MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY - REMEDIATION AND REDEVELOPMENT DIVISION
PO BOX 30426, LANSING, MICHIGAN 48909-7926, Phone 517-284-5087, Fax 517-241-9581

Request for DEQ Review of No Further Action (NFA) Report

This form is required for submittal of a request for the DEQ to review a No Further Action Report, under Section 20114d, Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

Section A: NFA Category (Check all that apply:)

Residential	☐	Unrestricted	☐
Non-Residential	☒	Restricted	☒
20b(3) Site Specific or Surrogate *(no generic criteria available)*	☐	20b(2) Site Specific *(modification of generic critera)*	☐

The NFA addresses the entire facility ☐
(entire facility as defined by Part 201, all releases, hazardous substances, and environmental media):

The NFA does not address the entire facility ☒
Please specify the release(s), hazardous substance(s), environmental media, and/or portions of the facility addressed by the NFA.
This NFA addresses the entire Site (RACER owned property), but excludes an area west of the property within North Mill Street owned by the City of Pontiac.

NFA relies on a De minimus determination of GSI impact pursuant to Section 20120e(14): ☐

Section B: Facility Information:

Facility Name: **RACER –Employee Development Center**

Street Address of Property: **65 East University Drive**

City: **Pontiac** State: **MI** Zip: **48342**

Property Tax ID (include all applicable IDs addressed by the NFA)
14-29-428-002, 14-29-284-007, and 14-29-284-008

Status of submitter relative to the property (check all that apply):

	Former	Current	Prospective
Owner	☐	☐	☐
Operator	☐	☒	☐

County: **Oakland**
City/Village/Township: **Pontiac**
Range: **10 East** Section: **29**
Town: **3 North**
Quarter: **SE** Quarter-Quarter: **NE**

Decimal Degrees Latitude: **42.640647**
Decimal Degrees Longitute: **83.290392**

Reference point for latitude and longitude:
Center of site ☒ Main/front door ☐
Front gate/main entrance ☐ Other ☐

Collection method:
Survey ☐ GPS ☐ Interpolation ☒

Section C: Submitter Information:

Entity/person requesting review: **RACER Trust**

Contact Person (name and title): **Brad Saunders, Project Manager**
Arcadis of Michigan, LLC, Brad.Saunders@arcadis.com, 517.974.4441)

Submitter's Address: **500 Woodward Ave, Suite 2650**

City: **Detroit** State: **MI** Zip: **48226**

Telephone: **734.879.9525** E-Mail: **dfavero@racertrust.org**

Relationship of Contact Person to the Submitter: **Consultant**

Owner Name, if different from Submitter: **David Favero** Company: **RACER Properties LLC**

Owner Address: **500 Woodward Ave, Suite 2650** City: **Detroit** State: **MI** Zip: **48226**

Telephone: **734.879.9525** E-Mail: **dfavero@racertrust.org**

Section D: Facility/Property Subject to (Check all that apply):

Facility regulated under Part 201, source other than listed below or source unknown Part 201 Site ID, if known:	☒
Leaking Underground Storage Tank regulated pursuant to Part 213. Part 211/213 Facility ID, if known:	☒
Oil or gas production and development regulated pursuant to Part 615 or 625	☐
Licensed landfill regulated pursuant to Part 115	☐
Licensed hazardous waste treatment, storage, or disposal facility regulated pursuant to Part 111	☐
Consent Agreement or other legal agreement with the MDEQ	☐

Section E: Are/were the following present at the facility (Check all that apply):

	Current	Previously	Unknown
Mobil or migrating non aqueous phase liquids (NAPL)	☐	☒	☐
Soil contamination above residential criteria	☒	☐	☐
Soil contamination above non-residential criteria	☒	☐	☐
Soil aesthetic impacts	☒	☐	☐
Groundwater contamination above residential criteria	☒	☐	☐
Groundwater contamination above non-residential criteria	☒	☐	☐
Groundwater aesthetic impacts	☒	☐	☐
Soil Gas contamination above residential vapor intrusion (VI) screening levels	☒	☐	☐
Soil Gas contamination above non-residential VI screening levels	☒	☐	☐
Conditions immediately dangerous to life or health (IDLH)	☐	☐	☐
Fire & Explosion hazards related to releases	☐	☐	☐
Contamination existing in drinking water supply	☐	☐	☐
Imminent threat to drinking water supply	☐	☐	☐
Impact to surface water	☐	☐	☐
Impact to surface water sediments above screening levels	☐	☐	☐
	☐	☐	☐

Section F: The following questions assist MDEQ in evaluating the No Further Action Report:

Have other plans or reports, BEAs, DDCCs, NFAs, etc. been submitted for this facility? Yes

Facility Name, if different than this submittal: **Previous Reports prior to 2009 also under submitted under General Motors Corporation Employee Development Center**

Date and Name of most recent submittal: **June 21, 2016; RACER Pontiac EDC NFA Report (Draft)**

Response Activities or Remedial Action that have been Implemented (Check all that apply):

	Current	Previously
Excavation	☐	☒
Physical or Engineered Exposure Barrier	☐	☐
Active Soil Remediation System	☐	☐
In-situ Soil Remediation	☐	☐
Active Groundwater Remediation System	☐	☐
In-situ Groundwater Remediation	☐	☐
Groundwater Monitored Natural Attenuation	☒	☐
Containment, Physical or Hydraulic	☐	☐
Vapor Intrusion Barrier	☐	☐
Vapor Intrusion Remediation System	☐	☐
Other, Specify:		

Remedial Action Relies on (Check all that apply):

Mixing Zone	☐
Part 201 Section 20118(4) and (5)	☐
MIOSHA demonstration (Section 20120a(18))	☐
Restrictive Covenant	☒
Institutional Control (Section 20121(8))	☐
Alternative Instruments (Section 20121(9)	☐

Post Closure Plan and Components:

Post Closure Plan Required? Yes ☒ No (Residential, Unrestriced Category Only) ☐

Plan Includes:

- Permanent Markers ☐
- Restrictive Covenant ☒
- Other Institutional Controls ☐

Post Closure Agreement and Components:

Post Closure Agreement Required? Yes ☐ No ☒

Agreement Includes:

- FAM ☐
- FAM, de minimus ☐
- Waiver of Permanent Marker ☐

Section G: Attachments (Required):

	Yes
Environmental Professional's Affidavit is attached:	☒
Environmental Professional's Certificate of Insurance is attached:	☒
Submitter's Affidavit is attached:	☒

Section H: Environmental Professional Signature:

With my signature below, I certify that this report and all related materials are true, accurate, and complete to the best of my knowledge and belief.

Signature: _____ Date: 11-10-16

Printed Name: **Mike Pozniak**

Company: **ARCADIS of Michigan, LLC**

Mailing Address: **101 South Washington Square, Suite 400** City: **Lansing** State: **MI** Zip: **48933**

Telephone: **517.324.5054** E-mail: **Mike.Pozniak@arcadis.com**

Section I: Submitter Signature:

With my signature below, I certify that this report and all related materials are true, accurate, and complete to the best of my knowledge and belief and I am legally authorized to sign for the submitter.

Signature: David Favero Date: November 10, 2016

(Person legally authorized to bind the legal entity)

Printed Name: **David Favero**

Title and Relationship of signatory to submitter: **RACER Trust Deputy Cleanup Manager - Michigan**

Address: **500 Woodward Avenue** City: **Detroit** State: **MI** Zip: **48226**

Telephone: **734.879.9525** E-Mail: **dfavero@racertrust.org**

This form and the No Further Action Report should be submitted to the DEQ Remediation and Redevelopment Division District Office unless the response activity is related to a facility that is regulated by another DEQ Division. A district map is located at www.michigan.gov/deqrrd. If regulated by another division, contact should be made with that division for information on where to submit the form and report.

Environmental Consultant Affidavit for No Further Action Report

Required pursuant to Section 20114d(5) of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act (NEREPA), 1994 PA 451, as amended, for the Environmental Consultant who prepared a No Further Action (NFA) report that is being submitted to Michigan DEQ. All terms found in this document which are defined in Part 3, Definitions, and Part 201, Environmental Remediation, of NREPA shall have the same meaning as in the statute.

State of Michigan)
)
County of Oakland)

1. I, Michael A. Pozniak, am an Environmental Consultant whose title is, Certified Professional, and I am employed by ARCADIS of Michigan, LLC.

2. I meet the professional qualifications set forth in MCL 324.20114e(2) of NREPA. A description of my qualifications, including education and work experience, is attached.

3. I have prepared a No Further Action (NFA) report dated November 10, 2016 for the facility referred to as RACER – Pontiac Employee Development Center and located at 65 East University Drive, Pontiac, Michigan (the "Facility.") Property Tax ID is 14-29-428-002, 14-29-284-007, and 14-29-284-008 and the legal description for the Property is located within Appendix D of this NFA report, and included in the Restrictive Covenant. I am submitting this affidavit pursuant to MCL 324.20114d(5).

4. I prepared the NFA Report at the request of RACER Trust (Owner/Operator of the Property) located at 500 Woodward Ave, Suite 2650, Detroit, MI.

5. The remedial action at the Facility described in the NFA report was conducted in compliance with Part 201 of the NREPA, and all other applicable local, state, and federal laws and regulations.

6. I affirm to the best of my knowledge and belief that the NFA report prepared for this Facility, and all information, data, documents and reports relied upon for this NFA report, are true, accurate and complete.

Signature of Affiant

Sworn to before me and subscribed in my presence this 10 day of November, 2016.

Notary Public

CINDY L. JEFFERS
Notary Public, State of Michigan
County of Genesee
My Commission Expires 03-22-2021
Acting in the County of Oakland

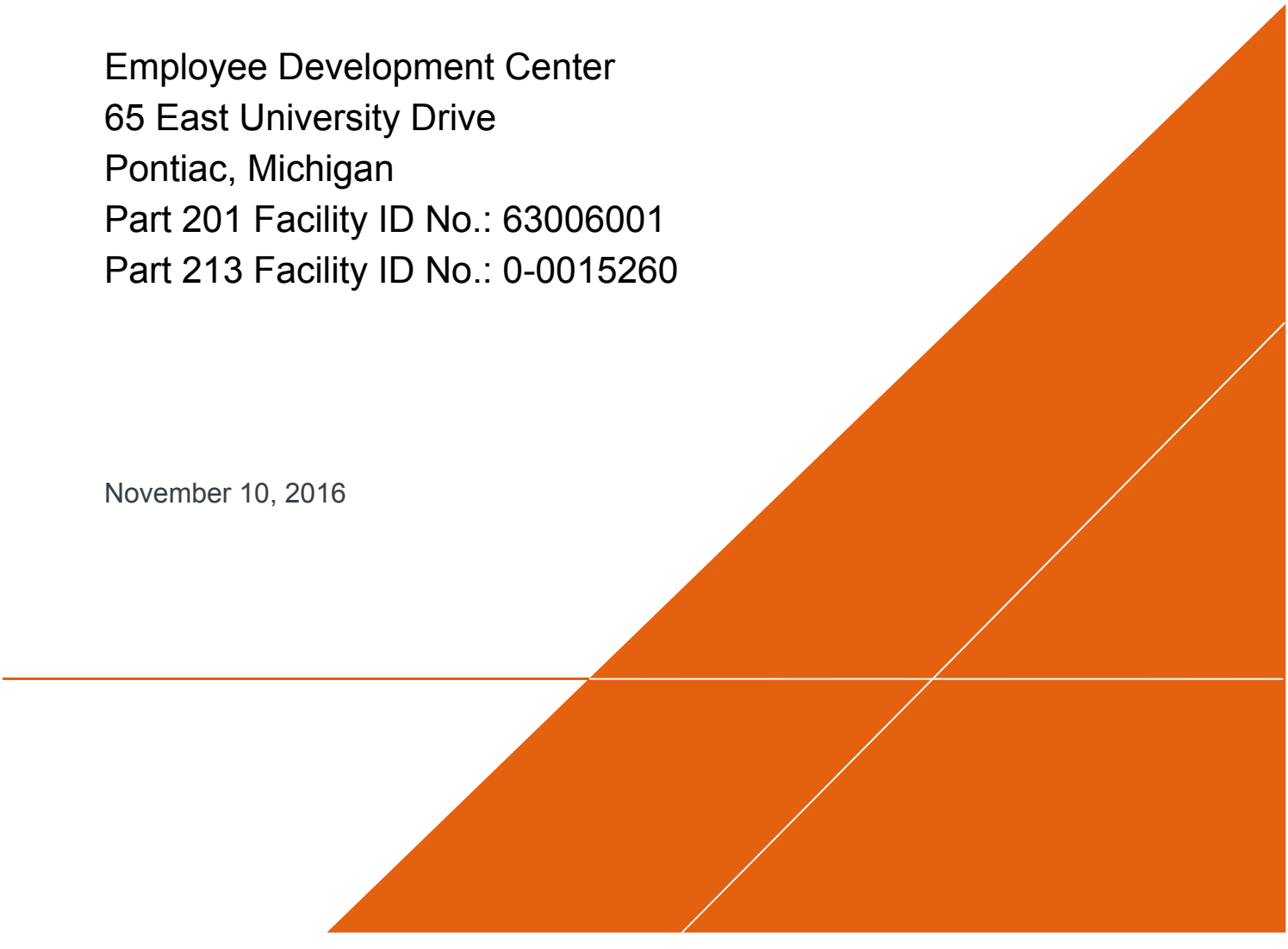
ARCADIS Design & Consultancy for natural and built assets

RACER Trust

NO FURTHER ACTION REPORT

Employee Development Center
65 East University Drive
Pontiac, Michigan
Part 201 Facility ID No.: 63006001
Part 213 Facility ID No.: 0-0015260

November 10, 2016



NO FURTHER ACTION REPORT

Employee Development Center
65 East University Drive
Pontiac, Michigan
Part 201 Facility ID No.: 63006001
Part 213 Facility ID No.: 0-001526

Megan Meckley
Environmental Scientist II

Joel Fett
AFS Project Manager

Brad Saunders
Principal Engineer

Prepared for:

RACER Trust

Prepared by:

Arcadis of Michigan, LLC
28550 Cabot Drive
Suite 500
Novi
Michigan 48377
Tel 248 994 2240
Fax 248 994 2241

Our Ref.:

B0064486.2016

Date:

November 10, 2016

CONTENTS

1 Introduction 1
1.1 Site Location 1
1.2 Site History 2
1.3 Physical Setting 3
1.3.1 Regional Topography 3
1.3.2 Regional Geology 3
1.3.3 Site Geology 3
1.3.4 Site Hydrogeology 3
2 Initial Site Investigation and Remediation Activity Summary 4
2.1 Previous Site Investigations and Remediation Activities 4
2.1.1 Underground Storage Tank Removal and Subsurface Investigations (1992-1995) 4
2.1.2 Initial Site Investigation Activities (2006) 5
2.1.3 Remedial Investigation Activities (2007-2010) 5
3 Site Closure Investigations and Monitoring Summary 7
3.1 Pre-Excavation Activities and Source Area Removal (2012) 7
3.2 Post-Corrective Closure Action Activities (2013) 8
3.3 Continued Remedial Investigation (2013-2015) 9
3.4 Closure Investigations Data Summary 11
3.4.1 Soil Closure Investigations Data Summary 11
3.4.2 Site Closure Groundwater Monitoring 11
3.4.3 Site Closure Storm Sewer Monitoring 14
3.4.4 Summary of LNAPL Assessment and Residual LNAPL 15
4 Restrictive Covenant 17
5 City of Pontiac Groundwater Ordinance 18
6 Notices 19
7 Non-Residential Cleanup Criteria Pathway Evaluation 19
7.1 Soil Exposure Pathways 20
7.1.1 Drinking Water Protection Pathway 20
7.1.2 Groundwater Surface Water Interface Protection Pathway 20

7.1.3 Soil Volatilization to Indoor Air Inhalation 21
7.1.4 Direct Contact with Soil Pathways 21
7.2 Groundwater Exposure Pathway Evaluation 21
7.2.1 Drinking Water Pathway 21
7.2.2 Groundwater Surface Water Interface Pathway 22
7.2.3 Volatilization to Indoor Air Inhalation Pathways 23
8 Markers 23
9 Post Closure Plan 24
10 Conclusions 24
11 References 25

TABLES

1A Summary of Historical Soil Analytical Results
1B Summary of Monitoring Well Soil Analytical Results
1C Summary of Delineation Soil Analytical Results
1D Summary of Soil Confirmation Analytical Results
2 Summary of Groundwater Analytical Results
3 Summary of Groundwater Elevations
4 Summary of Storm Sewer Analytical Results

FIGURES

1 Site Location Map
2 Site Map
3A Geologic Cross-Section Location Map
3B Geologic Cross-Section A-A' (North – South)
3C Geologic Cross-Section B-B' (West – East)
3D Geologic Cross-Section C-C' (West – East)
4 Soil Analytical Map
5 Groundwater Analytical Map
6 Groundwater Elevation Contour Map – September 17, 2013
7 Groundwater Elevation Contour Map – May 21, 2014

8 Groundwater Elevation Contour Map – October 27, 2014

9 Groundwater Elevation Contour Map – April 15, 2015

10 Wellhead Protection Area

APPENDICES

A Soil Boring Logs, Monitoring Well Construction Logs

B Soil Analytical Reports (CD)

C Closure Groundwater and Storm Sewer Analytical Reports (CD)

D Declaration of Restrictive Covenant

E City of Pontiac Groundwater Ordinance Number 2311

F City of Pontiac Water Well Record and Well Viewer Log

G Notices of Migration of Contamination and Notices to Impacted Parties

1 INTRODUCTION

Arcadis of Michigan, LLC (Arcadis) has prepared this No Further Action Report (Report) on behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust for the Pontiac Employee Development Center (EDC) property located at 65 East University Drive, Pontiac, Michigan (Site) (Figure 1). This Site is classified by both the Part 201 Facility ID Number 63006001 and the Part 213 Facility ID Number 0-0015260. This Report does not address the entire "Facility" as defined in Part 201 as any area, place, or property where a hazardous substance in excess of the established state cleanup standard for residential property has been released, deposited, disposed of, or otherwise comes to be located. This Report addresses the entire Site (RACER owned property), but excludes an area west of the property within North Mill Street owned by the City of Pontiac (**Figure 2**). RACER is currently working with the City of Pontiac with respect to the residual impacts within the City owned property. An NFA Report for the City owned property that is part of the Facility will be submitted to the Michigan Department of Environmental Quality (MDEQ) at a later date.

