, MW-1 through MW-4, were subsequently converted into wells for collecting groundwater samples. Soil samples were colleted for analytical testing from borings MW-1 through MW-4.

Groundwater samples only were collected from borings B-1 through B-3. The groundwater samples collected were submitted for analytical testing of volatile organic compounds (VOCs) and polynuclear aromatic hydrocarbons (PAHs). Each of borings MW-1 through MW-4 had two soil and one groundwater sample tested for VOCs and Resource Conservation and Recovery Act (RCRA) metals. Several constituents were detected at very low concentrations in the soil samples, as indicated below in Table 1 at the end of this report. The constituents detected in the groundwater samples are shown in Table 2 at the end of this report.

After meeting with the EPD, the various chemicals identified on the Project Site and on the adjacent LRM property were suggested as COC. The list of COC is included in Table 3 at the end of this report.

Based on the analytical data, no soil samples were detected with COC in excess of their respective NC or Type 1 RRS concentrations. Thus, no soil remedial actions were required at the Project Site. By reason of the provisions of the Brownfield Act and its LoL provisions, in conjunction with a prior non-listing letter that was issued by EPD following notification of the finding of groundwater impact at the site, remedial action for the groundwater is not required.

Risk Reduction Standards and Site Compliance

Type 1 RRS were calculated for the COC identified in the soil and/or groundwater at the Project Site and LRM facility. Soil impacts at the Project Site were all below NCs. No areas were identified on the Project Site with soil concentrations of COCs in excess of Type 1 RRS. Therefore, no areas were excavated or otherwise remediated. In accordance with the procedures outlined in the PPCAP, confirmatory samples were not required, as provided in the application. The results of the testing reveal the concentrations in the soils meet residential Type 1 RRS.

CERTIFICATION OF COMPLIANCE

I certify under penalty of law that this report and all attachments were prepared under my direction in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Based on my review of the findings of this report with respect to the soil risk reduction standards (RRSs) of the Rules for Hazardous Site Response, Rule 391-3-19-.07, I have determined that the soil at this site is in compliance with the Type 1 and/or Type 2 Residential Risk Reduction Standards.

By: Kevin J. Brangers

Signature: [signature] Date: 10/25/05

Title: Director

Kairos Development Corporation

Groundwater Scientist Statement

I certify that I am a qualified groundwater scientist who has a baccalaureate or post-graduate degree in the natural sciences or engineering, and have sufficient training and experience in groundwater hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enable me to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport. I further certify that this Compliance Status Report for the Former Atwood Canvas facility, located at 1526 East Forrest Avenue in Atlanta, Fulton County, Georgia was prepared by myself and appropriate qualified subordinates working under my direction.

UNITED CONSULTING

Name: Kalen J Kramer, P.G.

Signature: ____________________

Date: 11.11.05

Kalen J. Kramer
No.1742
GEORGIA REGISTERED PROFESSIONAL GEOLOGIST

Georgia Stamp or Seal

INTRODUCTION

Purpose

United Consulting has prepared this Proposed Purchaser's Compliance Status Report (PPCSR) for the Attwood Canvas site, (hereinafter referred to as the Project Site) pursuant to Section 12-8-207(6) of the Hazardous Site Reuse and Redevelopment Act. This PPCSR has been prepared on behalf of Kairos Development Corporation.

Kairos wishes to obtain the liability protection offered by the Brownfields Act, as amended during the recent session of the Georgia General Assembly, with respect to the Project Site. Kairos qualifies for these protections, as outlined below, and through implementation of the previously submitted PPCAP, and preparation of this PPCSR certifying compliance with applicable Risk Reduction Standards under the Hazardous Site Response Act (HSRA) as to various hazardous substances.

Site Description

The Project Site consists of approximately 1.7 acres of developed land located within Parcel 23, Land Lot 156 of the 14th District of Fulton County, Georgia. The Project Site is referenced by the address of 1526 East Forrest Avenue and is located south of Norman Berry Drive, west of Carmichael Street, and north of East Forrest Avenue. A copy of the property description and tax map is included in Appendix A. The location of the Project Site is illustrated on Figure 1 and figure 2 shows the overall topography of the Project Site area.

The Project Site is fenced and developed with a four-story commercial structure, and associated parking areas. The Project Site building is currently vacant. However, the building was most recently occupied by Attwood Canvas Division and utilized as a sewing facility in the manufacture of canvas boat covers and canopies.

Facility Background

United Consulting previously conducted a Phase I Environmental Assessment (Phase I), dated January 2, 2001, a Phase I Environmental Assessment Update (Update) and Limited Asbestos Survey, dated April 29, 2005, and a Limited Phase II, dated June 2, 2005, on the Project Site. At the time of the Phase I, the Project Site consisted of an approximately 1.7-acre tract of land that contained one four-story building and associated parking areas. Attwood Canvas Division utilized the building as a sewing facility for the manufacturing of boat covers and canopies. Figure 3 shows the layout of the Project Site and investigation locations, as well as the relative location of LRM.

The Project Site was not listed on any of the Federal and State environmental databases reviewed. The Phase I listed the former Linear Dynamics (a.k.a. LRM, Prismo Safety Corporation, which became Linear Dynamics, Inc., and then Lafarge Road Marking), as a recognized environmental condition (REC). The LRM facility was performing State directed corrective action due to the release of several solvents formerly contained at the Project Site in underground storage tanks (USTs) and/or used in their manufacturing process. United Consulting recommended additional investigations of the Project Site to assess potential impacts to the Project Site from the Lafarge facility.

At the time of the Update, the Project Site building was vacant. According to the Update, the Project Site was not listed on the Federal and State environmental databases reviewed. However two listed regulated facilities were listed as RECs, LRM and Shell East Point. The Shell East Point facility was listed in the Leaking Underground Storage Tank (LUST) database. United Consulting recommended a phase II environmental assessment to assess the potential impacts to the Project Site from these two facilities.

The Phase II was preformed by United Consulting to assess potential impacts from the Lafarge and Shell facilities. Three borings were drilled on the southeastern, southwestern, and west central portions of the Project Site in approximate down-gradient directions from the Lafarge and Shell East Point facilities. Figure 3 shows the investigation locations. Boring logs are provided in Appendix B. One groundwater sample was collected from each of the borings and tested for polynuclear aromatic hydrocarbons (PAHs) using EPA testing method 8270C and volatile organic compounds (VOCs) using EPA testing method 8260B. Based on the analytical testing, 1,1-dichloroethene, benzene, chloroform, cis-1,2-dichloroethene, cyclohexane, ethylbenzene, trans-1,2-dichloroethene, trichloroethene, vinyl chloride, and/or xylenes were detected in the groundwater samples obtained at the Project Site. Of these constituents, 1,1-dichloroethene, benzene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, trichloroethene, and vinyl chloride were detected at concentrations greater than their respective maximum contaminant levels (MCLs). Analytical test results and Chain of Custody forms are reproduced in Appendix C. Investigation procedures are provided in Appendix D.

SOURCE DESCRIPTION

Solvents

Various solvents have been identified at the Project Site. There is no history of their use at the Project Site. The LRM facility is the apparent source for these chemicals. LRM made and applied paints that included paints for marking roadways. The paints were all solvent based. Thus, multiple organic chemicals have historically been used at LRM. These have predominately moved to the Project Site through groundwater migration. The organic chemicals found at the Project Site have been identified at LRM. Data from LRM are reproduced in Appendix E.

Petroleum Chemicals

Petroleum chemicals have been found in the groundwater and soil at the Project Site. There is no history of their use at the Project Site. These COC were likely from at least LRM, but possibly also from the former Shell facility. These have move to the Project Site through groundwater migration.

Metals

Several metals have been identified at the Project Site. There is no history of their use at the Project Site. The LRM facility is the apparent source for these chemicals. LRM made and applied paints that included paints for marking roadways. The paints were all solvent based, and many used metals for color, enhancement, and/or durability. There is a historic use of metals in the paints and for their equipment, including tanks and piping, at LRM. These have predominately moved to the Project Site through groundwater migration, but likely also through air transport, also. The metals found at the Project Site have predominately been identified at LRM.

BROWNFIELD ELIGIBILITY

Site Eligibility

Preexisting Release:
Evidence of the release of hazardous substances has been discovered. A release notification was submitted to the Hazardous Site Response Program (HSRP) for several VOCs detected in the groundwater at the Project Site on August 24, 2005. The HSRP has stated verbally that the Project Site will not be placed on the Hazardous Site Inventory (HSI).

Liens:
No liens have been identified against the property.

Regulatory Status:
The Project Site is not listed on the HIS, the National Priority List (NPL), nor is it under investigation pursuant to any other federal program, including the Resource Conservation and Recovery Act (RCRA). The property is not a hazardous waste facility, and never has functioned as a hazardous wasted facility. Further, it is not performing corrective actions pursuant to RCRA, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), or any other federal program.

Kairos Eligibility

Contributor to Release:
The releases at the Project Site date to prior property use. Kairos Development Corporation proposes to purchase the Project Site. They have no past dealings with the property or anyone associated with the property. The Project Site has not been operated by Kairos or its affiliates. As such, they have not contributed to the release at the Project Site.

Affiliation:
Kairos Development Corporation and its personnel are not a legal entity that is a subsidiary, division, or parent company of the current owners or operators of the Project Site property or the LRM facility (the source of the release on the Project Site). There is not an employee relationship between these parties, either now, or at any time in the past. Nor is there any real, financial, or employee relationship between Kairos Development Corporation and the property owner or operator of the Lafarge facility.

Relative:
The individuals owning Kairos Development Corporation do not know the property owners or the operators of the Lafarge facility that has had the release. Kairos Development Corporation personnel are not related to these individuals by blood or any legal process.

Violations:
Kairos Development Corporation is not, to their knowledge, in violation of any orders, judgment, statues, rule, or regulation subject to the authority of the director of the EPD.

Acquisition:
The applicant proposes to acquire the property in November 2005 from the current owners. This acquisition is pending the approval for protections under the BrF Program, as required by the program Rules.

SUBSURFACE INVESTIGATIONS

Sampling and Analysis Procedures/QA/QC

Soil borings were drilled using standard penetration test boring procedures, using hollow stem auger rotary drilling techniques. Soil samples were obtained using split-spoon soil samplers driven through and in advance of the hollow stem augers. During the assessments conducted by United Consulting, samples were collected for analytical testing based on potential signs of impacts from visual observations, odors, and organic vapor screening results using a Multi Rae Plus organic vapor monitor (OVM). Quality control (QC) procedures included cleaning, Chain-of-Custody maintenance, and the use of laboratory blank samples. The drilling rigs were cleaned prior to entering the Project Site. The sampling tools were washed with an Alconox/water solution between sampling locations. This cleaning was performed to reduce the potential for contaminating samples due to the drilling/sampling processes. Chain of Custody of the samples was maintained and documented. Chain of custody forms were developed in the laboratory with the sample containers and custody was passed from individual to individual to maintain control of the materials. As the custody of the samples passed from individuals, this was documented on the Chain of Custody forms. The chain of custody forms are reproduced in Appendix C with the laboratory analysis data. Further details on the procedures used in this investigation are discussed below. General standard operation procedures for investigations are included in Appendix D.

The soil/groundwater samples were submitted for various analytical testing including: VOCs, PAHs, and RCRA metals by EPA testing methods 8260B, 8270C, and 6010B/7471A, respectively. Samples for VOC analysis were collected by EPA sampling method 5035A. PAHs were not analyzed in the samples collected from MW-1 through MW-4 since no PAHs were detected in the previously submitted groundwater samples from B-1 through B-3.

Investigations

As stated in the PPCAP, United Consulting had conducted a previous subsurface investigation at the Project Site. A previous Phase I, dated January 2, 2001, an Update, dated April 29, 2005, and a Phase II, dated June 2, 2005, were conducted United Consulting. The results of these investigations were used to prepare the PPCAP and this PPCSR. The extent of soil and groundwater impacts on the Project Site have been assessed through various sampling, as reported herein.

The Phase II, dated June 2, 2005, was preformed by United Consulting to assess potential impacts from the Lafarge and Shell facilities. Three borings were drilled on the southeastern, southwestern, and west central portions of the Project Site in approximate down-gradient directions from the Lafarge and Shell East Point facilities. The borings were SPT borings, as previously stated. The borings were advanced to below the groundwater table to collect groundwater samples for analytical testing. Each boring was advanced directly to the groundwater table, with only intermittent soil assessment using field organic vapor monitoring instruments. One groundwater sample was collected from each of the borings and tested for PAHs using EPA testing method 8270C and VOCs using EPA testing method 8260B.

The soil impacts at the Project Site were recently assessed in the PPCAP investigation. Four borings were drilled around the building on the Project Site. Two borings were drilled next to the southern property line with LRM and one boring was drilled next to the western property line with the cabinet shop (currently Atlanta Kitchen and Bath). A single boring was also drilled interior to the property, next to the northeastern corner of the building. These four borings were subsequently converted into permanent monitoring wells for collecting groundwater samples.

The borings drilled for the PPCAP were SPT borings, as previously stated. The borings were advanced to below the groundwater table to allow construction of wells across this surface. This also allowed for air entry and sampling from the well pipes after completion of the wells. Following drilling and soil sampling, the wells were completed as type II groundwater monitoring wells, with 2-inch diameter polyvinyl chloride well pipe, and a 10 or 15-foot long screen section of no. 10 (0.010-inch) opening screen. Boring and well logs are provided in Appendix B.

Two soil and one groundwater sample was collected from each of the borings and submitted for analytical testing of VOCs and RCRA metals. Several constituents were detected in the soil samples, as indicated below in Table 1. The constituents detected in the groundwater samples are shown in Table 2. Appendix C contains the analytical test results from the laboratory. Chain of Custody was maintained and documented. These forms are also provided in Appendix C.

CHEMICALS OF CONCERN - SOURCE DESCRIPTION

The COCs for this Project Site are primarily organic chemicals and several metals. As previously stated, United Consulting compared the list of chemicals detected at the Project Site with the COCs at the LRM property, and they were nearly identical. Cyclohexane, methyl-cyclohexane, and isopropyl benzene were the only regulated substance detected at the Project Site that are not a COC at the LRM facility; however, these constituents were not included in the analytical testing at the LRM facility. In addition, the isoconcentration maps from the most recent round of groundwater analytical testing at the LRM facility indicate that impacts have migrated off the

Lafarge property in the direction of the Project Site. United Consulting believes that the LRM facility is the source of the VOCs and metals detected in the groundwater at the Project Site.