Based on historic soil and groundwater remedial activities completed to date, results of the last four groundwater sampling events, three rounds of storm sewer sampling, and an analysis of the relevant and complete exposure pathways for the Site, Arcadis has prepared this Report. This Report summarizes the Site history, regional and local hydrogeologic conditions, previous consultants' investigations, and recent investigation and remediation activities completed by Arcadis.

The purpose of this Report is to document and present a detailed summary of Site background information, corrective actions implemented to address the historic petroleum-related impacts related to the former underground storage tanks (USTs) to be closed under Part 213 and the automotive repair sources including hydraulic oil tanks and lines from the underground hydraulic lifts as wells as trench drains from various Site operations to be closed under Part 201. These implemented remedial actions satisfy applicable non-residential cleanup criteria established under Part 201 of the Michigan Natural Resources and Environmental Protection Act (NREPA) (Public Act 451), as amended (Criteria). As required under Section 324.20114(d) of Public Act 451, Arcadis is also submitting a Request for MDEQ Review of the Report Form with this report.

1.1 Site Location

The Site occupies approximately 3.7 acres, consisting of three parcels and is located at 65 East University Drive in Pontiac, Oakland County, Michigan (southeastern ¼ of Section 29, Township 03 North, Range 10 East) (**Figure 1**). The Site is zoned C-3 for Central Business and Thoroughfare Frontage Business. No buildings currently exist at the Site, but former structures, storage tanks and historical features are depicted on **Figure 2**.

The Site is located in an area of commercial and residential development. Surrounding properties include residential properties to the north, M-59/Woodward Avenue and

residential properties to the east, East University Drive and commercial properties to the south, and North Mill Street, a parking lot and commercial properties to the west.

The Augusta Relief Drain, which consists of two 10.5-foot diameter concrete pipes, extends northwest to southeast in the central portion of the Site east of the former building location. The Augusta Relief Drain piping is located approximately 10 to 15 feet below grade surface (bgs), which is below the groundwater table. Shallow perched groundwater is generally encountered at the Site at depths between 1.45 to 11.0 feet bgs. The Augusta Relief Drain leads into the Clinton River, which is located approximately 200 feet southeast of the Site.

1.2 Site History

According to previous reports, several residences and associated garages existed on the Site from 1909 through 1950. A majority of the houses and associated garages were demolished prior to the early 1950s, when the Site was developed as an automobile dealership. The automobile dealership was referred to as the "Pontiac Store" and was owned and operated by Pontiac Motor Division from the early 1950s to 1978. The former Site building consisted of 40,459 square feet and was a single story building with a basement below a portion of it. In 1978, use of the Site was changed to operate General Motor's (GM's) Truck and Bus Division as Plant 13. The Site was utilized by GM's Truck and Bus Division as an engineering center for the construction of prototype vehicles and associated engineering development activities. These activities ceased in 1992. The Site formerly had a 1,000-gallon used oil UST and a 1,000-gallon gasoline UST. The used oil UST was converted to a dilute sulfuric acid overflow/spill UST. The USTs were installed on April 4, 1950 and were located outside the northeast corner of the former Site building (**Figure 2**). In December 1990 the USTs and dispensing equipment were removed. Soil confirmation samples were collected during the removal and based on analytical results, a confirmed release was reported to MDEQ on June 7, 1991 and assigned Release Number C-1142-91. Conestoga-Rovers & Associates, Inc. (CRA) submitted a Leaking Underground Storage Tank Release Closure Report on December 22, 1995, which concluded that the release had been remediated to the applicable MDEQ Residential Criteria at that time, and no exposure pathways were identified. According to the MDEQ's Leaking Underground Storage Tank database on the Internet, the release case (Release ID C-1142-91) was closed by the MDEQ on December 22, 1995.

The Site building was remodeled by GM in 1994 for use as a training and employee development center. The Site building operated as a joint GM-UAW training and employee development center from 1994 through January 2007 when operations ceased and the building was vacated. After GM filed for bankruptcy in 2009, GM changed its name to Motors Liquidation Company (MLC). The building and all site features were demolished in July 2010. During demolition activities, the basement was backfilled to grade and the Site building features were removed to grade with exception of the concrete and tile floor area. As a result of the MLC bankruptcy process, ownership of the Site was transferred to RACER on March 31, 2011.

Between 1992 and 1995, Enkon Environmental Services (Enkon), Pickering Environmental Consultants (PECI), and CRA completed several investigations until Closure for release number C-1142-91 was achieved. Encore Environmental Consortium, LLC. (EEC) completed a Phase I in 2005 to identify and document current and historical environmental conditions at the Site. In November and December 2006, due diligence activities were completed by Arcadis during which, evidence of gasoline contamination was detected and confirmed by soil and groundwater analytical results in the area of underground piping and former dispenser assumed to be associated with former gasoline UST. In addition to contamination

associated with the former gasoline UST, solvent and petroleum oil contamination from trench drains and petroleum oil contamination from underground hydraulic lifts was confirmed by analytical results in areas under and around the Site building. Upon receipt of analytical results, Arcadis reported a confirmed release under Michigan Part 213 to the MDEQ on November 14, 2006. As a result, the MDEQ assigned Incident Number C-0328-06 to this release case.

On February 5, 2007, Arcadis prepared and submitted an *Initial Assessment Report (IAR)* to MDEQ on behalf of GM. Due to the presence of co-mingled contaminants including gasoline constituents, motor and hydraulic oils, and chlorinated solvents and per a correspondence with Mr. Jim Lucas in the MDEQ Storage Tank Division, Arcadis requested transfer of the Site from Part 213 into the Part 201 voluntary cleanup program upon transmittal of the IAR.

1.3 Physical Setting

1.3.1 Regional Topography

The Pontiac North 7.5-minute quadrangle map (USGS 1968; photorevised 1983) indicates that the Site is at an elevation of approximately 918 feet above mean sea level (msl). The natural topography is relatively flat and generally slopes south-southeast towards the Clinton River.

1.3.2 Regional Geology

Information regarding the regional geology in the Site vicinity was obtained from the Geocheck® Addendum to the Environmental Database Resources (EDR) Radius Map Report and previous investigations. EDR regional data indicates that the surface soil texture in the area is variable consisting of loamy sand, sandy loam, silt loam and muck. The soil component name is Urbanland. Soils do not meet the requirements for a hydric soil. The regional shallow soil types consist of loamy sands. Soils encountered during previous investigations consisted primarily of brown sandy clay. EDR describes regional deeper soil types as fine sand, stratified and muck. Bedrock consists of Coldwater Shale.

1.3.3 Site Geology

The surface of the Site is typically impermeable surfaces throughout mostly consisting of asphalt and/or concrete. The asphalt and/or concrete surfaces are weathered and degrading therefore, patches of weeds, grass, and other vegetation have been observed. Soils at the Site consist primarily of light reddish brown to grayish brown clay with lenses of sand and gravel from ground surface to approximately 25 feet bgs. A light reddish brown to black sand is found in lesser amounts primarily in the western half of the Site. Within the excavation area, fill sand was used to backfill the removed soils. The lithology is characterized in the soil boring logs included in **Appendix A** and depicted in **Figures 3A** through **3D**.

1.3.4 Site Hydrogeology

Based on the completed borings, a perched groundwater zone is present due to the presence of a low permeable clay layer at a depth of approximately 18 feet bgs. The predominant soil type in the perched groundwater zone is fine to coarse grained sand with interbedded lenses of sandy clay.

The Augusta Relief Drain, which consists of two 10.5 foot diameter concrete pipes, extends northwest to southeast in the central portion of the Site. The Augusta Relief Drain piping is located approximately 10 to 15 feet bgs, which is below the groundwater table. The Augusta Relief Drain leads into the Clinton River, which is located approximately 200 feet southeast of the Site.

A more detailed discussion related to the groundwater flow conditions during recent groundwater monitoring events is provided in **Section 3.4.2** of this Report. The encountered high and low water levels are presented on the cross-sectional diagrams (**Figures 3B** through **3D)**.

2 INITIAL SITE INVESTIGATION AND REMEDIATION ACTIVITY SUMMARY

The following sections provide a summary of the previous Site investigations and remediation activities that have been conducted both by Arcadis and previous environmental consultants.

2.1 Previous Site Investigations and Remediation Activities

2.1.1 Underground Storage Tank Removal and Subsurface Investigations (1992-1995)

The Site formerly had a 1,000-gallon used oil UST identified as Tank #1 and a 1,000-gallon gasoline UST identified as Tank #2. In December 1990, Inland Waters removed the two 1,000-gallon USTs and associated gasoline dispenser. Soil confirmation samples were collected and analytical results identified two samples containing benzene, toluene, ethylbenzene, and xylenes (BTEX) constituents at concentrations exceeding Michigan Act 307 Type A levels (applicable at the time of Closure Report submittal in 1995). On June 7, 1991, a release from the two USTs was reported to MDEQ as a leaking underground storage tank (LUST) case (Release ID C-1142-91) (CRA, 1995).

On April 7, 1992, Enkon performed a subsurface investigation in the vicinity of the two former UST locations. Benzene was detected in two of the soil samples at concentrations exceeding Michigan Act 307 Type B Cleanup Criteria, which were applicable at the time of Enkon's report (Enkon, 1992).

On January 7, 1993, PECI performed a subsurface investigation in the vicinity of the former waste oil/spill UST. Benzene and ethylbenzene were detected in one of the soil samples at a concentration exceeding Michigan Act 307 Type B Cleanup Criteria, which were applicable at the time of PECI's report (PECI, 1993).

On March 16 and 17, 1995, CRA performed a subsurface investigation in the vicinity of the two former USTs (CRA, 1995). Except for arsenic, no parameters were detected above the Michigan Tier 1 Residential Direct Contact Criteria for soil, which were applicable at the time CRA's report was written. CRA concluded that arsenic was detected at a concentration close to the background level for arsenic in Erie Lobe clays (11 milligrams per kilogram [mg/kg]) and was not considered to be associated with the former USTs. Groundwater was reportedly not encountered during UST excavation and subsequent investigation activities. CRA concluded that the release had been remediated to the existing Michigan Residential Criteria and no exposure pathways were identified. CRA submitted its *Leaking Underground*

Storage Tank Release Closure Report to the MDEQ for the two USTs. According to the MDEQ's Leaking Underground Storage Tank internet database, the release case (Release ID C-1142-91) was closed by the MDEQ on December 22, 1995.

2.1.2 Initial Site Investigation Activities (2006)

In November and December 2006, Arcadis performed a due diligence subsurface soil and groundwater investigation. Twenty-five soil borings (B-1 through B-25) were completed, one extraction well (EW-1) and four monitoring wells (MW-2 through MW-5) were installed as part of subsurface investigation activities. Soil samples were collected from each soil boring location and one of the monitoring wells based on field observations. A groundwater grab sample was collected from 21 of the 25 soil boring locations. In addition, groundwater samples were collected from the on-Site monitoring wells after development and following proper groundwater sampling procedures. During the investigation, staining and evidence of a sheen was observed in soil cuttings, and evidence of a sheen on groundwater inside and outside the Site building in the vicinity of the former gasoline dispenser was noted. In an effort to determine if mobile light non-aqueous phase liquid (LNAPL) was present and to potentially recover LNAPL, Arcadis installed an extraction well (EW-1) in the vicinity of the former gasoline dispenser. However, mobile LNAPL was not observed in EW-1. After soil boring B-6 was completed, Arcadis obtained a product sample from B-6. Evidence of gasoline contamination including elevated volatile organic compounds (VOCs) and total petroleum hydrocarbons (TPH) concentrations were detected and confirmed by soil and groundwater analytical results in the area of underground piping and former dispenser assumed to be associated with former gasoline UST. In addition to contamination associated with the former gasoline UST, solvent contamination from trench drains and underground hydraulic lifts was confirmed by analytical results in areas under and around the Site building. Upon receipt of analytical results, Arcadis reported a confirmed release under Michigan Part 213 to the MDEQ on November 14, 2006. The MDEQ assigned Incident Number C-0328-06 to this release.

2.1.3 Remedial Investigation Activities (2007-2010)

On February 5, 2007, Arcadis prepared and submitted an Initial Assessment Report (IAR) to MDEQ on behalf of GM. Due to the presence of co-mingled contaminants including gasoline, motor and hydraulic oils, and chlorinated solvents and per a correspondence with Mr. Jim Lucas in the MDEQ Storage Tank Division, Arcadis requested transfer of the Site from Part 213 into the Part 201 voluntary cleanup program upon transmittal of the IAR.

In September and October 2007, Arcadis completed a total of twenty soil borings (B-26 through B-45) to perform a field screening and soil-quality assessment. Soils were collected continuously, starting at the ground surface, at 2-foot intervals by utilizing direct push techniques (DPT). The soil field screening activities consisted of visually inspecting the soil samples for the presence of NAPL, checking the samples for odors, and screening the samples using a photoionization detector (PID). Based on the results of the visual and olfactory observations and PID readings, Arcadis collected up to two soil samples from each boring for laboratory analysis. Soil samples that were collected for laboratory analysis were placed in appropriate sample jars and shipped to a certified laboratory for analysis of constituents selected based on both MDEQ Part 213/201 guidance for unleaded gasoline releases and solvent contamination from trench drains and underground hydraulic lifts of the initial investigations. Samples

were submitted for analysis of VOCs in accordance with United States Environmental Protection Agency (USEPA) Method 8260, Polynuclear Hydrocarbon Aromatics (PAHs) in accordance with USEPA Method 8270C and lead by USEPA Method 200.8. Concentrations of VOCs including BTEX and trichloroethene (TCE) which exceeded Criteria were observed in several soil samples collected beneath the building in the vicinity of underground hydraulic lifts, trench drains and other Site operations equipment.

During the September and October 2007 investigation, eleven temporary wells (TW-26 through TW-31, TW-34, TW-35, TW-37, TW-44, and TW-45) were installed from soil boring locations B- 26 through B-31, B-34, B-35, B-37, B-44, and B-45 to further investigate the groundwater plume. Groundwater grab samples collected from each of the temporary wells were submitted for laboratory analysis of VOCs (gasoline and chlorinated constituents). Boreholes were backfilled with bentonite chips and the surface sealed with concrete. Additionally, thirteen monitoring wells (MW-6 through MW-18) and one extraction well (EW-2) were installed to further assess the groundwater plume.

On February 14, 2008, Arcadis completed soil borings B-46 and B-47 to determine if impacts to the soil or groundwater exist beneath the basement floor of the Site building. The soil borings were advanced using a hand auger. The field screening activities consisted of visually inspecting the soil samples for the presence of residual LNAPL, checking the samples for odors, and screening the samples using a PID. Saturated soils were observed immediately beneath the concrete floor. Therefore, no soil samples were collected. Temporary wells were installed at each of the soil boring locations using a temporary 2-inch diameter PVC well screen in the open borehole. Groundwater did not accumulate in the temporary wells. Therefore, no groundwater samples could be collected.

On November 17, 2010, Arcadis installed monitoring wells MW-19 and MW-20 on the western off-site property for horizontal delineation of groundwater impacts. The monitoring wells were constructed with 10-foot long, 2-inch diameter PVC well screens. The monitoring wells were installed with the well screen straddling the water table and were installed with flush-mount well protectors. Soil samples were collected from each location and submittal for laboratory analysis of VOCs by USEPA Method 8260, PAHs by USEPA Method 8310, and lead by USEPA Method 6010. Concentrations were observed to be below method detection limits with the exception of lead concentrations in each sample. The detected lead concentrations were below Criteria and State Default Background.

Groundwater sampling events were conducted in December 2006, July 2008, and November 2010. Groundwater samples were collected using low-flow groundwater sampling procedures and were submitted to Merit Laboratories of Lansing, Michigan. The samples were analyzed for VOCs by USEPA Method 8260, PAHs by USEPA Method 8270, and lead by USEPA Method 6010.

A summary of the soil analytical results are provided in **Table 1A-1D** and a summary of groundwater analytical results are provided in **Table 2**. The soil laboratory analytical reports can be found in **Appendix B**. Soil boring and monitoring well logs are provided in **Appendix A.** Locations of soil borings can be found on **Figure 2**. Soil analytical data is displayed on **Figure 4** and groundwater analytical data is displayed on **Figure 5**.

3 SITE CLOSURE INVESTIGATIONS AND MONITORING SUMMARY

3.1 Pre-Excavation Activities and Source Area Removal (2012)

In January 2012, Arcadis abandoned monitoring wells MW-3, MW-6, MW-7, MW-15 and Extraction Well EW-2 prior to excavation activities. Additionally, Arcadis advanced five soil borings (B-50 through B-54) to evaluate the potential presence of Michigan 10 Metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, silver, selenium, and zinc) and polychlorinated biphenyls (PCBs) impacts to on-site soils and to characterize the soils for waste disposal. These five locations were spaced across the planned excavation area in areas where contaminants were confirmed to exist at elevated concentrations exceeding applicable Criteria. Analytical results for soil samples collected from soil borings B-50 through B-54 indicated no detectable presence of PCBs. Arsenic, barium, chromium (total), copper, lead, and zinc were detected in soil samples collected from soil borings B-50 through B-54 at concentrations less than Criteria and were observed at or below background levels.

Arcadis also advanced two soil borings (B-55 and B-56) at locations where former/abandoned hydraulic lifts existed north of the former basement footprint. Due to accessibility of the area, the former/abandoned hydraulic lifts were not able to be investigated during past field activities. The soil borings were continuously screened and samples were collected from the interval with the highest impact/PID reading, or immediately above the water table if no impacts were observed. Soil samples were collected and analyzed for TPH, VOCs, PAHs, Michigan 10 metals and PCBs. Concentrations of VOCs, PAHs or PCBs were below laboratory method detection limits at each location. Arsenic, barium, chromium (total), copper, lead, and zinc were detected in soil samples collected from soil borings B-55 through B-56 at concentrations less than Criteria and were observed at or below background levels. TPH was detected at 7,274 mg/kg in soil sample B-56, indicating the potential increased presence of petroleum hydrocarbons at this location. However, no staining, odors, or PID readings were observed from the surface to 12 feet bgs (the maximum depth explored). Additionally, no VOCs or PAHs were detected. The soil sample and duplicate sample may have contained asphalt debris that were mixed in with soil during re-grading activities at the Site. Analytical results from soil samples B-50 through B-56 indicate neither PCBs nor Michigan 10 metals are contaminants of concern at the Site. As a result, PCBs and Michigan 10 Metals were not further investigated or included in the parameter list for the excavation confirmation sampling. Additionally, the excavation boundaries were not extended to include the two former/abandoned hydraulic lifts as compounds of concern (COCs) were not detected in soil samples B-55 and B-56 above of applicable Criteria.

On May 29, 2012, Arcadis began excavation preparation activities with Terra Contracting LLC (Terra) for the removal of impacted soils. An inactive local storm drain was identified in the northern portion of the excavation footprint. No other active utility lines were identified within the excavation footprint. Additionally, any other utility lines identified within the excavation footprint were abandoned when the Site building was demolished in July 2010. Containment staging areas were constructed of sand and polyethylene in anticipation of wet/dry material mixing activities.

During the first phase of the excavation, the asphalt parking lot and concrete floor remaining from the demolished Site Building was saw cut based on the limits of excavation with proper sidewall sloping taken

into account. The asphalt and concrete were removed in tandem with the impacted soils, while staging and disposal was kept independent. The asphalt and concrete were disposed of with the impacted soils. A total of approximately 755 tons of asphalt and concrete were disposed of at the Eagle Valley RDF landfill which is owned by Waste Management, Inc. and located at 600 Silver Bell Road West, Orion, MI, 48359. Additionally, during the excavation activities, six abandoned dual post underground hydraulic lifts and associated components were removed. The lifts and associated components were placed in a roll off box with other debris. A total of approximately 20 yards of debris were disposed of at the Eagle Valley RDF landfill.

Source area excavation commenced on May 29, 2012, beginning at the southern portion and progressed to the north. A 1:1 slope was maintained along the excavation perimeter at all times to comply with construction regulations. The excavation was approximately 14,480 square feet and impacted soil was excavated to depths ranging from 9 to 17 feet bgs. The eastern extent of impacted soil to the east-northeast of the former Site building was reached prior to encountering the easement associated of the Augusta Relief Drain corridor. The western extent of the excavation was extended towards the western property boundary along the North Mill Street sidewalk. The excavation boundary is depicted in **Figure 2**. A total of 9,243.25 tons of impacted soils were disposed of at the Eagle Valley RDF landfill.

Field screening including PID readings and Oil-In-Soil® shake tests (qualitative field test for the potential presence of LNAPL) were recorded from samples taken from the excavation floors and sidewalls to qualitatively estimate if sufficient impacted soils had been removed. The shake tests consisted of placing the soil sample in a container that contains a hydrophobic dye (Red Azo Dye) that is soluble in most petroleum compounds and stains petroleum products red if present in the soil. When it was determined that impacted soil had adequately been removed to meet the cleanup objective, soil confirmation samples were collected from the excavation floor and sidewalls. A total of 39 shake tests were completed on the sidewall and floor samples of the excavation area. Of those 39 tests, only one positive test was noted at ASW-19 at a depth of 6-7 feet bgs. All other shake tests had negative results.

A total of 12 soil confirmation samples were collected from the floor of the excavation (AFL-01 through AFL-12) and 19 soil confirmation samples (ASW-01 through ASW-19) were collected from the sidewalls of the excavation. The approximate locations of the soil confirmation samples are shown on **Figure 2**. The soil confirmation samples submitted to Merit Laboratories of Lansing, Michigan for the analysis of VOCs (USEPA Method 8260), PAHs (USEPA Method 8270), and lead (USEPA Method 6010). Analytical results from the soil confirmation samples were compared to applicable Criteria.

During the excavation activities, a total of 36,585 gallons of groundwater were removed from the excavation and disposed of at the Aevitas Specialty Services Corporation facility located at 12680 Beech Daly Road in Redford, MI 48239. A total of 9,151.68 tons of Class II sand was placed in the excavation basin in 1 foot lifts and compacted to 95% maximum dry density to grade. Compaction testing was performed by Construction Testing Services (CTS).

3.2 Post-Corrective Closure Action Activities (2013)

On January 7 through January 10, 2013, twelve monitoring wells (MW-21, MW-22, MW-23, MW-24S, MW-24D, MW-25, MW-26, MW-27, MW-28, MW-29, MW-30, and MW-31) were installed throughout the Site and in North Mill Street, adjacent to the water line corridor (**Figure 2**). Soils were continuously

logged and monitored with a PID. Each of the monitoring well locations was logged to a maximum depth of 25 feet bgs. A soil sample was collected at monitoring wells MW-24 (13-14 feet bgs) due to elevated PID readings and odors and soil samples were collected at monitoring wells MW-24 (24-25 feet bgs), MW-25 (6-7 feet bgs), MW-26 (4-5 feet bgs), and MW-27 (6-8 feet bgs) to characterize the soil within the North Mill Street utility corridor which had not previously been investigated. Soil samples were submitted for laboratory analysis of VOCs, PAHs, and total lead. Samples collected from the locations within North Mill Street (MW-25, MW-26, and MW-27) were below laboratory method detection limits and/or Criteria. The soil sample collected at MW-24 (13-14' bgs) located in the excavated area exceed Drinking Water Protection (NRDP) and Groundwater Surface Water Interface Protection (GSIP) Criteria and exceeding the *MDEQ Non-residential Vapor Intrusion Screening Values for Groundwater as provided in the May 2013 Guidance Document for the Vapor Intrusion Pathway* (GVI) for benzene. Additionally, concentrations of one or more analytes NRDP and GSIP Criteria. Based on the groundwater analytical results and lack of NAPL accumulation in MW-24D (screened from 15-20 feet bgs), the MDEQ Criteria exceedances present at MW-24 (13-14 feet bgs) are more representative of dissolved groundwater impacts and residual NAPL. Soil sample MW-24 (24-25 feet bgs) collected further into the saturated zone to vertically delineate impacts at MW-24 (13-14 feet bgs), exceeds DWP Criteria for benzene only. The remaining analytes were not detected above laboratory method detection limits, or above Criteria.

Groundwater sampling was completed in January and June 2013, following the installation of the twelve monitoring wells in January 2013. Groundwater monitoring activities included collecting groundwater depth-to-water measurements, groundwater field parameters, and collection of groundwater samples from monitoring wells MW-2, MW-4, MW-5, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, MW-16, MW-17, MW-18, MW-19, MW-20, MW-21, MW-22, MW-23, MW-24S, MW-24D, MW-25, MW-26, MW-27, MW-28, MW-29, MW-30, and MW-31. Groundwater samples collected were submitted to Merit for analysis of VOCs (USEPA Method 8260), PAHs (USEPA Method 8270), and dissolved lead (USEPA Method 6010).

3.3 Continued Remedial Investigation (2013-2015)

In September 2013, Arcadis completed a full round of groundwater gauging and closure verification groundwater sampling. Groundwater samples were submitted to Merit Laboratories for analysis of VOCs (USEPA Method 8260), PAHs (USEPA Method 8270), and dissolved lead (USEPA Method 6010). Groundwater samples were collected using low-flow sampling techniques in compliance with the MDEQ Operational Memorandum #2, Sampling and Analysis Guidance, dated October 22, 2004. Samples were collected in laboratory-supplied pre-preserved containers, placed on ice, and submitted via lab courier to Merit Laboratories (Merit) of Lansing, Michigan.

In May 2014, Arcadis completed a full round of groundwater gauging and closure verification groundwater sampling. Sampling methods and techniques were the same as those used during groundwater sampling events completed previously in September 2013. Additionally during the May 2014 groundwater sampling event, Arcadis collected storm sewer samples from five storm sewer manhole locations on-Site and in North Mill Street.

On September 23 and 24, 2014, eight soil borings (soil borings B-57 through B-64) and a nested set of two permanent monitoring wells (MW-32S and MW-32D) were advanced at the Site to delineate saturated soil and groundwater impacts in the vicinity of monitoring well MW-24D, and also to complete

delineation of groundwater impacts at the southwest corner of the Site (**Figure 2**). Soil samples B-58 (14-15 feet bgs), B-59 (12-13 feet bgs), B-60 (12-13, and 18-20 feet bgs), B-61 (14-15 feet bgs), and B-62 (17.5-19.5 feet bgs) had VOC concentrations which exceeded NRDP and/or GSIP Criteria. Soil samples B-57 (14-15 feet bgs), B-60 (8-10 feet bgs), B-62 (7-9 and 12-13 feet bgs), B-63 (11-12 feet bgs) and B-64 (8.5-9.5 feet bgs) were below Criteria and/or method detection levels. Temporary monitoring wells were installed during the September 2014 field activities to collect groundwater samples for additional delineation. Groundwater samples collected from temporary monitoring wells installed at soil borings B-59, B-60, and B-62 exceeded Drinking Water (DW) and/or Groundwater Surface Water Interface (GSI) Criteria.

Based on a review of the September 2014 soil and groundwater analytical results with RACER Trust, and correspondence with MDEQ, Arcadis returned to the Site on October 24, 2014 to properly abandon the temporary monitoring wells at B-58, B-59, B-60, B-63, and B-64, and convert the temporary well at B-62 into a permanent monitoring well, MW-33, to provide further delineation of impacted groundwater at the Site. Monitoring well MW-33 was screened from 13-18 feet bgs. The decision to abandon the temporary wells was based on field observations and soil and groundwater analytical results from the September 2014 delineation activities and on the location of existing permanent monitoring wells. The temporary wells at B-58, B-59, B-60, B-63, and B-64 were removed and the boreholes were backfilled with a bentonite grout via tremie pipe.

From October 27 through October 29, 2014, Arcadis conducted a site-wide well gauging event and collected groundwater samples. Groundwater samples were collected from reduced set of monitoring wells which was based on historical soil and groundwater analytical results that was presented in a technical memorandum submitted to the MDEQ on July 25, 2014. Sampling methods and techniques were identical to the groundwater sampling events completed in 2013 and 2014. Groundwater samples were submitted for analysis of VOCs in accordance with USEPA Method 8260.

During the October 2014 groundwater sampling event, Arcadis collected a second set of grab samples (SS-1 through SS-5) during a period of dry weather from five storm sewer manhole locations. Storm sewer flow directions observed during the October 2014 sampling event were similar to that observed during the May 2014 sampling event. No water was observed in storm sewer SS-1, therefore no grab sample was collected. The storm sewer grab samples were collected with a peristaltic pump and submitted for analysis of VOCs (USEPA Method 8260).

On April 15 and 16, 2015, Arcadis conducted a site-wide groundwater gauging event and collected closure groundwater verification samples. Sampling methods and techniques were identical to those used for the groundwater sampling events completed during 2013 and 2014. Groundwater samples were submitted for analytical analysis of VOCs (USEPA Method 8260). Groundwater concentrations in monitoring wells MW-5, MW-8, MW-24D, MW-26, and MW-33 continue to exceed MDEQ Non-Residential DW, and/or GSI Criteria for VOCs. The groundwater exceedances are observed to be stable to decreasing. TCE concentrations at MW-27 no longer exceed Non-Residential DW Criteria and at MW-12, the concentration of TCE was 5 µg/l. Monitoring wells MW-2, MW-4, MW-9, MW-10, MW-11, MW-13, MW-14, MW-16, MW-17, MW-18, MW-19, MW-20, MW-21, MW-22, MW-23, MW-24S, MW-25, MW-27, MW-28, MW-29, MW-30, and MW-31 were below Criteria.

Additionally during the April 2015 groundwater sampling event, Arcadis collected a third set of grab samples (SS-1 through SS-5) during a period of dry weather from the five storm sewer manhole locations.

The storm sewer grab samples were collected with a peristaltic pump and submitted for analysis of VOCs (USEPA Method 8260). Storm sewer flow directions observed during the April 2015 sampling event were similar to those observed during the May 2014 and October 2014 sampling events. Analytical results from the storm sewer samples collected at SS-1, SS-2, SS-3, SS-4, and SS-5 were below GSI Criteria and/or laboratory method detection limits.