After meeting with the EPD, the various chemicals identified on the Project Site and on the adjacent LRM property were suggested as COC. Thus, this property has as soil COC the list in Table 3 at the end of this report. Groundwater impacts at the site included the chemicals listed in Table 3. Only four of the VOCs on the COC list were detected in the soil samples collected at the Project Site. Several metals were also detected at low concentrations. In United Consulting's opinion these metals are likely naturally occurring.

SOIL IMPACT EXTENT

During the Phase II conducted by United Consulting and reported on June 2, 2005, discrete soil samples were not collected from the Project Site for analytical testing. However, select soil samples were collected and screened using a MultiRAE Plus, PGM-50, Multi-gas monitoring instrument (Multirae). Based on this screening, organic vapor concentrations were <u>not detected</u> above ambient air conditions in any of the soil samples collected above the groundwater table. The additional PPCAP Investigations also screened soil samples for organic vapors, with similar results. Screening results are provided on the boring logs in Appendix B and are summarized in Table 4.

Two soil samples were collected from each of monitoring wells MW-1 through MW-4. The samples were tested for VOCs and RCRA metals. Very low concentrations of four VOCs, benzene, cis-1,2-dichloroethene, isopropylbenzene, and/or toluene, were detected in the soil samples submitted for analytical testing. The soil samples with the highest concentration of each of the VOCs detected in the soil were submitted for analytical testing by the Toxicity Characteristic Leaching Procedure (TCLP). The TCLP results were below laboratory detection for the four constituents tested. In addition, four metals, arsenic, barium, chromium, and/or lead, were detected at low concentrations well below the applicable NCs. The metals detected were likely naturally occurring. No areas were identified on the Project Site with COC in excess of their respective NC or RRS. Thus, no soil remedial actions are required at the Project Site.

Three of the soil samples were submitted for additional analytical testing in case soil remediation was required. These tests include total organic carbon, cation exchange capacity, pH, and specific conductance using EPA testing methods 9060, 9080, 9045C, and 9050, respectively. The results of these tests are summarized in Table 1. The analytical testing results are included in Appendix C.

GROUNDWATER IMPACT EXTENT

<u>Overview</u>

Groundwater impacts at the site included the chemicals listed on the COC list, except for the metals, arsenic, chromium and lead. The distribution of chemicals was primarily next to the southern and western property lines, near the properties identified with releases and groundwater impacts. By reason of the provisions of the Brownfield Act and its LoL provisions, in conjunction with a prior non-listing letter that was issued by EPD following notification of the finding of groundwater impacts at the site, remedial action for the groundwater is not required.

Geologic and Hydrogeologic Setting

The topography, geology and hydrogeology commonly control the migration of chemicals released at a site/facility. The relative location of the properties will often define their potential interaction and hydraulic connection. The description of the setting for the Project Site is provided below, starting with the topography and geology. The resultant anticipated, surface water and groundwater flow directions are then estimated and described.

The Project Site is located in the Piedmont Physiographic Province of Georgia, which is characterized by medium- to high-grade metamorphic rocks and scattered igneous intrusions. Topography in the province is variable and ranges from gently rolling hills in the south to moderate to steep hills in the north. Based on the United States Geological Survey (USGS) 7.5-minute topographic quadrangle map of the area Southwest Atlanta, Georgia, 1993, elevations in the vicinity of the Project Site range from approximately 950 feet above mean sea level (ft-msl) to approximately 1,000 ft-msl. The Project Site was located in a relatively flat area with an approximate elevation of 1,000 ft-msl. Topography at the Project Site generally slopes down to the north and northeast. Surface water flow at the Project Site and immediate vicinity generally flows northeast towards an unnamed tributary of the South River, approximately 5,000 feet from the Project Site. Figure 2 shows the topography of the Project Site and surrounding areas.

The metamorphic rocks comprising the Piedmont Physiographic Province were formed when older "parent" rocks were subjected to high temperatures and/or pressures during regional metamorphism that occurred during the creation of the Appalachian Mountains. The same high temperatures and pressures also caused some "parent" rocks to fully melt and subsequently recrystallize as intrusive igneous rocks. According to the *Geologic Map of Georgia,* the rock type(s) underlying the Project Site has (have) been mapped as amphibolites, and/or gneiss which is a (are) highly metamorphosed rock(s). The area topography is illustrated on Figure 2.

Groundwater in this region is contained in joints, fractures and other openings in bedrock and the pore spaces in the overlying residual soil. Groundwater recharge occurs by seepage of water through the soil and/or rock or by flowing directly into openings in outcropping rock. The primary source of recharge water is from precipitation that falls in the area, but can also originate from river discharge during dry periods. The movement of groundwater typically follows the original surface topography, moving from hilltops and uplands to stream valleys. The water table is generally 30 to 100 feet below the ground surface on hilltops and hillsides, but is at or near the ground surface in stream valleys and draws. In this type of geologic setting, the direction of groundwater flow can be expected to generally conform to that of the surface water.

Based on the USGS topographic map of the area (Figure 2), groundwater below the Project Site can be expected to flow northeast. Areas considered up-gradient of the Project Site are to the south and southwest. This anticipated direction of groundwater flow was used to assist in the evaluation of potential impacts from nearby properties.

On-Site Subsurface Conditions

Site drilling was used to further define the site conditions. Approximately 1 to 2 inches of asphalt followed by 3 to 6 inches of graded aggregate base (GAB) was encountered at the surface of borings B-1, B-2, B-3, and MW-2. Approximately six inches of concrete was encountered at the surface of boring MW-1 and six inches of gravel at the surface of MW-3 and MW-4. Fill material was encountered below the concrete/gravel/GAB in the borings. The fill materials generally consisted of silts and sands with varying amounts of sand, silt, and clay, with occasional debris such as clay bricks mixed with soil. Residual soils were encountered beneath the fill materials. The residual soil generally consisted of sands and silts with varying amounts of sand, silt and clay. Groundwater was encountered in borings at depths of 8 to 16 feet below the ground surface (bgs) at the time of boring. Static groundwater levels in monitoring wells MW-1 through MW-4 were measured at depths of 12.43, 7.74, 13.67, and 5.74 feet below the top of casing (toc). A detailed description of the conditions encountered within the test borings is included on the boring/monitoring well logs in Appendix B.

The Project Site is underlain by an unconfined aquifer. Groundwater is contained in the residual soil and underlying weathered rock. The estimated flow system is about 50 feet thick. The wells installed at the Project Site and at LRM were used to assess the overall system. Well construction logs are included in Appendix B and their construction is summarized in Table 5. These wells were surveyed and water level data obtained to construct a potentiometric map of the Project Site area. Table 6 summarizes these water level data and the potentiometric map is shown on Figure 5.

As illustrated on the potentiometric map on Figure 5, the overall groundwater flow direction is to the northeast. A potentiometric map for the LRM property is reproduced in Appendix E and shows flow from the LRM property towards the Project Site, consistent with the flow direction on the Project Site. Several other characteristics of the system are that it is:

- Unconfined;
- Uniform;
- Relatively extensive;
- Isotropic; and
- About 50 feet thick (maximum)

Extent of Groundwater Contamination

Seven borings, designated B-1 through B-3 and MW-1 through MW-4, were drilled around the building on the Project Site. Four borings were drilled next to the southern property line with LRM and two borings were drilled next to the western property line. A single boring was also drilled interior to the property, next to the northeastern corner of the building. Four of the borings, MW-1 through MW-4, were subsequently converted into wells for collecting groundwater samples. Seven groundwater samples were obtained at the Project Site. From the calculated potentiometric data and LRM data, the overall direction of groundwater flow is to the northeast. Regulated substances were detected in the groundwater samples collected from all seven borings/wells. The borings with the most significant impacts were B-1 and MW-1, which were directly downgradient from one of the areas with the highest concentrations of dissolved VOCs at the LRM facility.

One groundwater sample was obtained from each of borings B-1 through B-3 and submitted for analytical testing of VOCs and PAHs using EPA testing methods 8260B and 8270C, respectively. No PAH constituents were detected in the groundwater samples submitted for analytical testing. Multiple VOCs were detected in the groundwater sample from boring B-1; trichloroethene and cis-1,2-dichloroethene were detected in the sample from boring B-2; and ethylbenzene was detected in the sample from boring B-3.

One groundwater sample was obtained from each of monitoring wells MW-1 through MW-4 for analytical testing of VOCs and RCRA metals using EPA testing methods 8260B and 6010B/7471A, respectively. PAHs were not analyzed since no PAHs were detected in borings B-1 through B-3 during the initial Phase II investigation. RCRA metals were added based upon information obtained from the EPD regarding the COC at LRM. Multiple VOCs were detected in the groundwater samples. In addition, very low concentrations of barium were also detected in the groundwater samples well below the Maximum Contaminant Level (MCL). The barium detected in the groundwater is likely naturally occurring. Table 2 summarizes the groundwater analytical testing results. A copy of the laboratory analytical test results is included in Appendix C.

As previously stated, the groundwater at all seven of the borings at the Project Site was impacted by VOCs. The least impacted borings/wells were MW-3 and B-3, which were located on the western property boundary, the most up gradient location from LRM at the Project Site. The highest impacted wells were MW-1 and B-1, which were located on the southwestern portion of the Project Site. Based on groundwater data from LRM, these two borings are in a directly down-gradient direction (northeast) from one of the areas at LRM with the highest dissolved VOC concentrations (near RW-2 on LRM property). Monitoring well MW-4, which is located the furthest northeast of the borings on the Project Site, was also impacted. Based on this information, the VOC plume could extend beyond the northeastern property boundary of the Project Site.

Figure 4 shows the distribution of VOCs at the Project Site. The LRM data reproduced in Appendix E shows the distribution of VOCs in the most recent available map. These show that similar chemicals are on both sites, with higher concentrations on the LRM property.

POTENTIAL HUMAN OR ENVIRONMENTAL RECEPTORS

Currently, the nearest resident to the Project Site is less than 300 feet to the east of the Project Site, at 1496 Norman Berry Drive. Upon completion of the planned development, residents may be located on the Project Site. However, soil sampling has confirmed that no soils with COC concentrations in excess of the Type 1 RRS were detected on the Project Site.

The EPD previously assessed the LRM and the Project Site for known releases of several regulated substances to the groundwater, which included conducting a receptor survey. In addition, the United Consulting conducted an independent survey for the Project Site notification. Based on file information, no drinking water wells exist within 3 miles of the Project Site.

RISK REDUCTION STANDARDS

Approach

Type 1 RRS calculations have been made for the COC in the soil/groundwater at the Project Site and LRM. The RRS were developed based on guidance and the Rules for the HSRP, as well as applicable guidance from the EPA (1991, 2001). The RRS values calculated in this report incorporate standard, default assumptions recommended by EPD and EPA. RRS calculations are described in the HSRA Rules under, 391-3-19-.07(6)(c). Generally, Type 1 soil RRS shall be based on the strictest of groundwater protection criteria, non-cancer toxic effect concentrations, or carcinogenic risk concentrations for residential receptors.

Non-cancer toxic effect concentrations and carcinogenic risk concentrations were assessed using equations 6 and 7, shown below, from Risk Assessment Guidance for Superfund (RAGS), Volume I - Human Health Evaluation Manual, Part B (1991).

Equation 6-Carcinogenic Risk RRS (RRS_c) in milligrams per kilogram (mg/kg):

$$RRS_c = \frac{TR*BW*AT_c*365\ \text{days/yr}}{EF*ED*[(CSF_o*10^{-6}\ \text{kg/mg}*IR_s)+(CSF_i*IR_a*[1/VF+1/PEF])]}$$

Equation 7-Non-carcinogenic Risk RRS (RRS_{nc}) in mg/kg:

$$RRS_{nc} = \frac{THI*BW*AT_{nc}*365\ \text{days/yr}}{EF*ED*[(1/RfD_o*10^{-6}\text{kg/mg}*IR_s)+(1/RfD_i*IR_a*[1/VF+1/PEF])]}$$

Where:

TR	Target Risk	1.00E-05
THI	Target Hazard Index	1 (unitless)
CSF_i	Inhalation Cancer Slope Factor	Chemical Specific
CSF_o	Oral Cancer Slope Factor	Chemical Specific
RfD_i	Inhalation Reference Dose	Chemical Specific
RfD_o	Oral Reference Dose	Chemical Specific
BW	Body Weight	70 kg
AT	Averaging Time	70/30* yr: Eq 6/Eq 7
EF	Exposure Frequency	350 days/yr
ED	Exposure Duration	30 yr

IR_{soil}	Soil Ingestion Rate	114 mg/kg
IR_{air}	Workday Inhalation Rate	15 m^3/day
VF	Soil to Air Volatilization Factor	Chemical Specific
PEF	Particulate Emission Factor	4.63E+09 m^3/kg

Note: Parameters per HSRA, Table 3, Appendix III and RAGS, Volume I, Part B, except * value, which was verbally specified by EPD on 9/1/05.

Type 1 RRS

Default values were used as obtained from the standard residential exposure assumptions, Table 3, Appendix III of the HSRP Rules. Chemical specific values were obtained from the Region 9 PRG Table and other sources[1]. Type 1 risk based soil RRS calculations are included in Table 7.

SUBSURFACE AIR

Due to the detection of multiple solvents in the groundwater and the shallow groundwater table at the Project Site, the potential exists for vapors from the COC to migrate through the soil into buildings on the Project Site. Kairos intends to implement a vapor collection and/or venting system during construction to reduce the potential for toxic/flammable vapors to collect within the Project Site buildings.

CORRECTIVE ACTION

Overview

The PPCAP provided for the contingency of remedial action if soil concentrations exceeded NCs or the associated RRS. Soils on the Project Site did not exceed either NCs or Type 1 RRS. Consequently, no corrective actions were required.

Regulatory Compliance (not required)

The soil removal operations for this project were to be performed in accordance with the PPCAP. Excavation activities were scheduled for performance by contractors experienced, trained, and licensed for hazardous waste activities. Any materials removed from the Project Site would have been transported by experienced, trained, and licensed waste haulers. Work documentation, protection, and regulatory compliance were identified for use, if required.

Health and Safety (not required)

Corrective actions would have been performed in accordance with OSHA requirements, as provided for in Title 29 of the Code of Federal Regulations, part 120 (29 CFR 120), for

[1] Supplemental Guidance to RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, EPA Region 4, originally published November 1995, http://www.epa.gov/region4/waste/ots/healtbul.htm (Website last updated May 30, 2000), Integrated Risk Information System (IRIS), published and maintained by the EPA, www.epa.gov/iris/, Health Effects Assessment Summary Tables (HEAST), EPA, 1997.

hazardous waste work. All companies involved in the excavation activities were to prepare health and safety plans (HASPs) for their workers and the tasks they performed, as required by the PPCAP and regulations, and cleaning protocols for their personnel and equipment.