A summary of the soil analytical results can be found in **Table 1A-1D** and a summary of groundwater analytical results can be found in **Table 2**. Groundwater elevations are summarized in **Table 3**. A summary of the storm sewer analytical results can be found in **Table 4**. The laboratory analytical reports for soil can be found in **Appendix B** and soil boring and monitoring well logs can be located in **Appendix A.** Groundwater and storm sewer laboratory analytical reports can be found in **Appendix C**.

3.4 Closure Investigations Data Summary

3.4.1 Soil Closure Investigations Data Summary

Since 2012, Arcadis has completed a source area excavation removing 9,243.25 tons of impacted soil from beneath the former building footprint and extending to include areas of impact observed during prior investigations. During the excavation, 12 soil confirmation samples were collected from the floor of the excavation (AFL-01 through AFL-12) and 19 soil confirmation samples (ASW-01 through ASW-19) were collected from the sidewalls of the excavation. In addition, Arcadis advanced eight soil borings (B-57 through B-64) and installed fourteen monitoring wells (MW-21 through MW-24S/D, MW-25 through MW-33) to further delineate soil and groundwater impacts on-Site and in North Mill Street. Soil samples collected during the 2012 through 2015 sampling events were compared to DWP, GSIP, and direct contact (DC) Criteria, and Soil Vapor Intrusion Screening Levels(SVI). Elevated soil concentrations which exceed DWP and GSIP Criteria, and *MDEQ Non-residential Vapor Intrusion Screening Values for Soil as provided in the May 2013 Guidance Document for the Vapor Intrusion Pathway* (SVI) exceedance were observed in the central portion of the Site and along the northwest property boundary adjacent to North Mill Street. Soil impacts are horizontally and vertically delineated (**Figures 3A through 3D** and **4**). Additionally, a Declaration of Restrictive Covenant (DRC) has been recorded for the Site with the Oakland County Register of Deeds. The DRC is included in **Appendix D**.

3.4.2 Site Closure Groundwater Monitoring

Prior to each closure groundwater sampling event, the monitoring wells were gauged with an electronic water-level indicator, graduated at 0.01-foot increments, to measure depth-to-groundwater. **Table 3** presents a summary of depth to water measurements and the corresponding static water-level elevations. Based on the September 2013, May and October 2014, and April 2015 closure groundwater sampling events, the depth to groundwater at the Site ranged from 1.22 feet bgs 11.03 feet bgs. Groundwater elevation contour maps depicting the shallow groundwater flow for the September 2013, May 2014, October 2014, and April 2015 closure groundwater sampling events are provided as **Figures 6** through **9**. The groundwater elevation contours constructed from the aforementioned events water-level elevation data reveal that the shallow groundwater flow is observed to be radial from a mound in the vicinity of the former gasoline UST within the excavated area.

The monitoring well network sampled during the October 2014 and April 2015 was reduced based on historical soil and groundwater analytical results presented in a technical memorandum submitted to the MDEQ on July 25, 2014.

A summary of each sampling event is provided below:

Date of Sampling	Wells Sampled	Laboratory / Parameters	Sampling Technique
September 17-20, 2013	MW-2, MW-4, MW-5, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, MW-16, MW-17, MW-18, MW-19, MW-20, MW-21, MW-22, MW-23, MW-24S, MW-24D, MW-25, MW-26, MW-27, MW-28, MW-29, MW-30, and MW-31	Merit Laboratories VOCs USEPA 8260 Method; PAHs USEPA Method 8270; Dissolved Lead USEPA Method 6010	Low Flow
May 21-23, 2014	MW-2, MW-4, MW-5, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, MW-16, MW-17, MW-18, MW-19, MW-20, MW-21, MW-22, MW-23, MW-24S, MW-24D, MW-25, MW-26, MW-27, MW-28, MW-29, MW-30, and MW-31	Merit Laboratories VOCs USEPA 8260 Method; PAHs USEPA Method 8270; Dissolved Lead USEPA Method 6010	Low Flow
October 27-29, 2014	MW-5, MW-8, MW-9, MW-11, MW-12, MW-20, MW-21, MW-22, MW-23, MW-24S, MW-24D, MW-25, MW-26, MW-27, MW-28, MW-29, MW-30, MW-31, MW-32S, MW-32D, and MW-33	Merit Laboratories VOCs USEPA 8260 Method	Low Flow
April 15-16, 2015	MW-5, MW-8, MW-9, MW-11, MW-12, MW-20, MW-21, MW-22, MW-23, MW-24S, MW-24D, MW-25, MW-26, MW-27, MW-28, MW-29, MW-30, MW-31, MW-32S, MW-32D, and MW-33.	Merit Laboratories VOCs USEPA 8260 Method	Low Flow

Groundwater samples were collected using low-flow sampling techniques in compliance with the MDEQ Operational Memorandum #2, Sampling and Analysis Guidance, dated October 22, 2004. Samples were collected in laboratory-supplied pre-preserved containers, placed on ice and stored at a temperature of approximately 4 degrees Celsius before being submitted via lab courier to Merit Laboratories of Lansing, Michigan.

Groundwater analytical results were compared to DW, and GSI Criteria, and GVI. Groundwater impacts remain in the central portion of the Site including the southwestern excavation boundary as well as in North Mill Street. Groundwater concentrations are horizontally delineated in all directions. Vertical delineation is achieved to the west, north, and east by the clay confining layer. Concentrations of benzene exceeding the DW Criteria are observed in the central portion of the Site at Monitoring Well MW-24D at a depth of 24 to 25 feet bgs. This exceedance is delineated by the City of Pontiac's Paddock Stand by Water Well which is located approximately 0.40 miles east of the Site. A review of the boring log from the well responsible for the WHPA, an upper, 20 foot thick, clay layer is present from 3 to 23 feet bgs (~896-876 ft msl), and another 35 foot clay layer was observed from 38 to 73 feet bgs (~861-826 ft msl), which separates the shallow and deep aquifers in this area. Additionally, groundwater use and

water well installation restrictions are imposed by the DRC filed for the Site, as well as the groundwater restriction ordinance in effect for a portion of North Mill Street by the City of Pontiac which restricts the use of water supply wells in this area. Additional information regarding the City of Pontiac groundwater restriction ordinance can be found in **Section 6.0.** A copy of the groundwater ordinance, including a map of the North Mill Street restriction zone is included as **Appendix E**. A copy of the City of Pontiac Water Well Record is included as part of **Appendix F**, and a copy of the DRC is included as **Appendix D**.

Exceedances of DW, and/or GSI Criteria and/or GVI were observed in monitoring wells MW-8 (gasoline parameters) and MW-33 (benzene) located southwest of the excavation boundary, MW-24D (gasoline parameters) located within the southern portion of the excavation area in the vicinity of former underground hydraulic lifts and at monitoring well MW-26 (benzene), located in North Mill Street. Additionally, exceedances of DW Criteria have been observed at monitoring well MW-5 (TCE) located southeast of the former building footprint (**Figure 5**) and MW-12 (TCE). All other monitoring wells were either below Criteria or below method detection limits during the closure groundwater sampling events completed between September 2013 and April 2015.

Monitoring wells MW-8 and MW-24D both display overall stable to decreasing trends since their installation in 2008 and 2013, respectively. Benzene concentrations in Monitoring well MW-33 were 40 ug/l and 65 ug/l in October 2014 and April 2015, respectively. These benzene concentrations are lower than those observed in the temporary groundwater sample collected at Soil Boring B-62. Additionally, Monitoring Well MW-33 is located slightly further from the source area and has only displayed DW exceedances since installation, signifying that the plume is stable to decreasing.

In the central portion of the Site groundwater impacts, including monitoring wells MW-8, MW-24D, and MW-33 and temporary groundwater samples collected from soil borings ASW-01, B-9, B-60, and B-62 are horizontally delineated by monitoring wells MW-11, MW-27, and Soil Boring B-63 to the west, monitoring wells MW-9, MW-31, MW-32S/D, and soil boring B-64 to the south, monitoring wells MW-24S, MW-12, MW-30 and soil boring B-58 to the east, and monitoring wells MW-21, MW-23, and MW-28 to the north.

Monitoring well MW-26, located in North Mill Street and historical DW exceedance located at Soil Boring B-12, located along the western edge of the property, are delineated horizontally to the west by monitoring well MW-20, to the south by monitoring wellsMW-19 and MW-27, to the east by monitoring wells MW-28 and MW-23, and to the north by monitoring well MW-25. Benzene concentrations at monitoring well MW-26 are observed to be decreasing.

Low level TCE concentrations have been detected at Monitoring Well MW-5, located southeast of the building footprint. These concentrations appear to have stabilized since February 2013. The TCE impacts are limited in extent and localized around MW-5, B-4, B-2 and MW-12, and delineated by Monitoring Wells MW-21, MW-22, MW-23 and MW-29 (north), MW-17, MW-18 and MW-30 (east), MW-9 and MW-31 (south), and MW-32S (west). (**Figure 5**).

A summary of the groundwater analytical results, along with a comparison to the DW and GSI Criteria and GVI, are provided in **Table 2.** Copies of the laboratory analytical reports for the closure verification groundwater sampling events are included in **Appendix C** and **Figure 5**.

3.4.3 Site Closure Storm Sewer Monitoring

To evaluate the GSI pathway and potential for contaminants to be migrating into the storm sewers in the vicinity of the Site, Arcadis completed three rounds of storm sewer sampling during dry periods in May and October 2014 and April 2015. The samples were collected from the storm sewer manholes located within North Mill Street (SS-1 through SS-4) and in the southern portion of the Site (SS-5). Prior to collecting samples, the flow direction was determined at each location and recorded. Similar flow directions were recorded during all three sampling events. Northeasterly flow was observed inside of North Mill Street manholes SS-2 and SS-4 draining into the Augusta Relief Drain at a location immediately north of the property line. Storm sewer flow was observed to be south inside of North Mill Street manhole SS-3, leading to the storm sewer servicing University Drive. Flow at the SS-5 manhole on the southern portion of the Site was also observed to be south to the storm sewer servicing University Drive.

Storm sewer samples were collected by grab sample. A sample could not be collected from SS-1 in October 2014, because the sewer line was dry at that manhole. Samples were collected in laboratory-supplied, containers, placed on ice and submitted via lab courier to Merit Laboratories of Lansing, Michigan.

A summary each manhole sampling event is provided below:

Date of Sampling	Manholes Sampled	Laboratory / Parameters	Sampling Technique
May 21, 2014	SS-1, SS-2, SS-3, SS-4, and SS-5.	Merit Laboratories VOCs USEPA 8260 Method; PAHs USEPA Method 8310; MTBE USEPA Method 8021B	Grab Sample
October 27, 2014	SS-2, SS-3, SS-4, and SS-5.	Merit Laboratories VOCs USEPA 8260 Method	Grab Sample
April 15, 2015	SS-1, SS-2, SS-3, SS-4, and SS-5.	Merit Laboratories VOCs USEPA 8260 Method	Grab Sample

Analytical results of samples collected from storm sewer location SS-5 (to the south) indicated TCE was detected at 2 µg/L during all three events. The concentrations of TCE detected at SS-5 is below GSI Criteria, and other VOCs were both below GSI Criteria and laboratory method detection limits. Analytical results of samples collected from storm sewer locations SS-1, SS-2, SS-3, and SS-4 indicated concentrations of VOCs remained below GSI Criteria and laboratory method detection limits. Additionally, the backfill of the water line was assessed for migration by the installation of monitoring wells MW-24 and MW-27. Analytical results from MW-25 have consistently been below method detection limits and results from MW-27 have been below Criteria during the May and October 2014 and April 2015 groundwater sampling events.

As discussed in the previous section, the groundwater flow direction at the Site is radial from a mound in the vicinity of the former gasoline UST within the excavated area. Monitoring wells located along the August Relief Drain (MW-17, MW-30, MW-21, MW-22, MW-29, and MW-14) have concentrations below Criteria or method detection limits.

A summary of the water samples from the storm sewer analytical results, along with a comparison to the DW and GSI Criteria and GVI, are provided in **Table 4.** Copies of the laboratory analytical reports for the closure verification storm sewer sampling events are included in **Appendix C.** Manhole sample locations can be seen on **Figure 2**.

3.4.4 Summary of LNAPL Assessment and Residual LNAPL

Per the MDEQ revisions to Part 201 of the National Resources and Environmental Protection Act (NREPA) in May 2012, the term "free product" has been replaced with the term non-aqueous phase liquid (NAPL) and the previous emphasis on determining whether or not NAPL was present at a Site has been replaced with a focus on defining the extent, magnitude and state (i.e. residual, mobile, or migrating) of NAPL impacts.

The definitions of NAPL provided within Part 201 are presented below:

- NAPL – a non-aqueous phase liquid or a non-aqueous phase solution composed of one or more organic compounds that are immiscible or sparingly soluble in water. NAPL includes both DNAPL and LNAPL.
- LNAPL – a light non-aqueous phase liquid having a specific gravity less than one and composed of one or more organic compounds that are immiscible or sparingly soluble in water, and the term encompasses all potential occurrences of LNAPL.
- DNAPL – a dense non-aqueous phase liquid with a specific gravity greater than one and composed of one or more organic compounds that are immiscible or sparingly soluble in water. DNAPL encompasses all potential occurrences of DNAPL.
- Migrating NAPL – NAPL that is observed to spread or expand laterally or vertically or otherwise result in an increased volume of the NAPL extent, usually indicated by time series data or observation. Migrating NAPL does not include NAPL that appears in a well within the historical extent of the NAPL due to a fluctuating water table.
- Mobile NAPL – NAPL that exceeds residual saturation, and includes migrating NAPL, but not all mobile NAPL is migrating NAPL.
- Residual NAPL Saturation – the range of NAPL saturations greater than zero NAPL saturation up to the NAPL saturation at which NAPL capillary pressure equals pore entry pressure and includes the maximum NAPL saturation, below which NAPL is discontinuous and immobile under the applied gradient.

The MDEQ guidance references the use of the Interstate Technology and Regulatory Council's (ITRC) Technical/Regulatory Guidance "Evaluating LNAPL Remedial Technologies for Achieving Project Goals" and ASTM E 2531-06 "Standard Guide for Development of Conceptual Facility Models and Remediation Strategies for Light Non-Aqueous Phase Liquids Released to the Subsurface" (ASTM 2006). These guidance documents can be utilized as references for the evaluation and assessment of mobile, migrating and residual NAPL present in the subsurface.

Based on concentrations of TPH and VOC constituents in soil, an assessment of residual LNAPL was completed. Using a combination of PID readings, visual and olfactory observations, hydrophobic dye

shake tests and laboratory analytical results for samples collected at the Site and during the excavation, it was determined that the potential for residual LNAPL is present at:

- The northwestern portion of the Site, adjacent to North Mill Street at soil boring B-35 and excavation sidewall sample ASW-19
- The central portion of the Site, southwest of the excavation boundary at Soil Borings B-59, B-60, and MW-24D.

The horizontal and vertical extents of residual LNAPL were determined by soil samples with low PID readings; lack of visual and/or olfactory field screening evidence of impacts; laboratory analytical results and/or shake testing. Soil sample locations along with the approximate horizontal and vertical extent of residual LNAPL is shown on **Figure 4**. The horizontal extent of residual LNAPL in the northwestern portion of the Site, adjacent to North Mill Street is defined by the following data points listed below:

North: Soil Borings B-37, and excavation sidewall sample ASW-11;
East: The western excavation boundary;
South: Soil Borings B-12, B-13, and B-31; and
West: Monitoring wells MW-20 and MW-26.

The vertical extent of residual LNAPL is defined the following data points:

- Soil Boring B-13 (18 to 20 feet bgs);
- Soil Boring B-35 (0.4 ppm PID reading at 14 feet); and
- Excavation bottom (14 feet bgs);

The horizontal extent of residual LNAPL in the central portion of the Site, adjacent to the southwestern excavation boundary is defined by the following data points listed below:

North: Soil Borings B-61, excavation sidewall sample ASW-16R and floor sample AFL-01RR, and Monitoring Well MW-8;
East: Soil Borings B-44, B-57, and B-58, excavation sidewall sample ASW-02, and the western excavation boundary;
South: Soil Borings B-45 and B-64, and basement which was backfilled with clean fill sand; and
West: Soil Borings B-10 and B-63 and monitoring wells MW-11 and MW-27.

The vertical extent of residual LNAPL is defined the following data points:

- Soil Boring B-60 (18 to 20 feet bgs);
- Soil Boring B-62 (17.5 to 19.5 feet bgs); and
- Monitoring Well MW-24D (24 to 25 feet bgs);

Mobile LNAPL was recorded at monitoring well EW-2 (screened 4 to 14 feet bgs) during several groundwater sampling events completed between 2008 and 2010. Mobile NAPL was not detected in 2011 and the monitoring well was abandoned prior to the 2012 excavation activities. Source area removal was completed in 2012 and approximately 9,243 tons of impacted soil and 36,585 gallons of groundwater were removed from the Site. The source area was defined prior to the excavation by concentrations observed in soil and groundwater samples. Monitoring wells in the vicinity of the excavation were

abandoned prior to the start of removal efforts, which included monitoring well EW-2. Monitoring wells were installed upon the completion of the excavation further providing additional verification of source area removal. Mobile LNAPL has not been observed in any monitoring wells since the source area excavation, including monitoring well MW-23 which was installed in the vicinity of former well EW-2 and screened similarly (3 to 13 feet bgs). The lack of LNAPL accumulation in monitoring wells at the Site and in North Mill Street demonstrates that NAPL is not present at saturations exceeding residual values. Furthermore, since residual LNAPL is present from approximately 6 to 14 feet bgs and 13 to 18 feet bgs, the current and historical monitoring well network appropriately intersects this zone. Therefore, if mobile LNAPL was present at saturations exceeding residual it would accumulate within the monitoring wells. Since residual LNAPL does not pose a risk from a mobility standpoint, the residual LNAPL impacts in the soil are functionally equivalent to adsorbed soil impacts. As a result, the removal of the residual LNAPL at the Site would not change the risk profile and is unnecessary.

4 RESTRICTIVE COVENANT

A DRC for the Site was executed on October 31, 2016 and recorded on November 2, 2016. A copy of the DRC recorded with the Register of Deeds for Oakland County is provided in **Appendix D**. The DRC includes the following restrictions:

1. Land Use Prohibitions. The Owner shall refrain from or otherwise prohibit all uses of the Property that are not compatible with nonresidential land use category under MCL 324.20120a(1)(b) and generally described in the Description of Allowable Uses, attached hereto as Exhibit 5.

   Part 201 cleanup criteria for land use-based response activities are located in the Government Documents Section of the State of Michigan Library, MCL 324.201201 *et seq*., effective December 31, 2013, and Michigan Administrative Code (MAC) Rules 299.5701 – 299.5727, also effective December 31, 2013, or as amended.

2. Activities Prohibited. The Owner shall refrain from or otherwise prohibit activities on the Property that may result in exposures above the nonresidential land use category. These prohibited activities include:

   a. Installation or use of drinking water or irrigation wells on the Property.

   b. Installation or use of groundwater extraction wells on the Property except for wells and devices that are part of an MDEQ-approved response activity and for short-term dewatering for construction purposes, provided the dewatering, including management and disposal of the groundwater, is conducted in accordance with all applicable environmental laws and does not cause or result in a new release, exacerbation of any pre-existing environmental condition, or any other violation of environmental laws.

   c. Relocation of contaminated soils on the Property except as provided for under Part 201, Section 20120c, MCL 324.20120c.

   d. ”Treatment”, “Storage”, “Disposal”, or “release” of any Hazardous Substances, on, at, or below the Property, in a manner that would require a permit under the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901 et seq. (RCRA), or equivalent State law, except pursuant to a plan or permit approved in writing by MDEQ.

e. Removal of any slabs, pavement or other impervious surface on the Property, unless the Owner takes responsibility for any and all obligations under environmental laws arising from any such removal, alteration or disturbance, whether or not caused by, arising from or related to, an environmental condition.

f. The Owner shall manage contaminated soils, media and/or debris (if any) and all other soils located at the Property whether encountered on the surface or during below grade work in accordance with any applicable requirements of Part 111, Subtitle C of RCRA, the administrative rules promulgated pursuant to Part 111 and RCRA, and all other relevant State and Federal laws, including but not limited to MCL 324.20120c, or other then applicable laws.

g. Building or occupying any structure in the Soil Vapor Management Area, which is described and illustrated in Exhibit 2, without first completing one of the following: Option 1) evaluate and determine, in accordance with applicable environmental laws rules or regulations and to the satisfaction of MDEQ that no unacceptable vapor intrusion risks to human health exist in any existing or newly constructed site buildings; or Option 2) with the concurrence from MDEQ install, operate, and maintain a vapor barrier and/or mitigation system designed to eliminate the potential for subsurface vapor phase hazardous substances to migrate into any building at concentrations greater than applicable criteria. This prohibition does not apply to short-term occupancy of a building for purposes of construction, renovation, repair, or other short-term activities as long as adequate health and safety precautions are employed during these activities, and they are performed in compliance with Section 20107a of NREPA.

   If Option 2 above is selected, the Owner shall install and thereafter maintain a vapor barrier and/or install and thereafter operate and maintain a vapor intrusion mitigation system in accordance with applicable standards and criteria at the time, for the purpose of mitigating the potential intrusion of soil vapor below any human-occupied building constructed on the property after the date of this Restrictive Covenant, until it is determined by MDEQ that a vapor barrier or mitigation system is no longer necessary in accordance with Option 1, above.

3. Contaminated Soil Management. The Owner shall manage contaminated soils, media and/or debris (if any) and all other soils located at the Property whether encountered on the surface or during below grade work in accordance with any applicable requirements of Part 111, Subtitle C of RCRA, the administrative rules promulgated pursuant to Part 111 and RCRA, and all other relevant State and Federal laws, including but not limited to MCL 324.20120c.

5 CITY OF PONTIAC GROUNDWATER ORDINANCE

On August 16, 2013, Ordinance Number 2311 was adopted to amend the Code of Ordinances of the City of Pontiac to amend Chapter 58, Article VIII to regulate the use of groundwater in certain areas of the City. The addition of Chapter 58, Article VIII entitled "Water Well Restriction" stated that the City finds "…that an aquifer in certain areas of the City has been contaminated or otherwise adversely impacted by hazardous substances…" therefore, "The City has determined that it is necessary and appropriate to prohibit and/or otherwise restrict the use of wells to supply water in and from the affected areas in order to protect City residents…" The North Mill Street Restricted Zone was included as one of the prohibited areas. This portion of North Mill Street is located adjacent to the Site running between the northwestern

corner of the property south to the intersection of North Mill Street and University Drive. Groundwater impacts exceeding the DW Criteria have been observed in Monitoring Well MW-26, adjacent to the Site and located in eastern North Mill Street. The ordinance prevents the installation of water wells and restricts the use of groundwater within North Mill Street. The Ordinance Number 2311 and figure outlining the North Mill Street Restricted Zone are included in **Appendix E**.

6 NOTICES

Impacted soil and/or groundwater are present on the Site and may have migrated to the west and southwest based on groundwater flow. As a result, Notices of Migration were submitted to the following parties in 2007. Notices of Migration:

- City of Pontiac; and
- Michigan Department of Environmental Quality.

In addition to the Notices of Migration submitted in 2007, the following Notices to Impacted Parties of Corrective Actions (NIP) were submitted in May 2016 based on the impacts observed within and/or adjacent to North Mill Street. Although NIPs are not required under Part 201; to satisfy the requirements of Sections 21309a(3) of Part 213, Leaking Underground Storage Tanks, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended Part 213 and address the open releases C-1142-91 and C-0328-06, NIPs were sent to the following:

- City of Pontiac Department of Public Works;
- Consumers Energy; and
- Water Resource Commission

Copies of the Notices are included in **Appendix G**.

7 NON-RESIDENTIAL CLEANUP CRITERIA PATHWAY EVALUATION

Arcadis has completed an analysis of each of the exposure pathways and COC concentrations to be considered for the protection of public health, safety, or welfare or the environment, and the relevant Site-specific conditions applicable to each. When an exposure pathway is considered complete or potentially complete, media-specific, pathway-specific Criteria can be used to determine whether conditions are acceptable. Site data can then be evaluated by comparison to applicable Criteria to determine whether additional Site-specific activities are necessary. If a Site is adequately characterized and data are below pathway-specific Criteria, then no further action is warranted to address that exposure pathway.

This Report indicates which pathways and conditions are relevant, which Criteria are applicable, and documents the reasons for those conclusions. Arcadis considered both historical (unless removed) and current information and data related to the Site to identify relevant potential exposure pathways. Based on the results of the exposure pathway assessment, applicable Criteria were identified.

7.1 Soil Exposure Pathways

Soil exposure pathways assessed for the Site included the following:

- Drinking Water Protection,
- Groundwater Surface Water Interface Protection,
- Soil Volatilization to Indoor Air, and
- Direct Contact.

7.1.1 Drinking Water Protection Pathway

The DWP pathway is considered relevant because both recent and historical analytical results for soil samples collected from on-Site soil borings have exceedances of DWP Criteria.

Soil impacts exceeding the DWP Criteria are present throughout the central portion of the Site including several floor and sidewall samples collected during the 2012 excavation. DWP exceedances are not observed off-Site or in adjacent North Mill Street. Horizontal delineation of DWP exceedances are complete in all directions of the Site and vertical delineation is achieved by the clay confining layer observed below the shallow aquifer.

In addition to the clay confining layer, a DRC has been filed for the Site, and the City of Pontiac has a Groundwater Ordinance to regulate the use of groundwater/restrict the installation of water wells within North Mill Street. Additionally, Groundwater is not used as a source of drinking water at the Site or adjacent properties. Water for commercial and industrial use was identified to be supplied to the Site and the surrounding area by the City of Pontiac. Therefore, the DWP Criteria is relevant, but not applicable.

7.1.2 Groundwater Surface Water Interface Protection Pathway

Review of the soil impacts reveal exceedances of GSIP Criteria exist at the Site. There are no GSIP Criteria exceedances off-Site or within adjacent North Mill Street or University Drive or in the vicinity of the August Relief Drain.

The GSIP pathway is applicable where the potential for groundwater to migrate to surface water is present or where storm sewers are located within impacted groundwater with hydraulic connection into the storm sewer, and if those storm sewers vent to a surface water. No surface water bodies are located on the Site, and the nearest surface water body is the Clinton River.

Storm sewer lines run in North Mill Street and on-Site from the Augusta Relief Drain into University Drive. Soil samples exceeding GSIP Criteria are located in the central portion of the Site and impacts do not extend to the vicinity of the storm sewers lines on-Site, in North Mill Street, or near the Augusta Relief Drain.

VOC concentrations exceeding GSIP Criteria exist at the Site and are delineated (**Figure 4**). Therefore, based on the fact that there are no soil exceedances in the vicinity of the storm drains on-Site or in North Mill Street, storm drain samples have always been observed at concentrations below the GSI Criteria, and the plume is defined in all directions, the GSIP pathway is relevant, though not applicable.

7.1.3 Soil Volatilization to Indoor Air Inhalation

The most likely exposure scenario for the Volatilization to Indoor Air (VI) pathway is the migration of vapors from subsurface soils and/or groundwater into a building. There are currently no structures present at the Site.

VOC concentrations exceeding the *MDEQ Residential Vapor Intrusion Screening Values for Soil as provided in the May 2013 Guidance Document for the Vapor Intrusion Pathway* exist in a portion of the Site west of the Augusta Relief Drain.

The DRC for the Site requires that a vapor assessment be conducted prior to any construction to assess for the potential for vapor intrusion and/or that new construction incorporates engineering controls (vapor barrier and/or mitigation system) designed to eliminate the potential for subsurface vapors from migrating into any new structures at concentrations greater than applicable Criteria. Although there are no structures on-Site nor in or known to be planned in North Mill Street or in or known to be planned in North Mill Street, the vapor intrusion pathway is relevant; however, it is not applicable.

7.1.4 Direct Contact with Soil Pathways

No soil concentrations on or off-Site exceed the DC Criteria. Based on the soil concentrations below DC Criteria, the direct contact pathway is not relevant.

7.2 Groundwater Exposure Pathway Evaluation

7.2.1 Drinking Water Pathway

Groundwater exceedances of DW Criteria are present at the Site and within North Mill Street. Arcadis has also used the MDEQ GeoWebFace Map online search tool (http://www.deq.state.mi.us/GeoWebFace/) to identify the potential for historic or current water wells within one mile of the Site. One (1) well was identified using the online search tool. The water well and pump record for Well ID 63000038319 identified the owner of the well to be the City of Pontiac, however it did not provide details regarding use, depth, or construction. This well is approximately 0.40 miles east of the Site. A review of the scanned logs available in the GeoWebFace program identified a log for the well. A copy of the well log is provided in **Appendix F.**

- The Site is located in an area where the water supply is obtained from the lower Lake Huron watershed via the Lake Huron Water Treatment Plant in Port Huron. The City of Pontiac purchases the water from the North Oakland County Water Authority (NOCWA), who obtains the water from the Detroit Water and Sewerage Department (DWSD), currently named the Great Lakes Water Authority (GLWA), as of January 1, 2016.
- A portion of the deeper aquifer in the area of the Site has been designated a Type 1 Provisional Wellhead Protection Area (WHPA). The purpose of a WHPA is to protect areas which, in this case, has the potential to contribute water to municipal water supply wells and to minimize the potential for contamination to the municipal drinking water supply system and water sources. A review of the boring log from the well responsible for the WHPA, an upper, 20 foot thick, clay layer is present from 3 to 23 feet bgs (~896-876 ft msl), and another 35 foot clay layer was observed from 38 to 73 feet bgs

(~861-826 ft msl), which separates the shallow and deep aquifers in this area, therefore providing a barrier from the low level soil exceedance observed at MW-24D from 24 to 25 feet bgs (~893 ft msl). Additionally, the water supply well is not at risk for contamination for the following reasons:

- The well is considered a stand by well, and not currently in use.
- The stand by water supply well is screened from 180 to 200 feet bgs, over 160 feet deeper than the well screen at MW-24D;
- The shallow groundwater plume at the Site is delineated horizontally and vertically, with the above-referenced clay layers preventing vertical migration of contaminants to the depth of the stand by water supply well screen;
- Groundwater flow in the shallow aquifer is radial but contamination migration is to the northwest (away from the supply well), towards North Mill Street;
- Majority of the source material has been removed; and
- Plume is stable to decreasing and has only migrated off-Site to the northwest.

Properties surrounding the Site receive drinking water from Oakland County and do not utilize private water wells. A map of the WHPA is included as **Figure 10**.

The City of Pontiac has groundwater use ordinance which restricts the installation of water wells within certain areas of the city; The North Mill Street Restriction zone is included in City Ordinance 2311 and includes a portion of North Mill Street, adjacent to the Site, and prohibits the installation of water wells within the North Mill Street Restriction Zone, as discussed in Section 6; unless wells are needed for/if 1) Proof of No Influence, 2) Groundwater Monitoring / Remediation, 3) Construction Dewatering, 4) Processing Activities, and 5) Public Emergencies. A copy of this ordinance can be found in **Appendix E**. A DRC has also been recorded for the Site. Due to the City of Pontiac groundwater ordinance and the DRC prohibiting the use of groundwater, the DWP Pathway is relevant, though not applicable.

7.2.2 Groundwater Surface Water Interface Pathway

Groundwater exceedances of GSI Criteria exist at the Site and within North Mill Street. No surface water bodies are located on the Site, however, the Clinton River located approximately 200 feet southeast of the Site.

In order to address the GSI pathway and to determine if impacted groundwater was affecting the storm sewer lines located in North Mill Street and on-Site, Arcadis completed three rounds of storm sewer sampling during dry weather events in May and October 2014 and April 2015. Each sampling event was scheduled after a minimum period of 72 hours with no precipitation. Storm sewer samples were collected from manhole access points located within North Mill Street (SS-1 through SS-4) and from a manhole access point located in the southern portion of the Site (SS-5). Grab samples were collected from the storm sewer during three consecutive events (May and October 2014 and April 2015) and flow directions in the sewers were recorded. Northeasterly flow was observed inside of North Mill Street manholes SS-2 and SS-4 draining into the Augusta Relief Drain at a location immediately north of the property line. Storm sewer flow was observed to be south inside of North Mill Street manhole SS-3, leading to the storm sewer servicing University Drive. Flow at the SS-5 manhole on the southern portion of the Site was also

observed to be south to the storm sewer servicing University Drive. Flow directions have been consistent during each sampling event. Analytical results of samples collected from storm sewer location SS-5 (to the south) indicated TCE was detected at 2 µg/L, which was similar to detections observed in the April and October 2014 events. The concentration of TCE detected at SS-5 is below GSI Criteria, and other VOCs were both below GSI Criteria and laboratory method detection limits. Analytical results of samples collected from storm sewer locations SS-1, SS-2, SS-3, and SS-4 indicated concentrations of VOCs remained below GSI Criteria and laboratory method detection limits.