Verification (not required)

Soils would be removed from the Project Site if COC impacts had been found greater than the NC and/or Type 1 RRS. Soil confirmation sampling would then have been conducted at a rate of one sample for every 400 square feet of exposed base. Sidewall samples will be collected at a rate of one sample for every 25 linear feet of sidewall. At a minimum, every excavation will have at least one base sample and four sidewall samples.

Excavation Monitoring (not required)

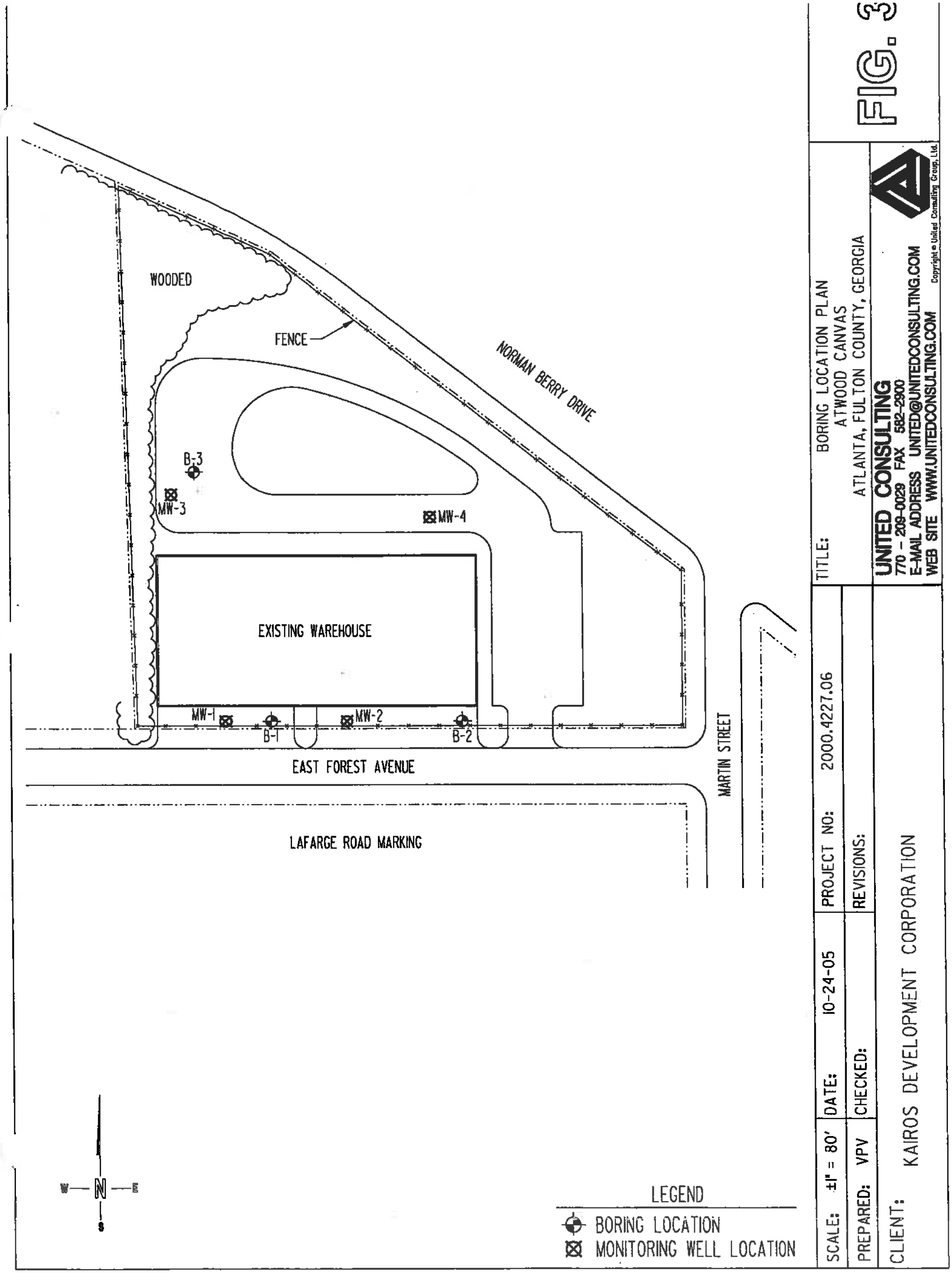
During required excavations, air monitoring would have been conducted using a portable volatile gas meter, such as a MultiRAE Plus or a Thermo Environmental 580B, Organic Vapor Monitor (OVM), and passive dosimeter tubes.

COMPLIANCE STATUS REPORT

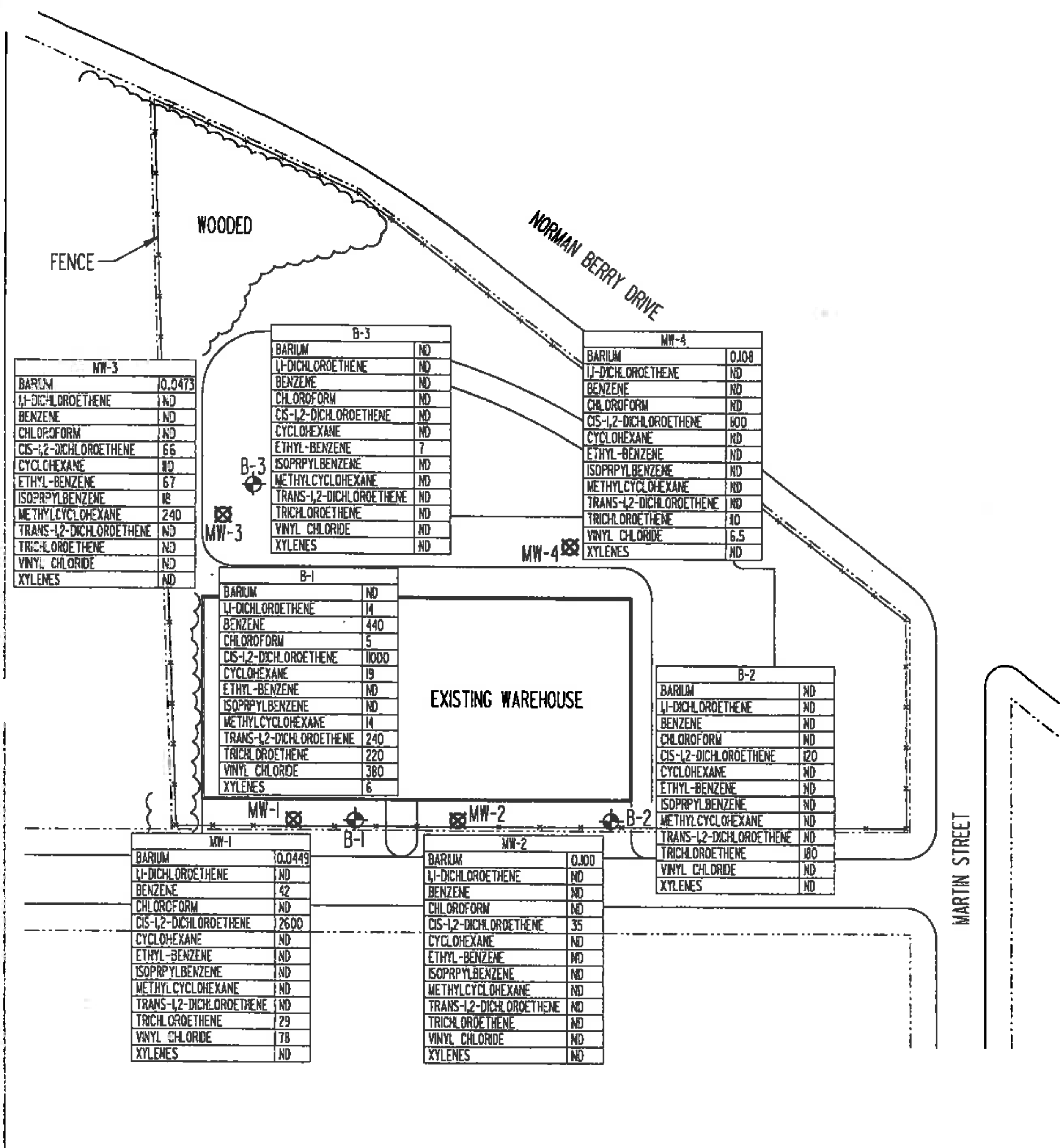
Following completion of the PPCAP, this Proposed Purchaser Compliance Status Report (PPCSR) was prepared for submittal to the EPD. This PPCSR summarizes the former investigations at the Project Site and includes the results of the additional investigations performed in the course of implementation of the PPCAP. Remedial actions were not performed and did not require description and documentation. Calculations of appropriate RRS and certification of compliance with the RRS and/or NCs for various COCs in soils on the Project Site is included herein. This PPCSR documents the following, at a minimum:

- A description of each known source of release and potential responsible parties (PRPs);
- A legal description of the property which comprises Brownfield Site;
- Re-statement of the applicant and property eligibility for Brownfields coverage;
- A summary of all pertinent field and laboratory data;
- Definition of the horizontal and vertical extent of on-site soil and groundwater impacts;
- A description of geologic and hydrogeologic conditions at the site;
- A description of existing or potential human or environmental receptors;
- A summary of previous actions take to eliminate, control, or minimize the potential risk at the site;
- Calculations of appropriate RRS numbers; and
- A concise statement of the findings of the report including Kairos Development Corporation's certification of compliance with the appropriate soil risk reduction standards.

UNITED CONSULTING


WOODED
FENCE
NORMAN BERRY DRIVE
B-3
MW-3
MW-4
EXISTING WAREHOUSE
MW-1
B-1
MW-2
B-2
EAST FOREST AVENUE
MARTIN STREET
LAFARGE ROAD MARKING
W N E S
LEGEND
BORING LOCATION
MONITORING WELL LOCATION
TITLE: BORING LOCATION PLAN
ATWOOD CANVAS
ATLANTA, FULTON COUNTY, GEORGIA
UNITED CONSULTING
770 - 209-0029 FAX 582-2900
E-MAIL ADDRESS UNITED@UNITEDCONSULTING.COM
WEB SITE WWW.UNITEDCONSULTING.COM
Copyright © United Consulting Group, Ltd.
FIG. 3
SCALE: ±1" = 80'
DATE: 10-24-05
PROJECT NO: 2000.4227.06
PREPARED: VPV
CHECKED:
REVISIONS:
CLIENT: KAIROS DEVELOPMENT CORPORATION

NOTE: SITE PLAN WAS DEVELOPED USING AERIAL PHOTOGRAPHS AND FULTON COUNTY TAX MAP, AND SHOULD BE CONSIDERED APPROXIMATE.



MW-3	
BARIUM	0.0473
1,1-DICHLOROETHENE	ND
BENZENE	ND
CHLOROFORM	ND
CIS-1,2-DICHLOROETHENE	66
CYCLOHEXANE	ND
ETHYL-BENZENE	67
ISOPRPYLBENZENE	18
METHYLCYCLOHEXANE	240
TRANS-1,2-DICHLOROETHENE	ND
TRICHLOROETHENE	ND
VINYL CHLORIDE	ND
XYLENES	ND

B-3	
BARIUM	ND
1,1-DICHLOROETHENE	ND
BENZENE	ND
CHLOROFORM	ND
CIS-1,2-DICHLOROETHENE	ND
CYCLOHEXANE	ND
ETHYL-BENZENE	7
ISOPRPYLBENZENE	ND
METHYLCYCLOHEXANE	ND
TRANS-1,2-DICHLOROETHENE	ND
TRICHLOROETHENE	ND
VINYL CHLORIDE	ND
XYLENES	ND

MW-4	
BARIUM	0.108
1,1-DICHLOROETHENE	ND
BENZENE	ND
CHLOROFORM	ND
CIS-1,2-DICHLOROETHENE	1100
CYCLOHEXANE	ND
ETHYL-BENZENE	ND
ISOPRPYLBENZENE	ND
METHYLCYCLOHEXANE	ND
TRANS-1,2-DICHLOROETHENE	ND
TRICHLOROETHENE	10
VINYL CHLORIDE	6.5
XYLENES	ND

B-1	
BARIUM	ND
1,1-DICHLOROETHENE	14
BENZENE	440
CHLOROFORM	5
CIS-1,2-DICHLOROETHENE	11000
CYCLOHEXANE	19
ETHYL-BENZENE	ND
ISOPRPYLBENZENE	ND
METHYLCYCLOHEXANE	14
TRANS-1,2-DICHLOROETHENE	240
TRICHLOROETHENE	220
VINYL CHLORIDE	380
XYLENES	6

B-2	
BARIUM	ND
1,1-DICHLOROETHENE	ND
BENZENE	ND
CHLOROFORM	ND
CIS-1,2-DICHLOROETHENE	120
CYCLOHEXANE	ND
ETHYL-BENZENE	ND
ISOPRPYLBENZENE	ND
METHYLCYCLOHEXANE	ND
TRANS-1,2-DICHLOROETHENE	ND
TRICHLOROETHENE	180
VINYL CHLORIDE	ND
XYLENES	ND

MW-1	
BARIUM	0.0449
1,1-DICHLOROETHENE	ND
BENZENE	42
CHLOROFORM	ND
CIS-1,2-DICHLOROETHENE	2600
CYCLOHEXANE	ND
ETHYL-BENZENE	ND
ISOPRPYLBENZENE	ND
METHYLCYCLOHEXANE	ND
TRANS-1,2-DICHLOROETHENE	ND
TRICHLOROETHENE	29
VINYL CHLORIDE	78
XYLENES	ND

MW-2	
BARIUM	0.100
1,1-DICHLOROETHENE	ND
BENZENE	ND
CHLOROFORM	ND
CIS-1,2-DICHLOROETHENE	35
CYCLOHEXANE	ND
ETHYL-BENZENE	ND
ISOPRPYLBENZENE	ND
METHYLCYCLOHEXANE	ND
TRANS-1,2-DICHLOROETHENE	ND
TRICHLOROETHENE	ND
VINYL CHLORIDE	ND
XYLENES	ND

NOTES:
1. ALL DATA IS IN MICROGRAMS PER LITER.
2. DATA FROM B-1, THROUGH B-3 WAS COLLECTED ON 5-16-05.
   DATA FROM MW-1 THROUGH MW-4 WAS COLLECTED ON 10-10-05
3. TABLE 2 OF REPORT PRESENTS THESE RESULTS IN DETAIL.