The Augusta Relief Drain, which consists of two 10.5 foot diameter concrete pipes, extends northwest to southeast in the central portion of the Site east of the former building location. The Augusta Relief Drain piping is located approximately 10 to 15 feet bgs, which is below the groundwater table. Shallow perched groundwater is generally encountered at the Site at depths between 1.45 to 11.0 feet bgs. Monitoring wells in the vicinity of the Augusta Relief Drain have consistently been below Criteria and/or method detection limits, therefore the threat of impacted groundwater infiltrating the August Relief Drain is not relevant.

Groundwater samples exceeding GSI Criteria both on-Site and in North Mill Street have been delineated to below GSI Criteria in all directions (**Table 2** and **Figure 5**).

The City of Pontiac has been notified of North Mill Street impacts, and a Notification of Migration was submitted for the Site in 2007(**Appendix G**). Based on the delineation of GSI exceedances to below applicable GSI Criteria, as well as storm sewer samples consistently below Criteria, the plume is defined and VOC concentrations are not infiltrating into on-site or off-Site storm drains. Therefore, the GSI pathway is relevant, though not applicable.

7.2.3 Volatilization to Indoor Air Inhalation Pathways

VOC concentrations exceeding the *MDEQ Residential Vapor Intrusion Screening Values for Groundwater as provided in the May 2013 Guidance Document for the Vapor Intrusion Pathway* exist at the Site and in North Mill Street.

These exceedances exist at monitoring wells in a portion of the Site west of the Augusta Relief Drain and within North Mill Street at monitoring well MW-26. The groundwater exceedances at the Site are within the restricted area, which addresses possible future VI concerns.

Based on the VI exceedances at the Site, a DRC was developed to address these areas. The institutional control makes the volatilization to indoor air pathway relevant, but not applicable.

8 MARKERS

Markers are not required for the Site according to 20114c(2)(b)

9 POST CLOSURE PLAN

The Post-Closure Plan for this Site relies on the DRC for the Site (**Appendix D**).

A Post-Closure Agreement or Financial Assurance Mechanism are not required based on the existing DRCs being limited to Restricted Non-Residential and not incorporating a Remedial Action Plan or other engineering control as listed in Part 20114c.

The remedial action requires only land use or resource use restrictions and financial assurance is not required based on no monitoring or O&M being required. Therefore, a post-closure agreement is not required to be submitted as noted in Part 20114d3(b).

10 CONCLUSIONS

The soil and groundwater impacts associated with the former USTs and on-Site operations have been delineated horizontally and vertically. The source area has been largely excavated and delineation soil borings indicate that impacts that remain in place are limited in extent and delineated. Impacts remaining are limited to the vicinity of former underground hydraulic lifts located southwest of the excavated area and near the former trench drain, adjacent to North Mill Street. Soil impacts and residual LNAPL have been fully delineated in these areas. The groundwater plume is stable and impacts originating from the Site are delineated and are not impacting the storm sewer lines located on-Site, in North Mill Street, or the August Relief Drain.

Remedial action activities that have been conducted at the Site have included a source area removal of approximately 9,243 tons of impacted soils and 36,585 gallons of impacted groundwater in 2012. A DRC was recorded for the Site with the Oakland County Register of Deeds. Additionally, and the City of Pontiac has an ordinance in place which limits groundwater use and prohibits the construction of potable water wells within North Mill Street.

Groundwater analytical results obtained from four rounds of groundwater sampling indicate groundwater exceedances of DW and GSI Criteria are stable and/or decreasing. A decreasing trend is observed at the monitoring well within North Mill Street and is delineated in all directions. All historical structures and features from the former Site activities were removed during the source area excavation in 2012. Soil impact is limited to two portions of the Site and are fully delineated in all directions. The DW exceedances at MW-24D are considered stable and have an overall decreasing trend. These DW exceedances are delineated and not expected to migrate vertically because of the two clay units documented in the log for the City of Pontiac's - Paddock Standby Well; which is consistent with regional geology. The analysis of potential exposure pathways outlined in Sections 8.1 and 8.2 of this Report does not indicate a risk is present to public health, safety, or welfare or the environment.

Based on the remedial action activities that have been completed at the Site and horizontal and vertical delineation has been achieved for remaining soil and groundwater impacts, Arcadis respectfully requests that MDEQ provide concurrence that a restricted and NFA status be granted for the Employee Development Center located at 65 East University Drive in Pontiac, Michigan for the MDEQ Part 201 and Part 213 releases filed for the Site.

11 REFERENCES

Enkon Environmental Services, Inc. Subsurface Soils Investigation, GMC Truck Plant #13, 65 University Drive, Pontiac, Michigan 48342. April 22, 1992

Pickering Environmental Consultant, Inc. Report of Findings GM North America Platform Engineering Facility-Plant #13, 65 University Drive, Pontiac, Michigan 48342. February 22, 1993

Conestoga-Rovers and Associates. Site Investigation Work Plan Pontiac Truck Engineering Center (Plant 13) Site, 65 University Drive, Pontiac, Michigan 48342. April 2, 1993

Conestoga-Rovers and Associates. Leaking Underground Storage Tank Release Closure Report, 65 University Drive, Pontiac, Michigan 48342. December 22, 1995

Encore Environmental Consortium. Phase I Environmental Site Assessment, General Motors Corporation Employee Development Center, 65 E. University Drive, Pontiac, Michigan. July 1, 2005

Arcadis-BBL, Initial Assessment Report, General Motors Corporation Employee Development Center, 65 East University Drive, Pontiac, Michigan. February 5, 2007

Arcadis, Part 201 Excavation and Monitoring Work Plan, Former GM Employee Development Center Site, 65 East University Drive, Pontiac, Michigan. December 6, 2011

Arcadis, Excavation Activities Summary Report, Employee Development Center Site, 65 East University Drive, Pontiac, Michigan. August 30, 2012

Arcadis, Drilling Activities Update, Employee Development Center Site, 65 East University Drive, Pontiac, Michigan. January 14, 2013

Arcadis, Post Part 201 Corrective Action Activities Summary Report, Employee Development Center Site, 65 East University Drive, Pontiac, Michigan. September 10, 2013

Arcadis, 2014 Additional Delineation and Monitoring Activities Memo, Employee Development Center Site, 65 East University Drive, Pontiac, Michigan. February 10, 2015

Arcadis, 2015 Monitoring Update Memo, Employee Development Center Site, 65 East University Drive, Pontiac, Michigan. June 22, 2015

Michigan Department of Environmental Quality Part 201 Subsection 20114d (draft)

TABLES

TABLE 1A

Soil Analytical Data - Boring Locations

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:	Units	Michigan Department of Environmental Quality Part 201 Non-Residential Soil Cleanup Criteria				B-1	B-2	B-3	B-4	B-5	B-6	B-7	B-8	B-9	B-10	B-11	B-12	B-13	B-14
						Outside SE of Building in Paved Lot	Outside East-SE Corner of Building - Boiler Room Sump Area	Outside East-SE Side of Building - Boiler Room Sump & Elevator Lift Area	Outside East Side of Building - Elevator Lift Area	Outside East-NE Side of Building - Former Service / Hydraulic Lift Area	Inside Northeast Portion of Building Near Hydraulic Lift South of Dispenser Area	Inside Northeast Portion of Building Near Hydraulic Lift Further South	Inside Northwest Portion of Building Near Hydraulic Lift	Inside Northwest Portion of Building Near Hydraulic Lift Further South	Outside West Side of Building - Vicinity of Hydraulic Lift	Outside West Side of Building - Vicinity of Hydraulic Lift	Outside West-NW Side of Building - Oil-Sand Separator	Outside NW Corner of Building - Dyno Pit / Oil-Sand Separator	Outside NW Corner of Building - Trench & Dyno Pit
Date Collected:						11/6/2006	11/6/2006	11/6/2006	11/6/2006	11/6/2006	11/30/2006	11/30/2006	11/30/2006	11/30/2006	11/8/2006	11/8/2006	11/8/2006	11/6/2006	11/6/2006
Sample Depth (feet bgl):						8-9'	8-10'	8-10'	0-2'	9-10'	4-6'	2-4'	7.5-9.5'	7.5-9.5'	13-15'	5-6'	8-10'	18-20'	5-7'
Analytical Parameter		**Drinking Water Protection**	**Groundwater Surface Water Interface Protection**	**Soil Vapor Intrusion**	**Direct Contact Criteria**														
TPH (EPA Method 418.1/1664A)	mg/kg	NA	NA	NA	NA	23	55	26	55	22	27	26	<11	16	16	22	22	23	**1,000**
PAHs (EPA Method 8310/8270C)																			
1-Methylnaphthalene	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	<22	<4.2	<3.6	19	NA	NA	NA	NA	57
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	1.3E+05	2.6E+07	NA	NA	NA	NA	NA	<22	<4.2	<3.6	35	NA	NA	NA	NA	110
Acenaphthene	ug/kg	8.8E+05	8,700	7.3E+06	1.3E+08	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA	NA	15
Acenaphthylene	ug/kg	17,000	ID	2.8E+06	5.2E+06	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA	NA	< 12
Anthracene	ug/kg	41,000	ID	6.0E+08	7.3E+08	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA	NA	15
Benz(a)anthracene	ug/kg	NLL	NLL	NA	80,000	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA	NA	58
Benzo(a)pyrene	ug/kg	NLL	NLL	NA	8,000	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA	NA	62
Benzo(b)fluoranthene	ug/kg	NLL	NLL	NA	80,000	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA	NA	34
Benzo(g,h,i)perylene	ug/kg	NLL	NLL	NA	7.0E+06	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA	NA	59
Benzo(k)fluoranthene	ug/kg	NLL	NLL	NA	8.0E+05	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA	NA	22
Chrysene	ug/kg	NLL	NLL	NA	8.0E+06	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA	NA	51
Dibenzo(a,h)anthracene	ug/kg	NLL	NLL	NA	8,000	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA	NA	17
Fluoranthene	ug/kg	7.3E+05	5,500	NA	1.3E+08	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA	NA	85
Fluorene	ug/kg	8.9E+05	5,300	1.2E+07	8.7E+07	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA	NA	< 12
Indeno(1,2,3-cd)pyrene	ug/kg	NLL	NLL	NA	80,000	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA	NA	36
Naphthalene	ug/kg	1.0E+05	730	8,940	5.2E+07	NA	NA	NA	NA	NA	<22	<4.2	<3.6	86	NA	NA	NA	NA	52
Phenanthrene	ug/kg	1.6E+05	2,100	8.6E+04	5.2E+06	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA	NA	87
Pyrene	ug/kg	4.8E+05	ID	1.1E+09	8.4E+07	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA	NA	100
Other Target PAHs	ug/kg	various	various	various	various	NA	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA	ND
VOCs (EPA Method 8260B)																			
1,1,1-Trichloroethane	ug/kg	4,000	1,800	6.7E+04	4.6E+05	<5.7	<5.5	<5.2	<5.5	<5.4	<5.5	<6.4	<5.5	<5.3	<5.5	<5.6	<5.4	<5.6	<6
1,1,2,2-Tetrachloroethane	ug/kg	700	1,600 (X)	230	2.4E+05	<5.7	<5.5	<5.2	<5.5	<5.4	<5.5	<6.4	<5.5	<5.3	<5.5	<5.6	<5.4	<5.6	<6
1,1,2-Trichloroethane	ug/kg	100	6,600 (X)	365	8.4E+05	<5.7	<5.5	<5.2	<5.5	<5.4	<5.5	<6.4	<5.5	<5.3	<5.5	<5.6	<5.4	<5.6	<6
1,1-Dichloroethane	ug/kg	50,000	15,000	83.7	8.9E+05	<5.7	<5.5	<5.2	<5.5	<5.4	<5.5	<6.4	<5.5	<5.3	<5.5	<5.6	<5.4	<5.6	<6
1,1-Dichloroethene	ug/kg	140	2,600	7,330	5.7E+05	<5.7	<5.5	<5.2	<5.5	<5.4	<5.5	<6.4	<5.5	<5.3	<5.5	<5.6	<5.4	<5.6	<6
1,2,3-Trimethylbenzene	ug/kg	NA	NA	5.35E+04	NA	NA	NA	NA	NA	NA	<5.5	<6.4	<5.5	<5.3	<5.5	<5.6	<5.4	<5.6	<6
1,2,4-Trimethylbenzene	ug/kg	2,100	570	3.7E+04	1.10E+05	NA	NA	NA	NA	NA	6.6	<6.4	<5.5	6.4	NA	NA	NA	NA	NA
1,2-Dichloroethane	ug/kg	100	7,200 (X)	84	91,000	<5.7	<5.5	<5.2	<5.5	<5.4	<5.5	22	<5.5	<5.3	<5.5	<5.6	<5.4	<5.6	<6
1,2-Dichloropropane	ug/kg	100	4,600 (X)	151	5.5E+05	<5.7	<5.5	<5.2	<5.5	<5.4	<5.5	<6.4	<5.5	<5.3	<5.5	<5.6	<5.4	<5.6	<6
1,3,5-Trimethylbenzene	ug/kg	1,800	1,100	2.8E+04	94,000	NA	NA	NA	NA	NA	<5.5	<6.4	<5.5	8.5	NA	NA	NA	NA	NA
2-Butanone	ug/kg	7.6E+05	44,000	3.0E+06	2.7E+07	<23	<22	<21	<22	<22	<22	<26	<22	<21	<22	<22	<22	<23	<24
2-Hexanone	ug/kg	58,000	ID	1.7E+04	2.5E+06	<11	<11	<10	<11	<11	<11	<13	<11	<11	<11	<11	<11	<11	<12
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	1.3E+05	<11	<11	<10	<11	<11	<11	<13	<11	<11	<11	<11	<11	<11	<12
4-Methyl-2-pentanone	ug/kg	1.5E+05	ID	1.0E+06	2.7E+06	<11	<11	<10	<11	<11	<11	<13	<11	<11	<11	<11	<11	<11	<12
Acetone	ug/kg	42,000	34,000	5.2E+06	7.3E+07	<110	<110	<100	<110	<110	<110	<130	<110	<110	<110	<110	<110	<110	<120
Benzene	ug/kg	100	4,000 (X)	85	4.0E+05	< 5.7	< 5.5	< 5.2	< 5.5	< 5.4	41	**750**	<5.5	<5.3	<5.5	< 5.6	< 5.4	< 5.6	< 6
Bromodichloromethane	ug/kg	1,600 (W)	ID	104	4.9E+05	<5.7	<5.5	<5.2	<5.5	<5.4	<5.5	<6.4	<5.5	<5.3	<5.5	<5.6	<5.4	<5.6	<6
Bromoform	ug/kg	1,600 (W)	ID	1.1E+04	8.7E+05	<5.7	<5.5	<5.2	<5.5	<5.4	<5.5	<6.4	<5.5	<5.3	<5.5	<5.6	<5.4	<5.6	<6
Bromomethane	ug/kg	580	700	200	1.0E+06	<11	<11	<10	<11	<11	<11	<13	<11	<11	<11	<11	<11	<11	<12
n-Butylbenzene	ug/kg	4,600	ID	7,650	8.00E+06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	ug/kg	4,600	ID	738	8.00E+06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	ug/kg	46,000	ID	3,800	2.8E+05 (C,DD)	< 5.7	< 5.5	< 5.2	< 5.5	< 5.4	<5.5	<6.4	<5.5	<5.3	<5.5	< 5.6	< 5.4	< 5.6	< 6
Carbon tetrachloride	ug/kg	100	900 (X)	50	3.9E+05	<5.7	<5.5	<5.2	<5.5	<5.4	<5.5	<6.4	<5.5	<5.3	<5.5	<5.6	<5.4	<5.6	<6
Chlorobenzene	ug/kg	2,000	500	5,850	2.6E+05	<5.7	<5.5	<5.2	<5.5	<5.4	<5.5	<6.4	<5.5	<5.3	<5.5	<5.6	<5.4	<5.6	<6
Chloroethane	ug/kg	34,000	22,000 (X)	6.7E+04	9.5E+05	<11	<11	<10	<11	<5.4	<11	<13	<11	<11	<11	<11	<11	<11	<12
Chloroform	ug/kg	1,600 (W)	7,000	340	1.5E+06	<5.7	<5.5	<5.2	<5.5	<5.4	<5.5	<6.4	<5.5	<5.3	<5.5	<5.6	<5.4	<5.6	<6
Chloromethane	ug/kg	22,000	ID	323	1.1E+06	<11	<11	<10	<11	<11	<11	<13	<11	<11	<11	<11	<11	<11	<12
Dibromochloromethane	ug/kg	4,600	ID	266	5.0E+05	<5.7	<5.5	<5.2	<5.5	<5.4	<5.5	<6.4	<5.5	<5.3	<5.5	<5.6	<5.4	<5.6	<6
Ethylbenzene	ug/kg	1,500	360	3,990	1.4E+05	< 5.7	< 5.5	< 5.2	< 5.5	< 5.4	6.6	<6.4	<5.5	15	<5.5	< 5.6	< 5.4	< 5.6	**3,500**
p-Isopropyltoluene	ug/kg	2.6E+06	3,200	NA	3.9E+05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	ug/kg	4,600	ID	2,370	8.0E+06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene chloride	ug/kg	100	30,000 (X)	1,540	2.3E+06	8	9.9	9.3	9.9	8.6	6.6	7.7	8.8	5.3	<5.5	<5.6	< 5.4	7.9	9.6
Naphthalene	ug/kg	1.0E+05	730	8,940	5.2E+07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	ug/kg	2,700	2,100 (X)	3.0E+04	5.2E+05	<5.7	<5.5	<5.2	<5.5	<5.4	<5.5	<6.4	<5.5	<5.3	<5.5	<5.6	<5.4	<5.6	<6
Tetrachloroethene	ug/kg	100	1,200 (X)	1,030	88,000	< 5.7	< 5.5	< 5.2	< 5.5	< 5.4	<5.5	<6.4	<5.5	<5.3	<5.5	< 5.6	< 5.4	< 5.6	33
Toluene	ug/kg	16,000	5,400	1.7E+05	2.5E+05	< 5.7	< 5.5	< 5.2	< 5.5	< 5.4	20	<6.4	<5.5	<5.3	<5.5	< 5.6	< 5.4	< 5.6	14
Trichloroethene	ug/kg	100	4,000 (X)	50	5.0E+05	< 5.7	18	< 5.2	6.6	< 5.4	7.7	<6.4	<5.5	<5.3	<5.5	< 5.6	< 5.4	< 5.6	< 6
Vinyl chloride	ug/kg	40	260 (X)	40	34,000	<11	<11	<10	<11	<11	<11	<13	<11	<11	<11	<11	<11	<11	<12
cis-1,2-Dichloroethene	ug/kg	1,400	12,000	165	6.4E+05	<5.7	< 5.5	< 5.2	< 5.5	< 5.4	<5.5	<6.4	<5.5	<5.3	<5.5	< 5.6	< 5.4	< 5.6	< 6
cis-1,3-Dichloropropene	ug/kg	NA	NA	NA	NA	<5.7	<5.5	<5.2	<5.5	<5.4	<5.5	<6.4	<5.5	<5.3	<5.5	<5.6	<5.4	<5.6	<6
m,p-Xylene	ug/kg	NA	NA	NA	NA	< 5.7	< 5.5	< 5.2	< 5.5	< 5.4	20	<6.4	<5.5	98	<5.5	< 5.6	< 5.4	< 5.6	8,000
o-Xylene	ug/kg	NA	NA	NA	NA	< 5.7	< 5.5	< 5.2	< 5.5	< 5.4	<5.5	<6.4	<5.5	<5.3	<5.5	< 5.6	< 5.4	< 5.6	220
trans-1,2-Dichloroethene	ug/kg	2,000	30,000 (X)	NA	1.4E+06	< 5.7	<5.5	<5.2	<5.5	<5.4	<5.5	<6.4	<5.5	<5.3	<5.5	<5.6	<5.4	<5.6	<6
trans-1,3-Dichloropropene	ug/kg	NA	NA	NA	NA	< 5.7	<5.5	<5.2	<5.5	<5.4	<5.5	<6.4	<5.5	<5.3	<5.5	<5.6	<5.4	<5.6	<6
Xylenes, Total	ug/kg	5,600	820	4,890	1.5E+05	< 5.7	< 5.5	< 5.2	< 5.5	< 5.4	20	<6.4	<5.5	98	<5.5	< 5.6	< 5.4	< 5.6	**8,220**
1,2-Dichloroethene (total)	ug/kg	100	7,200 (X)	84	4.2E+05	< 5.7	< 5.2	< 5.2	< 5.5	< 5.4	<5.5	<6.4	<5.5	<5.3	<5.5	< 5.6	< 5.4	< 5.6	< 6
Other Target VOCs	ug/kg	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	<5.3	ND	ND	ND	ND	ND
MTBE (EPA Method 8021B/8260B)	ug/kg	800	1.4E+05	2.38E+05	5.9E+06	NA	NA	NA	NA	NA	<1.1	<2.6	<1.1	<1.1	NA	NA	NA	NA	340
Total Metals (EPA Method 6010B/6020)																			
Arsenic	mg/kg	4.6	4.6	NLV	37	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/kg	1,300	440	NLV	1.3E+05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium	mg/kg	6	3	NLV	2,100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Trivalent)	mg/kg	1.0E+06	2.9E+6	NLV	1.0E+06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/kg	5,800	75	NLV	73,000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/kg	700	2,500	NLV	900 (DD)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	9.82
Mercury **(7471A)**	mg/kg	1.7	0.05	ID	580	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Selenium	mg/kg	4	0.4	NLV	9,600	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Silver	mg/kg	13	0.1	NLV	9,000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/kg	5,000	170	NLV	6.3E+5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs (EPA Method 8082)																			
PCBs, Total	ug/kg	NLL	NLL	NA	(T)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<33