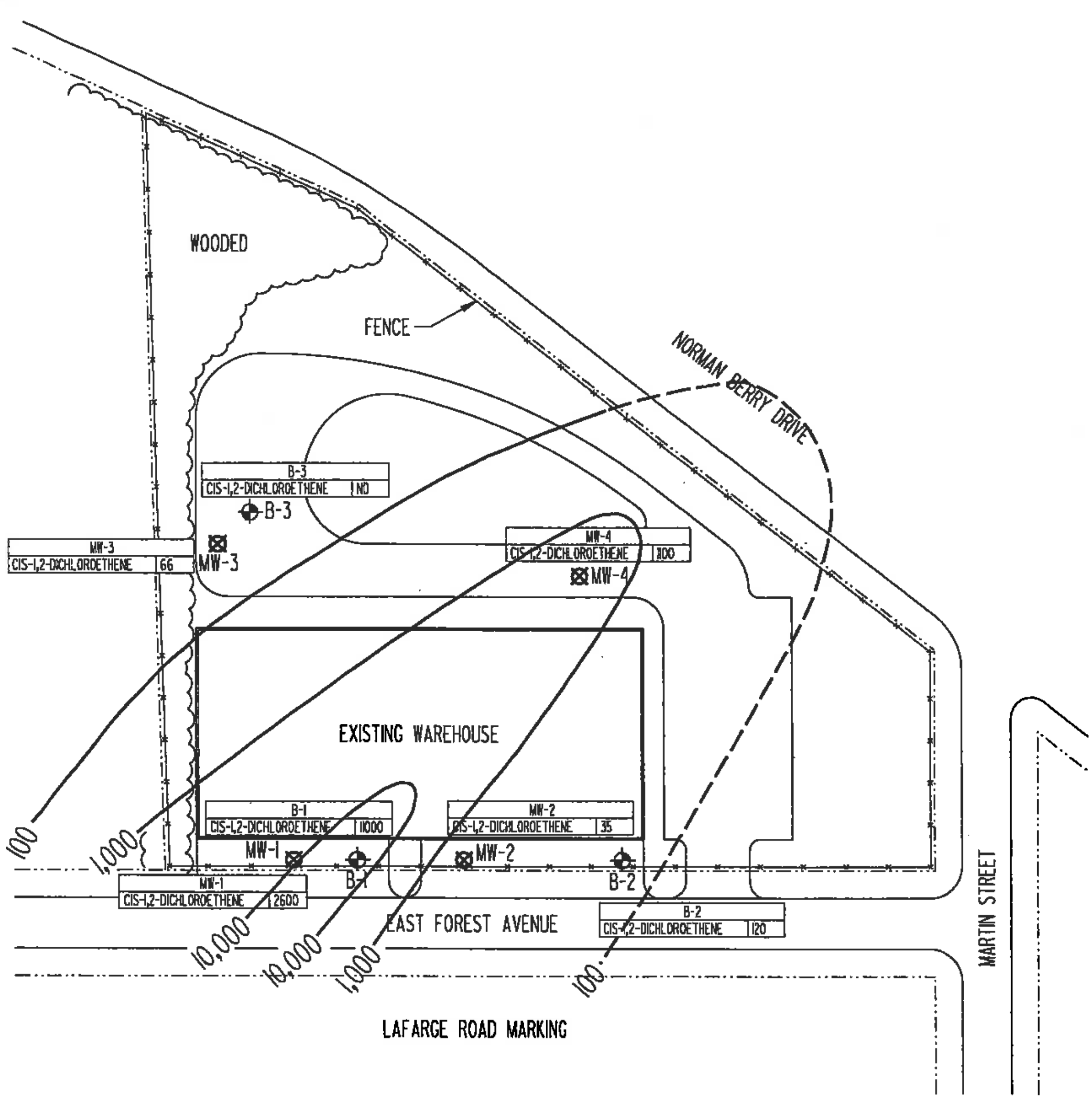
W — N — E
S

LEGEND
- BORING LOCATION
- MONITORING WELL LOCATION

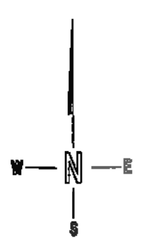
SCALE: ±1" = 80'
DATE: 10-24-05
PROJECT NO: 2000.4227.06
TITLE: GROUNDWATER QUALITY MAP
ATWOOD CANVAS
ATLANTA, FULTON COUNTY, GEORGIA
PREPARED: VPV
CHECKED:
REVISIONS:
CLIENT: KAIROS DEVELOPMENT CORPORATION

UNITED CONSULTING
770 - 209-0029 FAX 582-2900
E-MAIL ADDRESS UNITEDCONSULTING@UNITEDCONSULTING.COM
WEB SITE WWW.UNITEDCONSULTING.COM

FIG. 4



NOTES:
1. ALL DATA IS IN MICROGRAMS PER LITER.
2. DATA FROM B-1, THROUGH B-3 WAS COLLECTED ON 5-16-05.
   DATA FROM MW-1 THROUGH MW-4 WAS COLLECTED ON 10-10-05
3. TABLE 2 OF REPORT PRESENTS THESE RESULTS IN DETAIL.



LEGEND

- BORING LOCATION
- MONITORING WELL LOCATION
- CONCENTRATION ISOPLETH
- ESTIMATED ISOPLETH

TITLE: GROUNDWATER ISOCONCENTRATION MAP
CIS-1,2-DICHLOROETHENE
ATWOOD CANVAS - ATLANTA, FULTON COUNTY, GEORGIA

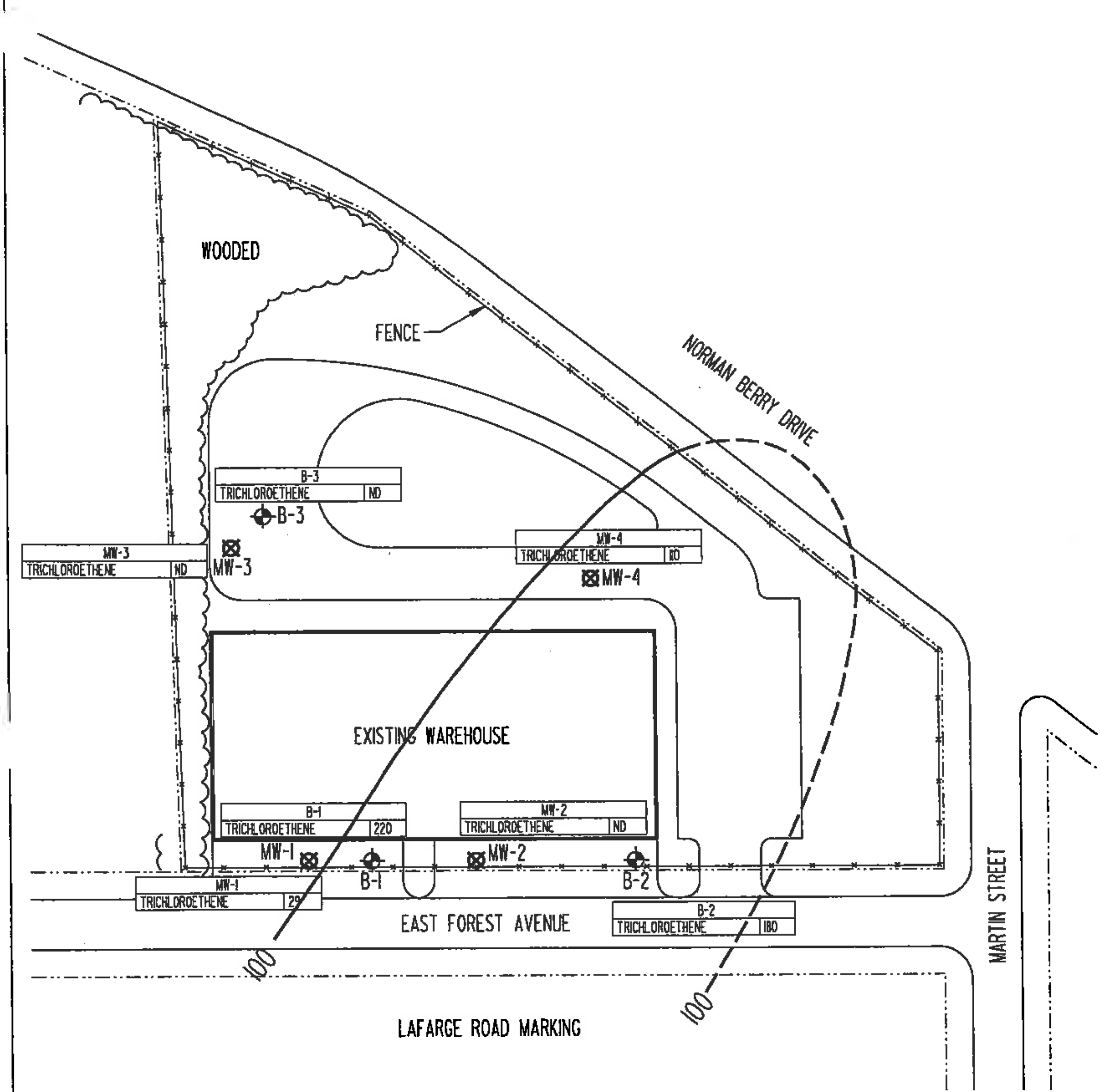
UNITED CONSULTING
770 - 209-0029 FAX 582-2900
E-MAIL ADDRESS UNITED@UNITEDCONSULTING.COM
WEB SITE WWW.UNITEDCONSULTING.COM

FIG. 4

PROJECT NO: 2000.4227.06
REVISIONS:

SCALE: ±1" = 80' | DATE: 10-24-05
PREPARED: VPV | CHECKED:

CLIENT: KAIROS DEVELOPMENT CORPORATION



NOTES:
1. ALL DATA IS IN MICROGRAMS PER LITER.
2. DATA FROM B-1, THROUGH B-3 WAS COLLECTED ON 5-16-05.
   DATA FROM MW-1 THROUGH MW-4 WAS COLLECTED ON 10-10-05
3. TABLE 2 OF REPORT PRESENTS THESE RESULTS IN DETAIL.

LEGEND

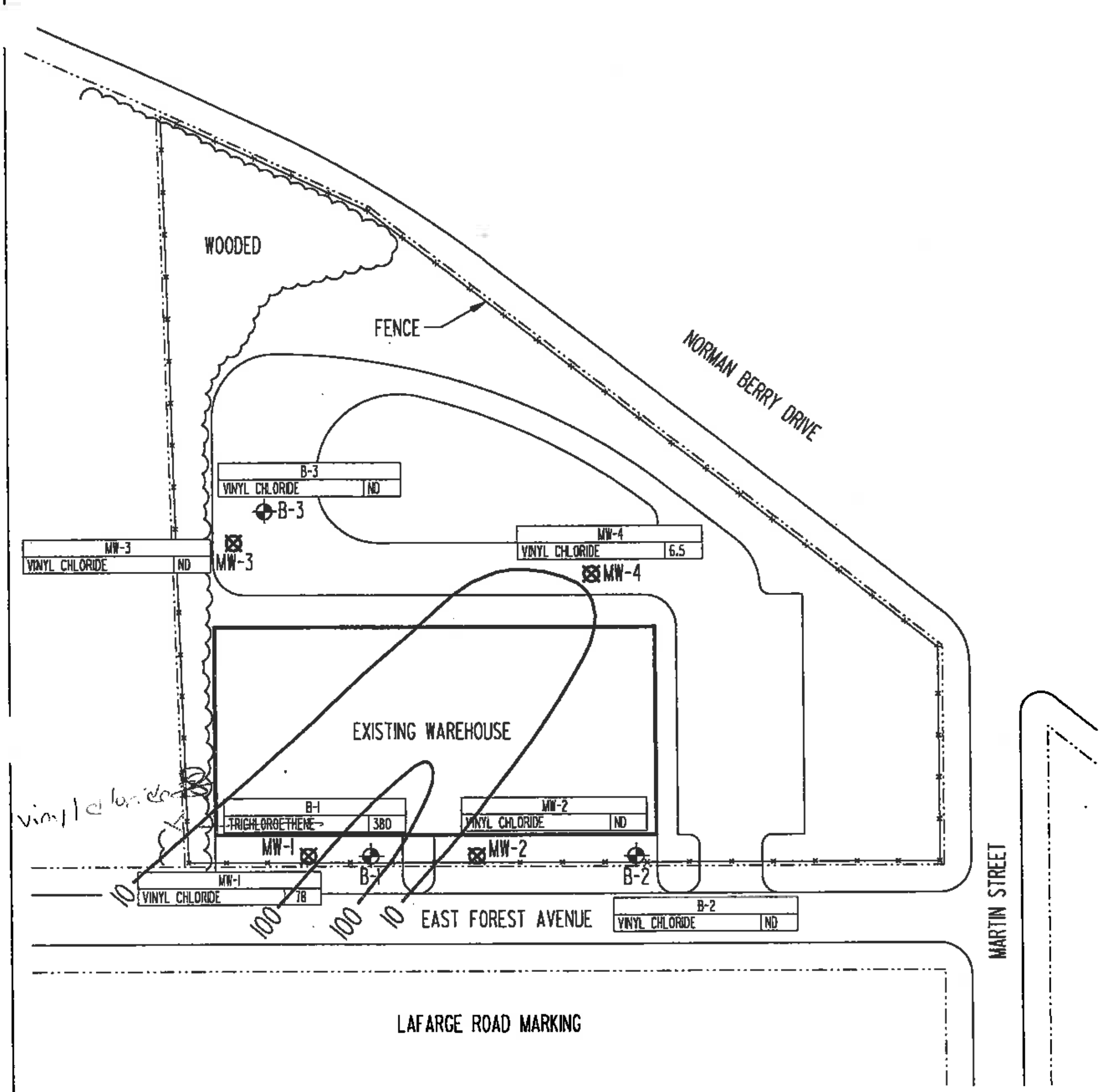
⊕	BORING LOCATION
⊠	MONITORING WELL LOCATION
———	CONCENTRATION ISOPLETH
– – –	ESTIMATED ISOPLETH

TITLE: GROUNDWATER ISOCONCENTRATION MAP
TRICHLOROETHENE
ATWOOD CANVAS - ATLANTA, FULTON COUNTY, GEORGIA

FIG. 4B

UNITED CONSULTING
770 - 209-0029 FAX 582-2900
E-MAIL ADDRESS UNITED@UNITEDCONSULTING.COM
WEB SITE WWW.UNITEDCONSULTING.COM

PROJECT NO: 2000.4227.06
REVISIONS:
SCALE: ±1" = 80'
DATE: 10-24-05
PREPARED: VPV
CHECKED:
CLIENT: KAIROS DEVELOPMENT CORPORATION



NOTES:
1. ALL DATA IS IN MICROGRAMS PER LITER.
2. DATA FROM B-1, THROUGH B-3 WAS COLLECTED ON 5-16-05. DATA FROM MW-1 THROUGH MW-4 WAS COLLECTED ON 10-10-05
3. TABLE 2 OF REPORT PRESENTS THESE RESULTS IN DETAIL.

W — N — E
S

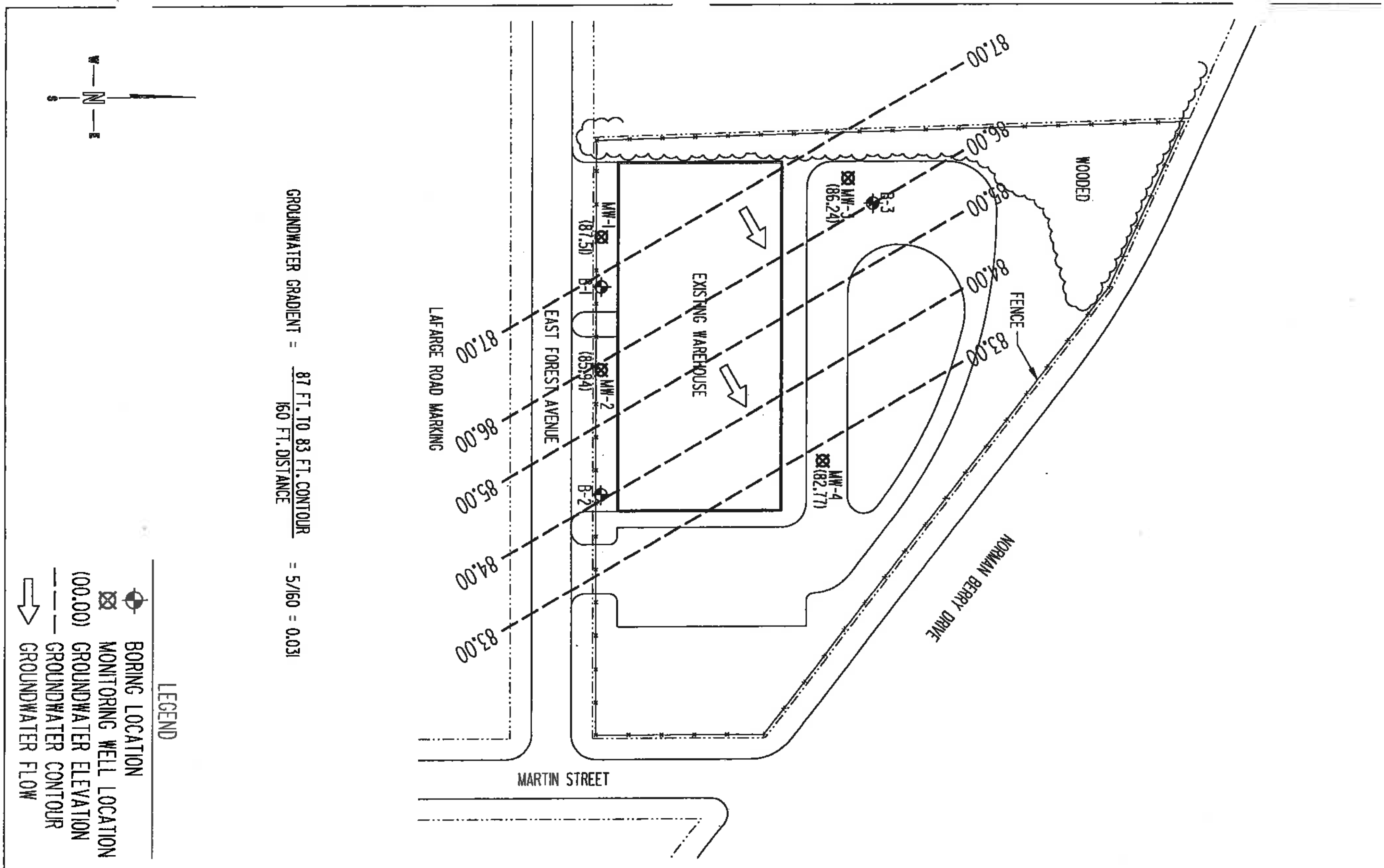
LEGEND
- BORING LOCATION
- MONITORING WELL LOCATION
- CONCENTRATION ISOPLETH
- ESTIMATED ISOPLETH

TITLE: GROUNDWATER ISOCONCENTRATION MAP
VINYL CHLORIDE
ATWOOD CANVAS - ATLANTA, FULTON COUNTY, GEORGIA

FIG. 4C

UNITED CONSULTING
770 - 209-0029 FAX 582-2900
E-MAIL ADDRESS UNITED@UNITEDCONSULTING.COM
WEB SITE WWW.UNITEDCONSULTING.COM

SCALE: ±1" = 80' | DATE: 10-24-05 | PROJECT NO: 2000.4227.06
PREPARED: VPV | CHECKED: | REVISIONS:
CLIENT: KAIROS DEVELOPMENT CORPORATION



SCALE: ±1" = 80'	DATE: 10-24-05	PROJECT NO: 2000.4227.06	TITLE: GROUNDWATER POTENTIOMETRIC MAP ATWOOD CANVAS ATLANTA, FULTON COUNTY, GEORGIA
PREPARED: VPV	CHECKED:	REVISIONS:	
CLIENT: KAIROS DEVELOPMENT CORPORATION			**UNITED CONSULTING** 770 - 209-0029 FAX 582-2900 E-MAIL ADDRESS UNITED@UNITEDCONSULTING.COM WEB SITE WWW.UNITEDCONSULTING.COM

FIG. 5

TABLES

TABLE 1: SUMMARY OF CONSTITUENTS IN SOIL SAMPLES

COC	MW-1	MW-1	MW-2	MW-2	MW-3	MW-3	MW-4	MW-4	NC
DEPTH (FT)	5	10	5	7.5	5	10	5	10	
METALS (mg/kg)									
Arsenic	<4.49	<4.87	<4.25	<4.13	4.11	<4.13	<3.85	<3.31	41
Barium	73.9	84.2	40.8	36.2	47.7	69.7	179	193	500
Chromium	25.1	3.38	14.2	21.3	33.5	8.31	38.3	20.0	1,200
Lead	39.7	5.31	6.42	8.94	16.8	22.7	9.91	8.23	400
VOCS (ug/kg)									
Benzene	<3.8	<3.3	3.7	<2.9	<3.8	<3.6	<3.5	<3.3	20
Cis-1,2-dichloroethene	7.0	22	<3.4	<2.9	<3.8	<3.6	<3.5	<3.3	53
Isopropylbenzene	<3.8	<3.3	<3.4	<2.9	<3.8	<3.6	3.6	<3.3	21,880
Toluene	<3.8	<3.3	16	5.5	8.3	6.1	11	<3.3	14,400
VOCS by TCLP (ug/l)									
Benzene	-	-	<100	-	-	-	-	-	NA
Cis-1,2-dichloroethene	-	<100	-	-	-	-	-	-	NA
Isopropylbenzene	-	-	-	-	-	-	<100	-	NA
Toluene	-	-	<100	-	-	-	<100	-	NA
Other Parameters		-							
pH (su)	6.83	-	-	-	-	7.22	6.13	-	NA
Conductance (umhos/cm)	406	-	-	-	-	288	429	-	NA
Cation Exchange Capacity (meq/100g)	9.2	-	-	-	-	19	9.2	-	NA
Total organic carbon (mg/kg-dry)	2020	-	-	-	-	691	593	-	NA

Notes:
RCRA Metal and VOCs constituents not listed were below detection limits
NC: Notification Concentration
su: standard units
umhos/cm: micromhos per centimeter
meq/100g: milliequivalents per 100 grams
mg/kg: milligrams per kilogram
ug/kg: micrograms per kilogram
ug/l: micrograms per liter
- indicates no analyses performed

TABLE 2: SUMMARY OF CONSTITUENTS IN GROUNDWATER SAMPLES

COC	B-1	B-2	B-3	MW-1	MW-2	MW-3	MW-4	MCL
Date Collected	5.16.05	5.16.05	5.16.05	10.10.05	10.10.05	10.10.05	10.10.05	
METALS (mg/L)								
Barium	-	-	-	0.0449	0.100	0.0473	0.108	2,000
VOCS (ug/L)								
1,1-Dichloroethene	**14**	<5	<5	<5	<5	<5	<5	7
Benzene	**440**	<5	<5	**42**	<5	<5	<5	5
Chloroform	5	<5	<5	<5	<5	<5	<5	80
Cis-1,2-dichloroethene	**11000**	120	<5	**2600**	35	66	1100	210
Cyclohexane	19	<5	<5	<5	<5	110	<5	NA
Ethyl-benzene	<5	<5	7	<5	<5	67	<5	700
Isopropylbenzene	<5	<5	<5	<5	<5	18	<5	NA
Methylcyclohexane	14	<5	<5	<5	<5	240	<5	NA
trans-1,2-dichloroethene	**240**	<5	<5	<5	<5	<5	<5	100
Trichloroethene	**220**	**180**	<5	**29**	<5	<5	**110**	5
Vinyl chloride	**380**	<5	<5	**78**	<5	<5	**6.5**	2.5
Xylenes	6	<10	<10	<10	<10	<10	<10	22,000
PAH (ug/L)	BDL	BDL	BDL	-	-	-	-	NA

Notes:
RCRA Metal, VOCs, and PAH constituents not listed were below detection limits
BDL: below detection limits (detection limits listed on laboratory data in the appendix)
MCL: Maximum contaminant level, from HSRP Rules 391-3-19
NA: Not applicable
Bold numbers are greater than MCL
- indicates no analyses performed
mg/L is milligrams per liter and ug/L is micrograms per liter

TABLE 3 – CHEMICALS OF CONCERN (COC)

CHEMICALS OF CONCERN
METALS
Arsenic
Barium
Lead
Chromium
Mercury
VOCs
Acetone
Benzene
Chlorobenzene
Chloroform
Cis-1,2-dichloroethene
Cyclohexane1,1-dichloroethane
1,2-dichloroethane
1,1-dichloroethene
Ethylbenzene
Isopropyl benzene
Methyl ethyl ketone (2-butanone)
Methyl isobutyl ketone (4-methyl-2-pentanone)
Methylene chloride (dichloromethane)
Methyl-cyclohexane
Tetrachloroethene
1,1,2,2-tetrachloroethane
Trans-1,2-dichloroethene
Trichloroethene
1,1,1-trichloroethane
1,2,2-trichloroethane
Toluene
Vinyl chloride
Xylenes

TABLE 4: SOIL SCREENING MEASUREMENTS

Boring	Depth in Feet							
	5	6.5	8	9.5	10	10.5	15	20
B-1	3.8	-	-	-	5.8	-	21.4	76.8
B-2	ND	-	-	-	5.4	-	6.2	-
B-3	-	-	-	-	5.3	-	-	-
MW-1	ND	-	-	-	5.1	-	-	-
MW-2	ND	3.6	ND	ND	-	-	-	-
MW-3	5.4	-	-	-	6.1	-	-	-
MW-4	ND	ND	ND	4.9	-	7.2	-	-

Notes:
-: Not sampled
ND: None detected
Concentrations in parts per million (ppm)

TABLE 5: WELL CONSTRUCTION SUMMARY

Well No.	Bore Depth (feet)	Well Depth (feet)	Screen Interval (feet)	Open Interval (feet)	Seal Interval (feet)	Stick-up (feet)
MW-1	20	20	10-20	8-20	0-8	-0.05
MW-2	20	20	5-20	3-20	0-3	-0.33
MW-3	20	20	10-20	8-20	0-8	-0.09
MW-4	20	20	5-20	3-20	0-3	-0.24

Notes:
Well borehole diameter was 6.75 inches, nominal
Well pipe was two-inch in diameter polyvinyl chloride (PVC)
Well screen was number 10 (0.010-inch) slot size PVC
Well filter material was Ottawa sand
Well seal was granulated Bentonite
Stick-up refers to the ripe eight relative to the ground surface

TABLE 6 GROUNDWATER ELEVATIONS

(Data obtained on October 18, 2005)

Station	Top of Casing Elevation (feet)	Land Surface Elevation (feet)	Depth of Screen Interval (feet)	Static Groundwater Depth (feet)	Groundwater Elevation (feet)
MW-1	99.94	99.99	89.99	12.43	87.51
MW-2	93.68	94.01	89.01	7.74	85.94
MW-3	99.91	100.00	90.00	13.67	86.24
MW-4	88.51	88.75	83.75	5.74	82.77

Elevations are relative to MW-3 ground surface

TABLE 7: TYPE I SOIL RISK REDUCTION STANDARD CALCULATIONS

PARAMETERS / CONSTITUENT	REF. DOSE ORAL (mg/kg-d)	REF. DOSE INHILATION (mg/kg-d)	SLOPE FACTOR (SFo) ORAL 1/(mg/kg-d)	SLOPE FACTOR (SFi) INHILATION 1/(mg/kg-d)	SOLUBILITY (mg/l-water)	(Di) MOLECULAR DIFFUSSIVITY (cm2/s)	(Dei) EFFECTIVE DIFFUSSIVITY (cm2/s)	(H) HENRY'S CONSTANT (atm-m3/mol)	Koc (cm3/g)	Kd (cm3/g)	α (cm2/s)	VF (m3/kg)	EQ. 6 PRG (mg/kg)	EQ. 7 PRG (mg/kg)	HSRP NC (mg/kg)	MCL X 100 (mg/kg)	TCLP (mg/l)	TYPE 1 RRS (mg/kg)
RCRA METALS																		
Arsenic															41	1		20
Barium															500	200		1000
Chromium															1200	10		100
Lead (see notes)															400	1.5		75
Mercury															17	0.2		0.5
VOCs																		
Acetone	9.00E-01	NA	NA	NA	1000000	0.124	0.087668	1.62E-03	1.981	0.03962	2.23E-02	722.55	NA	NA	2.74	NA		2.74
Benzene	4.00E-03	8.57E-03	5.50E-02	2.73E-02	1790	0.088	0.062216	2.27E-01	165.5	3.31	2.26E-02	611.73	2.52E+00	2.53E+01	0.02	0.5	< 0.1	0.5
2-Butanone	6.00E-01	1.40E+00	NA	NA	223000	0.0808	0.0571256	2.97E-05	3.827	0.07654	1.84E-04	10627.23	NA	6.09E+04	0.79	NA		0.79
Chlorobenzene	2.00E-02	1.70E-02	NA	NA	472	0.073	0.051611	1.52E-01	219	4.38	1.16E-02	1042.42	NA	8.57E+01	4.18	10		10
Chloroform	1.00E-02	1.40E-02	NA	8.10E-02	7920	0.104	0.073528	1.50E-01	39.8	0.796	4.49E-02	265.44	NA	1.80E+01	0.68	NA		0.68
Cyclohexane	1.70E+00	1.70E+00	NA	NA	55	NA	NA	1.94E-01	165	3.3	NA	NA	NA	NA	20	NA		20
1,1-Dichloroethane	1.00E-01	1.40E-01	NA	NA	5060	0.0742	0.0524594	2.30E-01	31.6	0.632	3.94E-02	180.54	NA	1.23E+02	0.03	NA		0.03
1,2-Dichloroethane	2.00E-02	1.40E-03	9.10E-02	9.10E-02	8520	0.104	0.073528	4.01E-02	17.4	0.348	3.60E-02	388.70	4.84E-01	2.65E+00	0.02	0.5		0.5
1,1-Dichloroethene	5.00E-02	5.70E-02	NA	NA	2250	0.09	0.06363	1.07E+00	58.9	1.178	5.62E-02	71.18	NA	1.97E+01	0.36	0.7		0.7
cis-1,2 Dichloroethene	1.00E-02	1.00E-02	NA	NA	3500	0.0736	0.0520352	7.36E-03	43.79	0.8758	3.41E-03	2314.86	NA	1.11E+02	0.53	7	< 0.1	0.53*
trans-1,2-Dichloroethene	2.00E-02	2.00E-02	NA	NA	6300	0.0707	0.0499849	3.85E-01	52.5	1.05	3.77E-02	183.74	NA	1.79E+01	0.53	10		10
Ethyl-benzene	1.00E-01	2.86E-01	NA	3.85E-03	169	0.075	0.053025	3.22E-01	517.8	10.356	1.09E-02	1099.39	NA	1.49E+03	20	70		70
Isopropylbenzene	1.00E-01	1.10E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.40E+04	21.88	NA	< 0.1	21.88
Methylcyclohexane	8.60E-01	8.60E-01	NA	NA	14	0.0986	0.0697102	4.23E-01	268	5.36	2.77E-02	524.25	NA	2.19E+03	NA	NA		2190
4-Methyl-2-pentanone	8.00E-02	8.60E-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3	NA		3.3
Methylene chloride	6.00E-02	8.60E-01	7.50E-03	1.60E-03	13000	0.101	0.071407	8.98E-02	11.7	0.234	5.44E-02	147.70	1.04E+01	6.08E+02	0.08	NA		0.08
Tetrachloroethene	1.00E-02	1.71E-01	5.40E-01	2.10E-02	206	0.072	0.050904	7.24E-01	106.8	2.136	3.76E-02	195.01	1.02E+00	1.58E+02	0.18	0.5		0.5
1,1,2,2-Tetrachloroethane	6.00E-02	6.00E-02	2.00E-01	2.00E-01	2970	0.071	0.050197	1.41E-02	93.3	1.866	2.97E-03	2494.56	1.39E+00	7.15E+02	0.13	NA		0.13
Trichloroethene	3.00E-04	1.00E-02	4.00E-01	4.00E-01	1280	0.079	0.055853	1.16E-02	67.7	1.354	3.71E-03	2215.79	6.19E-01	6.91E+01	0.13	5		0.5*
1,1,1-Trichloroethane	2.80E-01	6.30E-01	NA	NA	1330	0.078	0.055146	7.05E-01	110	2.2	4.01E-02	196.69	NA	6.01E+02	5.44	20		20
1,1,2-Trichloroethane	4.00E-03	4.00E-03	5.70E-02	5.60E-02	4420	0.078	0.055146	3.74E-02	50.1	1.002	1.31E-02	964.25	1.94E+00	1.86E+01	0.5	0.5		0.5
Toluene	2.00E-01	1.14E-01	NA	NA	526	0.087	0.061509	2.71E-01	268	5.36	1.82E-02	753.43	NA	4.17E+02	14.4	100	< 0.1	100
Vinyl chloride	3.00E-03	2.90E-02	1.50E+00	3.10E-02	2760	0.106	0.074942	1.11E+00	18.6	0.372	7.20E-02	20.83	7.57E-02	2.94E+00	0.04	0.2		0.076
Xylenes (Total)	2.00E-01	2.86E-02	NA	NA	106	0.0714	0.0504798	2.71E-01	443.1	8.862	1.02E-02	1138.11	NA	1.58E+02	20	1000		1000*

NOTES:

VOC is volatile organic compounds

HSRP NC is the notification concentration under the Hazardous Site Response Program (HSRP)

NA indicates values not available

Toxicity and chemical specific values from EPA Region 9 PRG table and other sources as ref. in the RRS section of the VCSR

RRSc Based on Equation 6 of RAGS, Volume I, Part B

RRSnc Based on Equation 7 of RAGS, Volume I, Part B

VF Based on Equation 8 of RAGS, Volume I, Part B

$$\text{EQ. 6/RRS}_c = \frac{TR*BW*AT_c*365\ days/yr}{EF*ED*[(CSF_o*10^{-6}kg/mg*IR_s)+(CSF_i*IR_a*[1/VF+1/PEF])]}$$

$$\text{EQ. 7/RRS}_{nc} = \frac{THI*BW*ATnc*365\ days/yr}{EF*ED*[(1/RfDo*10\text{-}6kg/mg*IRs)+(1/RfDi*IRa*[1/VF+1/PEF])]}$$

Type I RRS is highest of NC/MCL X 100/TCLP then the lowest of those/EQ. 6/EQ. 7 or from Table 2 of Appen. III for metals, except * concentrations, which were values verbally specified by EPD on 9/1/05 for previous submitted CSR relative to a separate regulated facility.

Residential Parameters	EQ. 6	EQ. 7	UNITS
CHEMICAL CONCENTRATION-C			
TARGET RISK-TR	1.00E-05	1.00E-05	Unitless
BODY WEIGHT-BW	70	70	KG
AVERAGING TIME-AT	70	30*	YEARS
EXPOSURE FREQUENCY-EF	350	350	D/Y
EXPOSURE DURATION-ED	30	30	YEARS
SOIL INGESTION RATE-IRs	114	114	MG/D
WORKDAY INHILATION RATE-IRa	15	15	M3/D
PARTICULATE EMISSION FACTOR-PEF	4.63E+09	4.63E+09	M3/KG
ORGANIC CARBON-OC	0.02	0.02	Unitless
SOIL MOISTURE CONTENT-NM	0.2	0.2	G/G
SOIL MOISTURE CONTENT-OM	0.2	0.2	LW/KGS

Parameters per HSRA, Table 3, Appendix III and RAGS, Volume I, Part B, except * value, which was verbally specified by EPD on 9/1/05

FIGURES

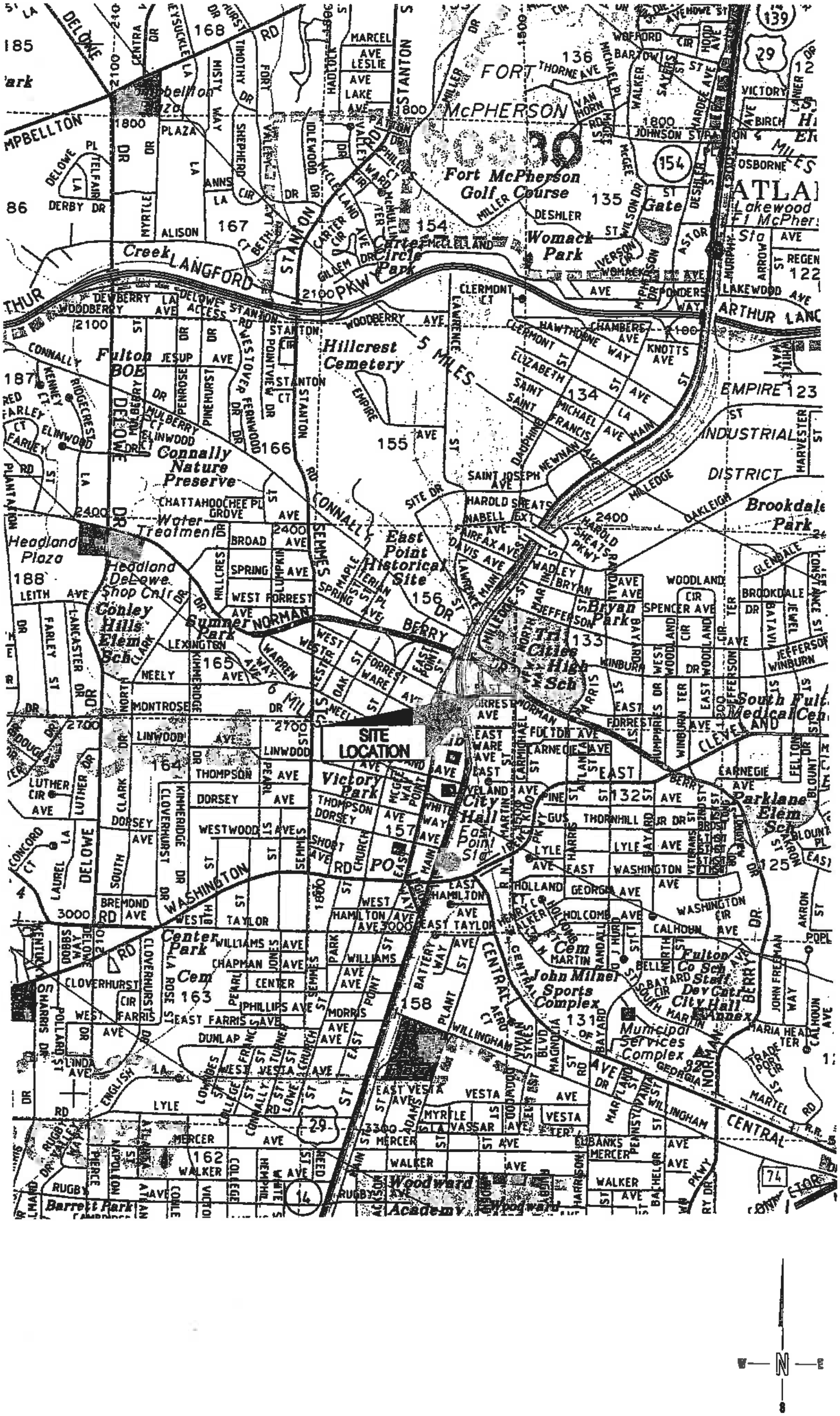
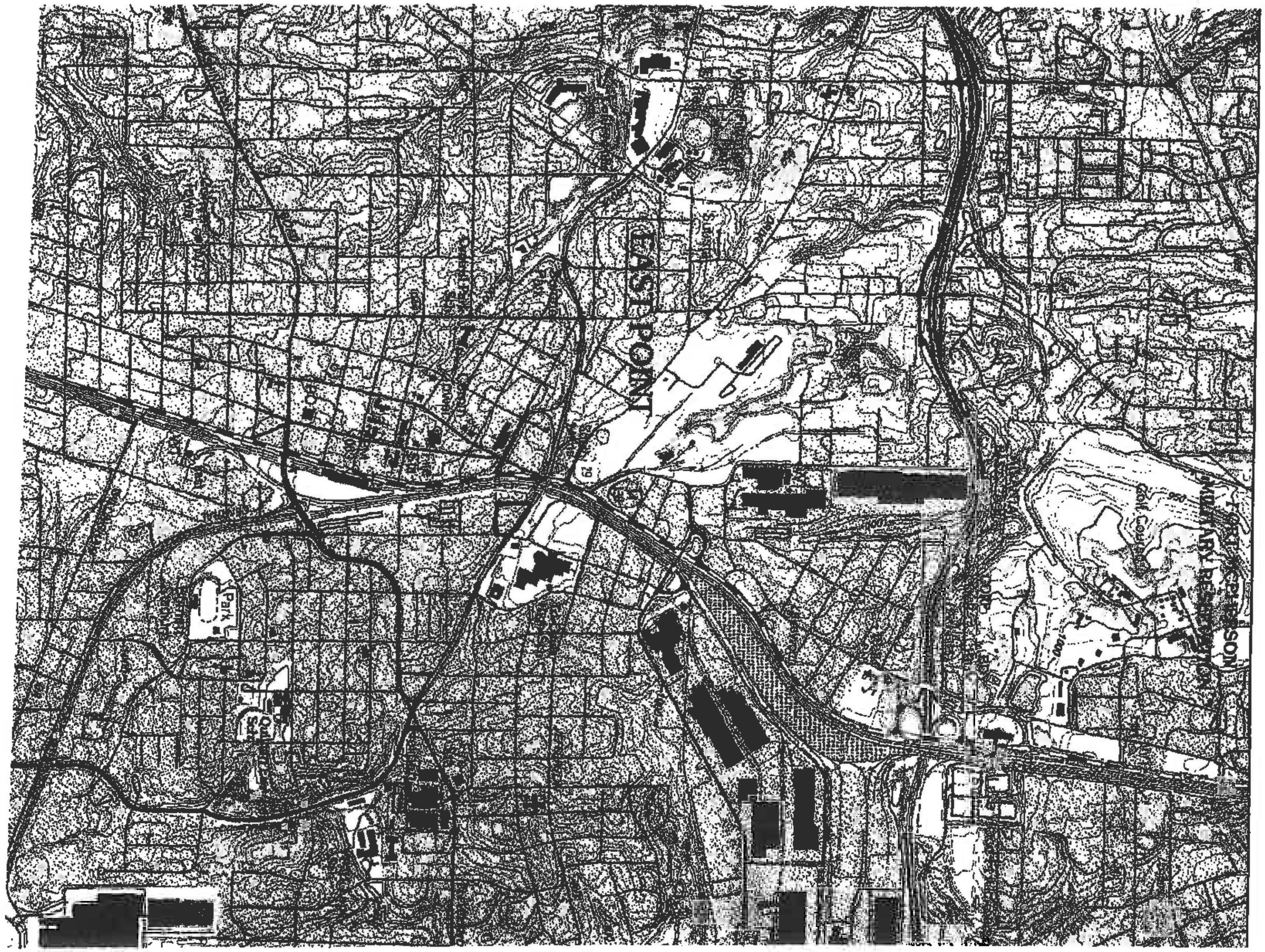


FIG. 1

SCALE: 1" = 2000'	DATE: 10-24-05
PROJECT NO: 2000.4227.06	TITLE: SITE LOCATION MAP ATWOOD CANVAS ATLANTA, FULTON COUNTY, GEORGIA
PREPARED: KK	CHECKED:
REVISIONS:	
CLIENT: KAIROS DEVELOPMENT CORPORATION	

UNITED CONSULTING
770 - 209-0029 FAX 582-2900
E-MAIL ADDRESS UNITED@UNITEDCONSULTING.COM
WEB SITE WWW.UNITEDCONSULTING.COM



SCALE: 1" = 2000'	DATE: 10-24-05	PROJECT NO: 2000.4227.06	TITLE: USGS SITE LOCATION MAP ATWOOD CANVAS ATLANTA, FULTON COUNTY, GEORGIA	FIG. 2
PREPARED: KK	CHECKED:	REVISIONS:		
CLIENT: KAIROS DEVELOPMENT CORPORATION			UNITED CONSULTING 770 - 209-0029 FAX 582-2900 E-MAIL ADDRESS UNITED@UNITEDCONSULTING.COM WEB SITE WWW.UNITEDCONSULTING.COM	

APPENDIX A – Property Legal Description/Tax Map

EXHIBIT "A"

Issuing Office File No.: KAIROS DEVELOPMENT CORPORATION

All that tract or parcel of land lying and being in Land Lot 156, 14th District, Fulton County, Georgia, and being more particularly described as follows:

BEGINNING at the iron pin marking the point of intersection of the north line of Forrest avenue (a 40-foot street) with the west line of Martin Street (a 50-foot street), and running thence westerly along the north line of Forrest Avenue three hundred sixty-two and seventeen hundredths (362.17) feet to an iron pin corner; running thence north at an interior angle of ninety-one degrees forty-one minutes (91°41') with the north line of Forrest avenue three hundred sixty-one (361) feet to an iron pin located twenty-two and six tenths (22.6) feet south of the southwest line of Norman Berry Drive; running thence southeasterly at an interior angle of sixty-four degrees eight minutes (64°08') with said last mentioned line one hundred twelve and twenty-five hundredths (112.25) feet to an iron pin on the southwest line of Norman Berry Drive; running thence southeasterly along the southwest line of said Norman Berry Drive three hundred forty-two and twelve hundredths (342.12) feet to an iron pin at the southwest corner of Norman Berry Drive and Martin Street; running thence south along the west line of Martin Street one hundred five and three tenths (105.3) feet to Forrest Avenue at the point of beginning, being improved property having a four-story brick building located thereon known as No. 1526 Forrest Avenue (formerly No. 110 East Forrest Avenue) in the City of East Point, Georgia; said property being more particularly shown by plat of survey made for L. S. Brown Co. by J. B. Carey, Engineer, dated July 12, 1965.

MAGNETIC N

THIS PROPERTY IS SUBJECT TO THE FOLLOWING DEEDS, PLAT BOOKS, EASEMENTS, RESTRICTIONS, RIGHT-OF-WAYS AND CONDEMNATIONS OF RECORDS: (FULTON COUNTY, GA)
1. DB. 4646, PG. 338 2. DB. 4513, PG. 54-55 3. DB. 1754, PG. 454
4. DB. 2386, PG. 507 5. DB. 3330, PG. 36 6. DB. 1991 PG. 269
7. PLAT BOOK 38, PG. 74 8. PLAT BOOK 21, PG. 16
8. FULTON COUNTY CONDEMNATION CASE NO. A-81515

FOR VERIFICATION OF EXACT LOCATION OF DRAINAGE AND SEWER STRUCTURES, CONCTACT ENGINEERING DEPARTMET OF EAST POINT GA, FOR AS BUILT DRAINAGE AND SEWER MAP.

1. 105.30' S 04 38' 48" W
2. 362.17' N 85 50' 57" W
3. 361.11' N 02 38' 48" E
4. 112.15' S 61 33' 28" E
5. 342.05' S 48 04' 03" E

I HAVE THIS DATE, EXAMINED THE "FIA FLOOD HAZARD MAP" AND FOUND IN MY OPINION REFERENCED PARCEL (IS NOT) IN AN AREA HAVING SPECIAL FLOOD HAZARDS, WITHOUT AN ELEVATION CERTIFICATION SURVEYOR IS NOT RESPONSIBLE FOR ANY DAMAGE DUE ITS OPINION FOR SAID PARCEL

MAP ID ____________ EFFECTIVE DATE: ____________

ZONE: ____________

LEGEND :

IPF	IRON PIN FOUND	POB	POINT OF BEGINNING
IPS	IRON PIN SET	LLL	LAND LOT LINE
OTP	OPEN TOP PIPE FOUND	MH	MAN HOLE
CTP	CRIMP TOP PIPE FOUND	SSL	SANITARY SEWER LINE
RBF	REINFORCING BAR FOUND	CB	CATCH BASIN
CP	CALCULATED POINT	HW	HEAD WALL
-X-X	FENCE	PP	POWER POLE
FC	FENCE CORNER	SP	SERVICE POLE
CLF	CHAIN LINK FENCE	SSE	SANITARY SEWER EASEMENT
WDF	WOOD FENCE	DE	DRAINAGE EASEMENT
WRF	WIRE FENCE	UE	UTILITY EASEMENT
BL	BUILDING LINE	CMP	CORRUGATED METAL PIPE
R/W	RIGHT-OF-WAY	RCP	REINFORCED CONC. PIPE
PL	PROPERTY LINE	APP	AS PER PLAT
P	PLAT	OU	OWNERSHIP UNCLEAR
F	FIELD	N	N'BORS.
D	DEED	W	WATER LINE
		VW	WATER VALVE
		SV	SPRINKLER VALVE
		GM	GAS METER
		BOC	BACK OF CURB

GENERAL NOTES:
1. THIS DRAWING IS THE SOLE PROPERTY OF SURVEY SYSTEMS & ASSOC, INC. ANY UNAUTHORIZED USE FOR REPRODUCTION AND/OR RECERTIFICATION TO A DIFFERENT PARTY IS PROHIBITED WITHOUT THE EXPRESS WRITTEN CONSENT OF SURVEY SYSTEMS & ASSOC, INC.
2. SURVEY SYSTEMS & ASSOC, INC. ASSUMES NO RESPONSIBILITY FOR THE LOCATION OF ANY AND ALL UNDERGROUND UTILITIES

2.05 AC

SCALE 1" = 60'

PLAT PREPARED FOR:

TRUSS-TECH INDUSTRIES, INC.

LOT	BLOCK	UNIT
SUBDIVISION		
LAND LOT 156	14TH DISTRICT	SECTION
FULTON COUNTY, GEORGIA		DATE DECEMBER 30, 2000
PLAT BOOK ,PAGE DEED BOOK ,PAGE		ALL MATTERS PERTAINING TO TITLE ARE EXCEPTED

GEORGIA REGISTERED No. 2363 PROFESSIONAL LAND SURVEYOR E.G. DAVIS

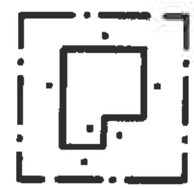
IN MY OPINION, THIS PLAT IS A CORRECT REPRESENTATION OF THE LAND PLATTED AND HAS BEEN PREPARED IN CONFORMITY WITH THE MINIMUM STANDARDS AND REQUIREMENTS OF LAW.

THE FIELD DATA UPON WHICH THIS PLAT IS BASED HAS A CLOSURE OF 1 FOOT IN 100,000+ FEET, AN ANGULAR ERROR OF 03 SECONDS PER ANGLE POINT AND WAS ADJUSTED USING THE LEAST SQUARES METHOD. THIS PLAT HAS BEEN CALCULATED FOR CLOSURE AND FOUND TO BE ACCURATE TO 1 FOOT IN 10,000+ FEET. AN ELECTRONIC TOTAL STATION AND A 100' CHAIN WERE USED TO GATHER THE INFORMATION USED IN THE PREPARATION OF THIS PLAT. NO STATE PLANE COORDINATE MONUMENT FOUND WITHIN 500' OF THIS PROPERTY.

JOB NUMBER 32-24400 SJ

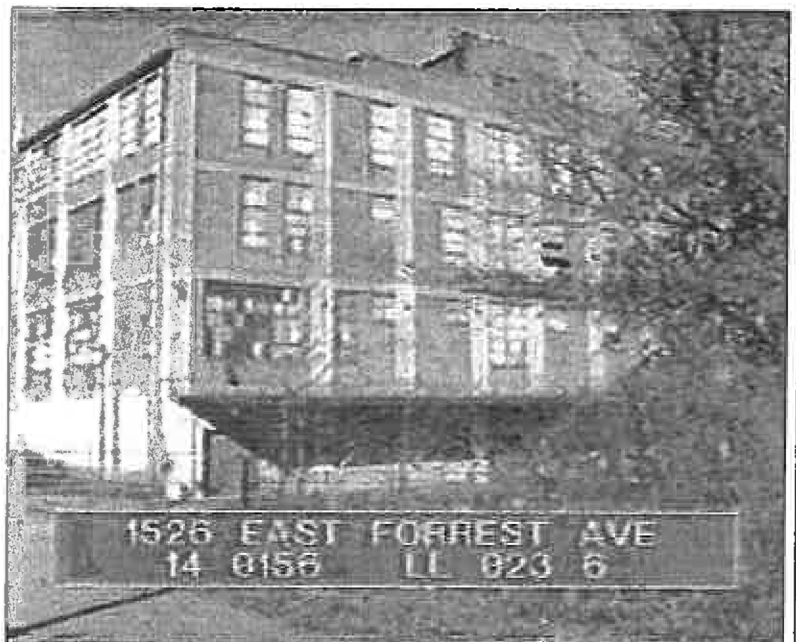
SURVEY SYSTEMS & ASSOC., INC.
P.O. BOX 8688
ATLANTA GA. 31106-0688
FAX (404)760-0011
PHONE (404)760-0010

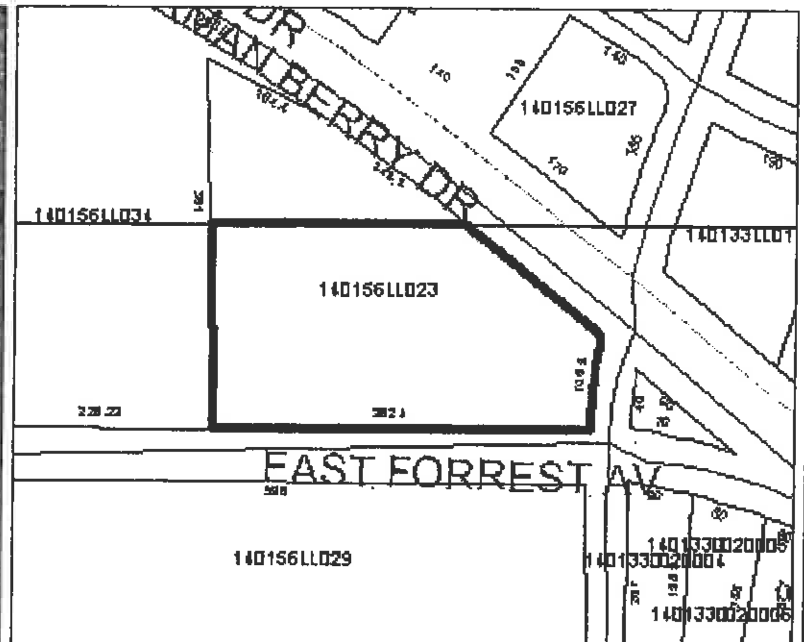
TAX YEAR	2004
PIN	14 -0156- LL-023-6
OWNER NAME	TRUSS TECH REALTY LLC
PROPERTY LOCATION	1526 EAST FORREST AVE
NEIGHBORHOOD	C9118
TOTAL ACREAGE	
TOTAL LAND SQUARE FOOTAGE	84700
LIVING AREA SQUARE FOOTAGE	
LAND VALUE	$169,400
IMPROVEMENT VALUE	$428,200
TOTAL VALUE	$597,600



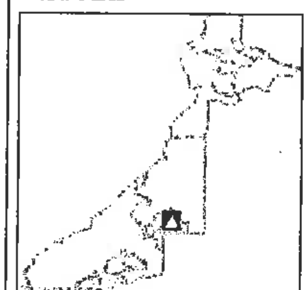
FULTON COUNTY
BOARD OF ASSESSORS

FULTON COUNTY
141 Pryor Street
Suite 1056
Atlanta, GA 30303
Phone: (404) 730-6440
Fax: (404) 224-0417





KEY MAP



The data contained in this report is intended for information purposes only! It is based on the best information available at the time of posting and is not warranted. The data may not reflect the most current records. Maps and acreage data are for illustration purposes only!

APPENDIX B –Boring/Monitoring Well Logs

UNITED CONSULTING
625 HOLCOMB BRIDGE ROAD
NORCROSS, GEORGIA 30071
(770)209-0029, FAX (770)582-2800

BORING LOG

CONTRACTED WITH: KAIROS DEVELOPMENT CORP. BORING NO.: B-1
PROJECT NAME: ATWOOD CANVAS DATE: 05/16/05
JOB NO.: 2000.4227-03 DRILLER: BILL RIG: CME-55 LOGGED BY: DAVE

ELEV.	DESCRIPTION	DEPTH in FEET	SAMPLES NO.	TYPE	BLOWS/6"	RECOV.	W%	NOTES
	2" - ASPHALT/6" - GAB	0						
	Silt-some sand; brown (Fill)							
	Silt-some sand and clay; stiff; orangish brown (Residual)	5	1		4-5-5	18		OVM = 3.8 PPM
	Sand-some silt; stiff; brown	10	2		4-5-5	18		OVM = 5.8 PPM
	-silty; very stiff; dark brown	▽ 15	3		6-8-9	18		OVM = 21.4 PPM Groundwater encountered at 14' at time of boring
		20	4		13-15-15	18		OVM = 76.8 PPM
		25						
	BORING TERMINATED AT 25'							
		30						
		35						
		40						

UNITED CONSULTING
625 HOLCOMB BRIDGE ROAD
NORCROSS, GEORGIA 30071
(770)209-0029, FAX (770)582-2800

BORING LOG

CONTRACTED WITH: KAIROS DEVELOPMENT CORP. BORING NO.: B-2
PROJECT NAME: ATWOOD CANVAS DATE: 05/16/05
JOB NO.: 2000.4227-03 DRILLER: BILL RIG: CME-55 LOGGED BY: DAVE

ELEV.	DESCRIPTION	DEPTH in FEET	SAMPLES NO.	TYPE	BLOWS/6"	RECOV.	W%	NOTES
	1" - ASPHALT/3" - GAB	0						
	Silt-some sand and clay; brown (Fill)							
	Sand-some silt and clay; Residual)							
		5	1		W.O.H.-1	18		-Wet and Reduced. OVM = ND
		10	2		5-2-2	16		OVM = 5.4 PPM
	Silt-some sand; medium; brown	15	3		3-3-5	18		OVM = 6.2 PPM
		∇						Groundwater encountered at 16' at time of boring
		20						
	BORING TERMINATED AT 25'	25						
		30						
		35						
		40						

W.O.H. - Weight of Hammer

ND - Non Detect

UNITED CONSULTING
625 HOLCOMB BRIDGE ROAD
NORCROSS, GEORGIA 30071
(770)209-0029, FAX (770)582-2800

BORING LOG

CONTRACTED WITH: KAIROS DEVELOPMENT CORP. BORING NO.: B-3
PROJECT NAME: ATWOOD CANVAS DATE: 05/16/05
JOB NO.: 2000.4227-03 DRILLER: BILL RIG: CME-55 LOGGED BY: DAVE

ELEV.	DESCRIPTION	DEPTH in FEET	SAMPLES NO.	TYPE	BLOWS/6"	RECOV.	W%	NOTES
	2" - ASPHALT/6" - GAB	0						
	Bricks mixed with soil (Fill)							
		5						
		10	1		3-2-4	14		OVM = 5.3 PPM
	Sand-silty, trace clay; orangish tan (Residual)							
		15	2		2-2-2	0		-No Recovery
								Groundwater encountered at 15' at time of boring
		20	3		3-2-2	0		-No Recovery
		25						
	BORING TERMINATED AT 25'							
		30						
		35						
		40						

UNITED CONSULTING
625 HOLCOMB BRIDGE ROAD
NORCROSS, GEORGIA 30071
770 - 209-0029 FAX 582-2900

WELL/PIEZOMETER LOG

CLIENT: KAIROS DEVELOPMENT CORPORATION
ROJECT NAME: ATWOOD CANVAS
PROJECT NUMBER: 2000.4227.06
DRILLED BY: BILL
LOGGED BY: KALEN

	DATE	TIME
STARTED:	10-7-05	10:00
COMPLETED:	10-7-05	11:30
DEVELOPED:	10-10-05	9:00

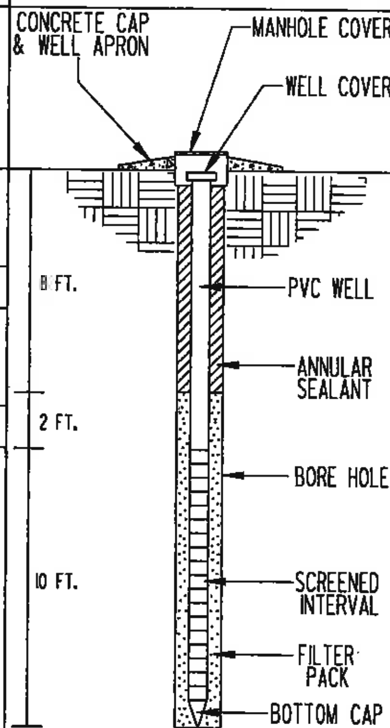
STATIC GROUNDWATER DEPTH: ______

WELL NO.: MW-1
LOCATION: ______

ELEVATION (G.S.): 99.99
ELEVATION (T.O.C.): 99.94

ELEV. (FEET)	DESCRIPTION	DEPTH (FEET)	BLOWS/6"	RECOV.	OVM (ppm)
	CONCRETE	0			
	SAND; SILTY; BROWNISH-ORANGE (FILL)				
	SAND; SOME SILT; BROWNISH-ORANGE (RESIDUAL)	5	5-6-7		ND
	SAND; SILTY; TAN	10	6-7-8		5.1
		15			
	BORING TERMINATED AT 20'	20			
		25			
		30			
		35			
		40			
		45			

SKETCH



WELL INFORMATION

RISER HEIGHT FROM GROUND SURFACE:	-0.05 FEET
SIZE/THICKNESS OF APRON:	2 FEET X 2 FEET
ANNULAR SEALANT:	BENTONITE
FILTER:	OTTOWA SAND
PVC WELL DIAMETER:	2 INCHES
BORE HOLE DIAMETER:	6¾ INCHES
TOP OF SCREEN:	10 FEET
SCREEN LENGTH:	10 FEET
SCREEN SLOT SIZE:	0.010 INCH
BOTTOM OF SCREEN:	20 FEET
BOTTOM OF WELL:	20 FEET

NOTES

ND - NON DETECT

24-HOUR GROUNDWATER LEVEL: 12.43'

GROUNDWATER LEVEL AFTER DEVELOPMENT: ______

GROUNDWATER LEVEL AT TIME OF DRILLING: 16'

UNITED CONSULTING
625 HOLCOMB BRIDGE ROAD
NORCROSS, GEORGIA 30071
770 - 209-0029 FAX 582-2900

WELL/PIEZOMETER LOG

CLIENT: KAIROS DEVELOPMENT CORPORATION
PROJECT NAME: ATWOOD CANVAS
PROJECT NUMBER: 2000.4227.06
DRILLED BY: BILL
LOGGED BY: KALEN

	DATE	TIME
STARTED:	10-7-05	11:30
COMPLETED:	10-7-05	13:00
DEVELOPED:	10-10-05	10:00

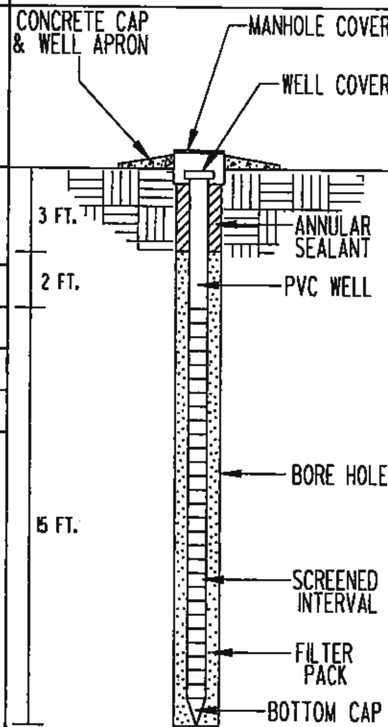
STATIC GROUNDWATER DEPTH: ______

WELL NO.: MW-2
LOCATION: ______

ELEVATION (G.S.): 94.01
ELEVATION (T.O.C.): 93.68

ELEV. (FEET)	DESCRIPTION	DEPTH (FEET)	BLOWS/6"	RECOV.	OVM (ppm)
	2" ASPHALT/4" GAB	0			
	SAND; SILTY; BROWNISH-ORANGE (FILL)				
	SAND; SILTY; TAN (RESIDUAL)		3-3-4	15"	ND
		5	2-3-4	6"	3.6
			6-7-8	16"	ND
			4-5-5	12"	ND
		10			
		15			
	BORING TERMINATED AT 20'	20			
		25			
		30			
		35			
		40			
		45			

SKETCH



WELL INFORMATION

RISER HEIGHT FROM GROUND SURFACE: -0.33 FEET
SIZE/THICKNESS OF APRON: 2 FEET X 2 FEET
ANNULAR SEALANT: BENTONITE
FILTER: OTTOWA SAND
PVC WELL DIAMETER: 2 INCHES
BORE HOLE DIAMETER: 6¾ INCHES
TOP OF SCREEN: 5 FEET
SCREEN LENGTH: 15 FEET
SCREEN SLOT SIZE: 0.010 INCH
BOTTOM OF SCREEN: 20 FEET
BOTTOM OF WELL: 20 FEET

NOTES

ND - NON DETECT

24-HOUR GROUNDWATER LEVEL 7.74'
GROUNDWATER LEVEL AFTER DEVELOPMENT: ______
GROUNDWATER LEVEL AT TIME OF DRILLING: 12'

UNITED CONSULTING
625 HOLCOMB BRIDGE ROAD
NORCROSS, GEORGIA 30071
770 - 209-0029 FAX 582-2900

WELL/PIEZOMETER LOG

CLIENT: KAIROS DEVELOPMENT CORPORATION
PROJECT NAME: ATWOOD CANVAS
PROJECT NUMBER: 2000.4227.06
DRILLED BY: BILL
LOGGED BY: KALEN

	DATE	TIME
STARTED:	10-7-05	13:00
COMPLETED:	10-7-05	14:30
DEVELOPED:	10-10-05	11:00

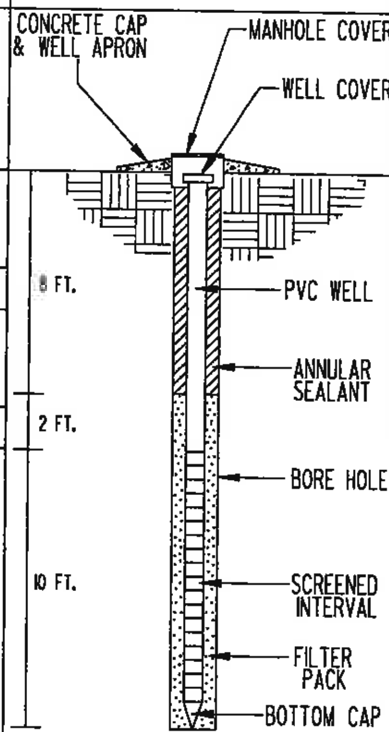
STATIC GROUNDWATER DEPTH:

WELL NO.: MW-3
LOCATION:

ELEVATION (G.S.): 100.00
ELEVATION (T.O.C.): 99.91

ELEV. (FEET)	DESCRIPTION	DEPTH (FEET)	BLOWS/6"	RECOV.	OVM (ppm)
	6" GRAVEL	0			
	SAND; SOME SILT; BLACK WITH ORGANIC DEBRIS (FILL)				
			3-4-3	6"	5.4
	SAND; SOME SILT; BROWNISH-ORANGE (RESIDUAL)	5			
			2-3-4	6"	6.1
		10			
	SAND; SILTY; GRAY				
		15			
	BORING TERMINATED AT 20'	20			
		25			
		30			
		35			
		40			
		45			

SKETCH



WELL INFORMATION

RISER HEIGHT FROM GROUND SURFACE: -0.09 FEET
SIZE/THICKNESS OF APRON: 2 FEET X 2 FEET
ANNULAR SEALANT: BENTONITE
FILTER: OTTOWA SAND
PVC WELL DIAMETER: 2 INCHES
BORE HOLE DIAMETER: 6¾ INCHES
TOP OF SCREEN: 10 FEET
SCREEN LENGTH: 10 FEET
SCREEN SLOT SIZE: 0.010 INCH
BOTTOM OF SCREEN: 20 FEET
BOTTOM OF WELL: 20 FEET

NOTES

ND - NON DETECT

24-HOUR GROUNDWATER LEVEL 13.67'

GROUNDWATER LEVEL AFTER DEVELOPMENT:

GROUNDWATER LEVEL AT TIME OF DRILLING: 16'

UNITED CONSULTING
625 HOLCOMB BRIDGE ROAD
NORCROSS, GEORGIA 30071
770 - 209-0029 FAX 582-2900

WELL/PIEZOMETER LOG

CLIENT: KAIROS DEVELOPMENT CORPORATION
ROJECT NAME: ATWOOD CANVAS
PROJECT NUMBER: 2000.4227.06
DRILLED BY: BILL
LOGGED BY: KALEN

	DATE	TIME
STARTED:	10-7-05	14:30
COMPLETED:	10-7-05	16:00
DEVELOPED:	10-10-05	12:00

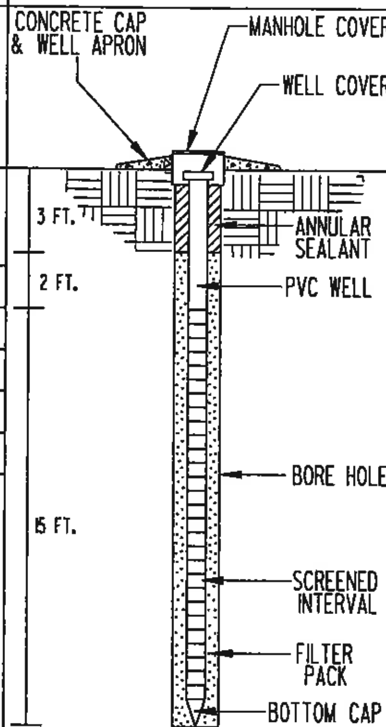
STATIC GROUNDWATER DEPTH:

WELL NO.: MW-4
LOCATION:

ELEVATION (G.S.): 88.75
ELEVATION (T.O.C.): 88.51

DEPTH (FEET)	DESCRIPTION	BLOWS/6"	RECOV.	OVM (ppm)
0	SAND; SOME SILT; BROWNISH-ORANGE (FILL)			
3	SAND; SOME SILT; LIGHT BROWN (RESIDUAL)			
		3-4-4	0	ND
5		4-5-5	16"	ND
		6-7-8		5.7
		3-5-5	14"	4.9
10		4-5-4	12"	7.2
20	BORING TERMINATED AT 20'			

SKETCH



WELL INFORMATION

RISER HEIGHT FROM GROUND SURFACE: -0.24 FEET
SIZE/THICKNESS OF APRON: 2 FEET X 2 FEET
ANNULAR SEALANT: BENTONITE
FILTER: OTTOWA SAND
PVC WELL DIAMETER: 2 INCHES
BORE HOLE DIAMETER: 6¾ INCHES
TOP OF SCREEN: 5 FEET
SCREEN LENGTH: 15 FEET
SCREEN SLOT SIZE: 0.010 INCH
BOTTOM OF SCREEN: 20 FEET
BOTTOM OF WELL: 20 FEET

NOTES

ND - NON DETECT

24-HOUR GROUNDWATER LEVEL 5.74'
GROUNDWATER LEVEL AFTER DEVELOPMENT:
GROUNDWATER LEVEL AT TIME OF DRILLING: 8'