Notes: See Last Page

TABLE 1A

Soil Analytical Data - Boring Locations

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:	Units	Michigan Department of Environmental Quality Part 201 Non-Residential Soil Cleanup Criteria				B-50	B-15	B-51	B-16	B-17	B-18	B-19	B-20	B-21	B-22	B-23	B-24	B-25	B-26	B-26
						Re-Occupy of Boring B-14 - Outside NW Corner of Building - Trench & Dyno Pit	Outside North Side of Building - Trench	Re-Occupy ob Boring B-15 - Outside North Side of Building - Trench	Outside North-NE Corner of Building - Former Gas Dispenser	Outside Further North of North Side of Building - Release Delineation	Outside NE of NW Corner of Building - Release Delineation	Outside Further North of NE Corner of Building - Release Delineation	Outside Further North of B-17 & Sewer Line - Release Delineation	Inside Northwest Portion of Building - Release Delineation	Outside North-NW Corner of Building - Release Delineation	Outside North of B-16 and Former Gas Dispenser - Release Delineation	Outside - NNW of B-15 - Release Delineation	Outside - North of NW Building Corner and B-14 - Release Delineation	Inside - Middle of East Garage Between Wells MW-7 & EW-2	Inside - Middle of East Garage Between Wells MW-7 & EW-2
Date Collected:						1/25/2012	11/6/2006	1/25/2012	11/6/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/30/2006	11/30/2006	11/30/2006	11/30/2006	11/30/2006	9/11/2007	9/11/2007
Sample Depth (feet bgl):		Drinking Water Protection	Groundwater Surface Water Interface Protection	Soil Vapor Intrusion	Direct Contact Criteria	6-8'	6-8'	6-7'	4-5'	4-6'	1-2'	0.5-1.5'	3.5-4.5'	2-4'	1-3'	2-4'	2-4'	2-4'	0-2'	6-8'
Analytical Parameter																				
TPH (EPA Method 418.1/1664A)	mg/kg	NA	NA	NA	NA	NS	**710**	NS	**250**	19	12	**2,000**	12	18	**210**	12	<12	11	NA	NA
PAHs (EPA Method 8310/8270C)																				
1-Methylnaphthalene	ug/kg	NA	NA	NA	NA	NS	400	NS	15,000	NA	NA	18	NA	<4.1	<23	<4	<3.9	<3.7	<300	<300
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	1.3E+05	2.6E+07	NS	760	NS	**29,000**	NA	NA	29	NA	<4.1	26	<4	<3.9	<3.7	<300	<300
Acenaphthene	ug/kg	8.8E+05	8,700	7.3E+06	1.3E+08	NS	< 12	NS	170	NA	NA	< 18	NA	<4.1	<23	<4	<3.9	<3.7	<300	<300
Acenaphthylene	ug/kg	17,000	ID	2.8E+06	5.2E+06	NS	< 12	NS	1,100	NA	NA	< 18	NA	<4.1	<23	<4	<3.9	<3.7	<300	<300
Anthracene	ug/kg	41,000	ID	6.0E+08	7.3E+08	NS	< 12	NS	< 11	NA	NA	< 18	NA	<4.1	<23	<4	<3.9	<3.7	<300	<300
Benz(a)anthracene	ug/kg	NLL	NLL	NA	80,000	NS	< 12	NS	< 11	NA	NA	< 18	NA	<4.1	<23	<4	<3.9	<3.7	<300	<300
Benzo(a)pyrene	ug/kg	NLL	NLL	NA	8,000	NS	20	NS	< 11	NA	NA	< 18	NA	<4.1	36	<4	<3.9	<3.7	<300	<300
Benzo(b)fluoranthene	ug/kg	NLL	NLL	NA	80,000	NS	< 12	NS	< 11	NA	NA	< 18	NA	<4.1	27	<4	<3.9	<3.7	<300	<300
Benzo(g,h,i)perylene	ug/kg	NLL	NLL	NA	7.0E+06	NS	38	NS	< 11	NA	NA	< 18	NA	<4.1	65	<4	<3.9	<3.7	<300	<300
Benzo(k)fluoranthene	ug/kg	NLL	NLL	NA	8.0E+05	NS	< 12	NS	< 11	NA	NA	< 18	NA	<4.1	<23	<4	<3.9	<3.7	<300	<300
Chrysene	ug/kg	NLL	NLL	NA	8.0E+06	NS	20	NS	< 11	NA	NA	< 18	NA	<4.1	34	<4	<3.9	<3.7	<300	<300
Dibenzo(a,h)anthracene	ug/kg	NLL	NLL	NA	8,000	NS	< 12	NS	< 11	NA	NA	< 18	NA	<4.1	<23	<4	<3.9	<3.7	<300	<300
Fluoranthene	ug/kg	7.3E+05	5,500	NA	1.3E+08	NS	20	NS	11	NA	NA	< 18	NA	<4.1	51	<4	<3.9	<3.7	<300	<300
Fluorene	ug/kg	8.9E+05	5,300	1.2E+07	8.7E+07	NS	< 12	NS	61	NA	NA	< 18	NA	<4.1	<23	<4	<3.9	<3.7	<300	<300
Indeno(1,2,3-cd)pyrene	ug/kg	NLL	NLL	NA	80,000	NS	13	NS	< 11	NA	NA	< 18	NA	<4.1	34	<4	<3.9	<3.7	<300	<300
Naphthalene	ug/kg	1.0E+05	730	8,940	5.2E+07	NS	**780**	NS	**12,000**	NA	NA	110	NA	<4.1	<23	<4	<3.9	<3.7	<300	<300
Phenanthrene	ug/kg	1.6E+05	2,100	8.6E+04	5.2E+06	NS	51	NS	82	NA	NA	< 18	NA	<4.1	35	<4	<3.9	<3.7	<300	<300
Pyrene	ug/kg	4.8E+05	ID	1.1E+09	8.4E+07	NS	42	NS	50	NA	NA	< 18	NA	<4.1	94	<4	<3.9	<3.7	<300	<300
Other Target PAHs	ug/kg	various	various	various	various	NS	ND	NS	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND
VOCs (EPA Method 8260B)																				
1,1,1-Trichloroethane	ug/kg	4,000	1,800	6.7E+04	4.6E+05	NS	<6.2	NS	<5.7	<6.3	<6.1	<5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60	<60
1,1,2,2-Tetrachloroethane	ug/kg	700	1,600 (X)	230	2.4E+05	NS	<6.2	NS	<5.7	<6.3	<6.1	<5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60	<60
1,1,2-Trichloroethane	ug/kg	100	6,600 (X)	365	8.4E+05	NS	<6.2	NS	<5.7	<6.3	<6.1	<5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60	<60
1,1-Dichloroethane	ug/kg	50,000	15,000	83.7	8.9E+05	NS	<6.2	NS	<5.7	<6.3	<6.1	<5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60	<60
1,1-Dichloroethene	ug/kg	140	2,600	7,330	5.7E+05	NS	<6.2	NS	<5.7	<6.3	<6.1	<5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60	<60
1,2,3-Trimethylbenzene	ug/kg	NA	NA	5.35E+04	NA		<6.2		<5.7	<6.3	<6.1	<5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<100	400
1,2,4-Trimethylbenzene	ug/kg	2,100	570	3.7E+04	1.10E+05	NS	NA	NS	NA	NA	NA	NA	NA	<6.2	<5.7	<6	<5.9	<5.6	<100	<100
1,2-Dichloroethane	ug/kg	100	7,200 (X)	84	91,000	NS	<6.2	NS	<5.7	<6.3	<6.1	<5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60	<60
1,2-Dichloropropane	ug/kg	100	4,600 (X)	151	5.5E+05	NS	<6.2	NS	<5.7	<6.3	<6.1	<5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60	<60
1,3,5-Trimethylbenzene	ug/kg	1,800	1,100	2.8E+04	94,000	NS	NA	NS	NA	NA	NA	NA	NA	<6.2	<5.7	<6	<5.9	<5.6	<100	<100
2-Butanone	ug/kg	7.6E+05	44,000	3.0E+06	2.7E+07	NS	<25	NS	<23	<25	<24	<21	<24	<25	<23	<24	<24	<22	<900	<900
2-Hexanone	ug/kg	58,000	ID	1.7E+04	2.5E+06	NS	<12	NS	<11	<13	<12	<11	<12	<12	<11	<12	<12	<11	<3000	<3000
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	1.3E+05	NS	<12	NS	<11	<13	<12	<11	<12	<12	<11	<12	<12	<11	<400	<400
4-Methyl-2-pentanone	ug/kg	1.5E+05	ID	1.0E+06	2.7E+06	NS	<12	NS	<11	<13	<12	<11	<12	<12	<11	<12	<12	<11	<3000	<3000
Acetone	ug/kg	42,000	34,000	5.2E+06	7.3E+07	NS	<120	NS	<110	<130	<120	<110	<120	<120	<110	<120	<120	<110	<1000	<1000
Benzene	ug/kg	100	4,000 (X)	85	4.0E+05	NS	< 6.2	NS	< 5.7	44	< 6.1	< 5.3	**220**	62	<5.7	<6	<5.9	<5.6	<60	**8,100**
Bromodichloromethane	ug/kg	1,600 (W)	ID	104	4.9E+05	NS	<6.2	NS	<5.7	<6.3	<6.1	<5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<100	<100
Bromoform	ug/kg	1,600 (W)	ID	1.1E+04	8.7E+05	NS	<6.2	NS	<5.7	<6.3	<6.1	<5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<100	<100
Bromomethane	ug/kg	580	700	200	1.0E+06	NS	<12	NS	<11	<13	<12	<11	<12	<12	<11	<12	<12	<11	<200	<200
n-Butylbenzene	ug/kg	4,600	ID	7,650	8.00E+06	NS	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<60	120
sec-Butylbenzene	ug/kg	4,600	ID	738	8.00E+06	NS	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<60	<60
Carbon disulfide	ug/kg	46,000	ID	3,800	2.8E+05 (C,DD)	NS	< 6.2	NS	5.7	< 6.3	< 6.1	< 5.3	< 6	<6.2	<5.7	<6	<5.9	<5.6	<300	<300
Carbon tetrachloride	ug/kg	100	900 (X)	50	3.9E+05	NS	<6.2	NS	<5.7	<6.3	<6.1	< 5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60	<60
Chlorobenzene	ug/kg	2,000	500	5,850	2.6E+05	NS	<6.2	NS	<5.7	<6.3	<6.1	< 5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60	<60
Chloroethane	ug/kg	34,000	22,000 (X)	6.7E+04	9.5E+05	NS	<12	NS	<11	<13	<12	<11	<12	<12	<11	<12	<12	<11	<300	<300
Chloroform	ug/kg	1,600 (W)	7,000	340	1.5E+06	NS	<6.2	NS	<5.7	<6.3	<6.1	< 5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60	<60
Chloromethane	ug/kg	22,000	ID	323	1.1E+06	NS	<12	NS	<11	<13	<12	<11	<12	<12	<11	<12	<12	<11	<300	<300
Dibromochloromethane	ug/kg	4,600	ID	266	5.0E+05	NS	<6.2	NS	<5.7	<6.3	<6.1	< 5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<100	<100
Ethylbenzene	ug/kg	1,500	360	3,990	1.4E+05	NS	**20,000**	NS	**34,000**	8.8	< 6.1	< 5.3	30	<6.2	<5.7	<6	<5.9	<5.6	<60	**2,500**
p-Isopropyltoluene	ug/kg	2.6E+06	3,200	NA	3.9E+05	NS	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<100	<100
n-Propylbenzene	ug/kg	4,600	ID	2,370	8.0E+06	NS	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<100	300
Methylene chloride	ug/kg	100	30,000 (X)	1,540	2.3E+06	NS	6.2	NS	< 5.7	< 6.3	< 6.1	< 5.3	< 6	8.6	9.2	8.4	9.5	10	<100	<100
Naphthalene	ug/kg	1.0E+05	730	8,940	5.2E+07	NS	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<400	<400
Styrene	ug/kg	2,700	2,100 (X)	3.0E+04	5.2E+05	NS	<6.2	NS	<5.7	<6.3	<6.1	< 5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60	<60
Tetrachloroethene	ug/kg	100	1,200 (X)	1,030	88,000	NS	< 6.2	NS	< 5.7	< 6.3	< 6.1	< 5.3	< 6	<6.2	<5.7	<6	<5.9	<5.6	<60	<60
Toluene	ug/kg	16,000	5,400	1.7E+05	2.5E+05	NS	**21,000**	NS	1,900 J	13	< 6.1	< 5.3	< 6	<6.2	<5.7	<6	<5.9	<5.6	<100	<100
Trichloroethene	ug/kg	100	4,000 (X)	50	5.0E+05	NS	14	NS	< 5.7	< 6.3	35	< 5.3	**140**	<6.2	<5.7	<6	<5.9	<5.6	<60	<60
Vinyl chloride	ug/kg	40	260 (X)	40	34,000	NS	<12	NS	<11	<13	<12	<11	<12	<12	<11	<12	<12	<5.6	<60	<60
cis-1,2-Dichloroethene	ug/kg	1,400	12,000	165	6.4E+05	NS	< 6.2	NS	< 5.7	< 6.3	< 6.1	< 5.3	86	<6.2	<5.7	<6	<5.9	<5.6	<60	<60
cis-1,3-Dichloropropene	ug/kg	NA	NA	NA	NA	NS	<6.2	NS	<5.7	<6.3	<6.1	< 5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60	<60
m,p-Xylene	ug/kg	NA	NA	NA	NA	NS	65,000	NS	93,000	28	< 6.1	< 5.3	< 6	<6.2	5.7	<6	<5.9	<5.6	<100	4,300
o-Xylene	ug/kg	NA	NA	NA	NA	NS	20,000	NS	10,000	7.6	< 6.1	< 5.3	< 6	<6.2	<5.7	<6	<5.9	<5.6	<60	640
trans-1,2-Dichloroethene	ug/kg	2,000	30,000 (X)	NA	1.4E+06	NS	<6.2	NS	<5.7	<6.3	< 6.1	< 5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60	<60
trans-1,3-Dichloropropene	ug/kg	NA	NA	NA	NA	NS	<6.2	NS	<5.7	<6.3	< 6.1	< 5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60	<60
Xylenes, Total	ug/kg	5,600	820	4,890	1.5E+05	NS	**85,000**	NS	**103,000**	35.6	< 6.1	< 5.3	< 6	<6.2	5.7	<6	<5.9	<5.6	<160	**4,940**
1,2-Dichloroethene (total)	ug/kg	100	7,200 (X)	84	4.2E+05	NS	< 6.2	NS	< 5.7	< 6.3	< 6.1	< 5.3	86	<6.2	<5.7	<6	<5.9	<5.6	NA	NA
Other Target VOCs	ug/kg	various	various	various	various	NS	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE (EPA Method 8021B/8260B)	ug/kg	800	1.4E+05	2.38E+05	5.9E+06	NS	**4,200**	NS	**4,200**	NA	NA	NA	NA	<1.2	<1.1	<1.2	<1.2	<1.1	<200	<200
Total Metals (EPA Method 6010B/6020)																				
Arsenic	mg/kg	4.6	4.6	NLV	37	2.70	NS	0.28	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/kg	1,300	440	NLV	1.3E+05	6.74	NS	3.16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium	mg/kg	6	3	NLV	2,100	<0.20	NS	<0.20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Trivalent)	mg/kg	1.0E+06	2.9E+6	NLV	1.0E+06	1.42	NS	0.91	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/kg	5,800	75	NLV	73,000	4.56	NS	3.13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/kg	700	2,500	NLV	900 (DD)	2.90	11.5	5.07	< 5.72	NS	NS	NS	NS	NS	NS	NS	NS	NS	7.0	9.0
Mercury **(7471A)**	mg/kg	1.7	0.05	ID	580	<0.050	NS	<0.050	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Selenium	mg/kg	4	0.4	NLV	9,600	<0.4	NS	<0.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Silver	mg/kg	13	0.1	NLV	9,000	<0.1	NS	<0.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/kg	5,000	170	NLV	6.3E+5	9.51	NS	5.46	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs (EPA Method 8082)																				
PCBs, Total	ug/kg	NLL	NLL	NA	(T)	<1,000	<500	<330	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA

Notes: See Last Page

TABLE 1A

Soil Analytical Data - Boring Locations

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:	Units	Michigan Department of Environmental Quality Part 201 Non-Residential Soil Cleanup Criteria				B-53	B-27	B-27	B-28	B-28	B-54	B-29	B-29	B-30	B-30	B-31	B-31	B-32	B-32	B-33
						Re-Occupy of Boring B-26 - Inside - Middle of East Garage Between Wells MW-7 & EW-2	Inside - Southern End of East Garage, West of MW-7	Inside - Southern End of East Garage, West of MW-7	Inside - Two Rooms South of East Garage, East Side of Room	Inside - Two Rooms South of East Garage, East Side of Room	Re-Occupy of Boring B-28 - Inside - Two Rooms South of East Garage, East Side of Room	Outside - North of Building Between MW-2 and B-23	Outside - North of Building Between MW-2 and B-24	Inside - Western Most Classroom, Along North Wall	Inside - Western Most Classroom, Along North Wall	Inside - Western Most Classroom, Along East Wall	Inside - Western Most Classroom, Along East Wall	Inside - Western Side of Building, 2nd Classroom to South, Along North Wall	Inside - Western Side of Building, 2nd Classroom to South, Along North Wall	Inside - Western Side of Building, 2nd Classroom to South, Along East Wall
Date Collected:						1/25/2012	9/11/2007	9/11/2007	9/11/2007	9/11/2007	1/25/2012	9/11/2007	9/11/2007	9/12/2007	9/12/2007	9/12/2007	9/12/2007	9/12/2007	9/12/2007	9/12/2007
Sample Depth (feet bgl):		Drinking Water Protection	Groundwater Surface Water Interface Protection	Soil Vapor Intrusion	Direct Contact Criteria	7-8'	0-2'	3.5-5.5'	0-2'	8-10'	4-5'	0-2'	3.5-5.5'	0-2'	6-8'	0-2'	3.3-5.3'	0-2'	8.8-10.8'	0-2'
Analytical Parameter																				
TPH (EPA Method 418.1/1664A)	mg/kg	NA	NA	NA	NA	NS	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (EPA Method 8310/8270C)																				
1-Methylnaphthalene	ug/kg	NA	NA	NA	NA	NS	1,200	700	<300	2,600	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	1.3E+05	2.6E+07	NS	2,700	1,600	<300	**4,600**	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Acenaphthene	ug/kg	8.8E+05	8,700	7.3E+06	1.3E+08	NS	<300	<300	<300	<400	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Acenaphthylene	ug/kg	17,000	ID	2.8E+06	5.2E+06	NS	<300	<300	<300	<400	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Anthracene	ug/kg	41,000	ID	6.0E+08	7.3E+08	NS	<300	<300	<300	<400	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benz(a)anthracene	ug/kg	NLL	NLL	NA	80,000	NS	<300	<300	<300	<400	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(a)pyrene	ug/kg	NLL	NLL	NA	8,000	NS	<300	<300	<300	<400	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(b)fluoranthene	ug/kg	NLL	NLL	NA	80,000	NS	<300	<300	<300	<400	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(g,h,i)perylene	ug/kg	NLL	NLL	NA	7.0E+06	NS	<300	<300	<300	<400	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(k)fluoranthene	ug/kg	NLL	NLL	NA	8.0E+05	NS	<300	<300	<300	<400	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Chrysene	ug/kg	NLL	NLL	NA	8.0E+06	NS	<300	<300	<300	<400	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Dibenzo(a,h)anthracene	ug/kg	NLL	NLL	NA	8,000	NS	<300	<300	<300	<400	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Fluoranthene	ug/kg	7.3E+05	5,500	NA	1.3E+08	NS	<300	<300	<300	<400	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Fluorene	ug/kg	8.9E+05	5,300	1.2E+07	8.7E+07	NS	<300	<300	<300	<400	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Indeno(1,2,3-cd)pyrene	ug/kg	NLL	NLL	NA	80,000	NS	<300	<300	<300	<400	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Naphthalene	ug/kg	1.0E+05	730	8,940	5.2E+07	NS	**1,600**	**1,200**	<300	**3,900**	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Phenanthrene	ug/kg	1.6E+05	2,100	8.6E+04	5.2E+06	NS	<300	<300	<300	<400	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Pyrene	ug/kg	4.8E+05	ID	1.1E+09	8.4E+07	NS	<300	<300	<300	<400	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Other Target PAHs	ug/kg	various	various	various	various	NS	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOCs (EPA Method 8260B)																				
1,1,1-Trichloroethane	ug/kg	4,000	1,800	6.7E+04	4.6E+05	NS	<1000	<600	<50	<1000	NS	<60	<60	<60	<50	<50	<50	<50	<50	<50
1,1,2,2-Tetrachloroethane	ug/kg	700	1,600 (X)	230	2.4E+05	NS	<1000	<600	<50	<1000	NS	<60	<60	<60	<50	<50	<50	<50	<50	<50
1,1,2-Trichloroethane	ug/kg	100	6,600 (X)	365	8.4E+05	NS	<2000	<600	<50	<3000	NS	<60	<60	<60	<50	<50	<50	<50	<50	<50
1,1-Dichloroethane	ug/kg	50,000	15,000	83.7	8.9E+05	NS	<1000	<600	<50	<1000	NS	<60	<60	<60	<50	<50	<50	<50	<50	<50
1,1-Dichloroethene	ug/kg	140	2,600	7,330	5.7E+05	NS	<1000	<600	<50	<1000	NS	<60	<60	<60	<50	<50	<50	<50	<50	<50
1,2,3-Trimethylbenzene	ug/kg	NA	NA	5.35E+04	NA		9,000	14,000	100	42,000		<100	<100	<100	<100	<100	<100	<100	<100	<100
1,2,4-Trimethylbenzene	ug/kg	2,100	570	3.7E+04	1.10E+05	NS	**35,000**	**62,000**	500	**200,000**	NS	<100	<100	<100	<100	<100	<100	<100	<100	<100
1,2-Dichloroethane	ug/kg	100	7,200 (X)	84	91,000	NS	<1000	<600	<50	<1000	NS	<60	<60	<60	<50	<50	<50	<50	<50	<50
1,2-Dichloropropane	ug/kg	100	4,600 (X)	151	5.5E+05	NS	<1000	<600	<50	<1000	NS	<60	<60	<60	<50	<50	<50	<50	<50	<50
1,3,5-Trimethylbenzene	ug/kg	1,800	1,100	2.8E+04	94,000	NS	**13,000**	**26,000**	200	**75,000**	NS	<100	<100	<100	<100	<100	<100	<100	<100	<100
2-Butanone	ug/kg	7.6E+05	44,000	3.0E+06	2.7E+07	NS	<20000	<14000	<800	<20000	NS	<900	<800	<900	<800	<800	<800	<800	<800	<800
2-Hexanone	ug/kg	58,000	ID	1.7E+04	2.5E+06	NS	<60000	<30000	<3000	<50000	NS	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	1.3E+05	NS	<400	**6,000**	<400	**14,000**	NS	<400	<400	<400	<400	<400	<400	<400	<400	<400
4-Methyl-2-pentanone	ug/kg	1.5E+05	ID	1.0E+06	2.7E+06	NS	<60000	<30000	<3000	<50000	NS	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000
Acetone	ug/kg	42,000	34,000	5.2E+06	7.3E+07	NS	<20000	<10000	<1000	<20000	NS	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000
Benzene	ug/kg	100	4,000 (X)	85	4.0E+05	NS	**1,000**	**1,200**	<50	**2,000**	NS	<60	<60	<60	<50	<50	<50	<50	<50	<50
Bromodichloromethane	ug/kg	1,600 (W)	ID	104	4.9E+05	NS	<2000	<1000	<100	<2000	NS	<100	<100	<100	<100	<100	<100	<100	<100	<100
Bromoform	ug/kg	1,600 (W)	ID	1.1E+04	8.7E+05	NS	<2000	<1000	<100	<2000	NS	<100	<100	<100	<100	<100	<100	<100	<100	<100
Bromomethane	ug/kg	580	700	200	1.0E+06	NS	<5000	<2000	<200	<4000	NS	<200	<200	<200	<200	<200	<200	<200	<200	<200
n-Butylbenzene	ug/kg	4,600	ID	7,650	8.00E+06	NS	2,000	**6,900**	<50	**22,000**	NS	<60	<60	<60	<50	<50	<50	<50	<50	<50
sec-Butylbenzene	ug/kg	4,600	ID	738	8.00E+06	NS	<1000	1,400	<50	4,000	NS	<60	<60	<60	<50	<50	<50	<50	<50	<50
Carbon disulfide	ug/kg	46,000	ID	3,800	2.8E+05 (C,DD)	NS	<6000	<3000	<300	<5000	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Carbon tetrachloride	ug/kg	100	900 (X)	50	3.9E+05	NS	<1000	<600	<50	<1000	NS	<60	<60	<60	<50	<50	<50	<50	<50	<50
Chlorobenzene	ug/kg	2,000	500	5,850	2.6E+05	NS	<1000	<600	<50	<1000	NS	<60	<60	<60	<50	<50	<50	<50	<50	<50
Chloroethane	ug/kg	34,000	22,000 (X)	6.7E+04	9.5E+05	NS	<6000	<3000	<300	<5000	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Chloroform	ug/kg	1,600 (W)	7,000	340	1.5E+06	NS	<1000	<600	<50	<1000	NS	<60	<60	<60	<50	<50	<50	<50	<50	<50
Chloromethane	ug/kg	22,000	ID	323	1.1E+06	NS	<6000	<3000	<300	<5000	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Dibromochloromethane	ug/kg	4,600	ID	266	5.0E+05	NS	<2000	<1000	<100	<2000	NS	<100	<100	<100	<100	<100	<100	<100	<100	<100
Ethylbenzene	ug/kg	1,500	360	3,990	1.4E+05	NS	**32,000**	**36,100**	**460**	**63,000**	NS	<60	<60	<60	<50	<50	<50	<50	<50	<50
p-Isopropyltoluene	ug/kg	2.6E+06	3,200	NA	3.9E+05	NS	<2000	<1000	<100	<2000	NS	<100	<100	<100	<100	<100	<100	<100	<100	<50
n-Propylbenzene	ug/kg	4,600	ID	2,370	8.0E+06	NS	**9,000**	**19,000**	100	**22,000**	NS	<100	<100	<100	<100	<100	<100	<100	<100	<100
Methylene chloride	ug/kg	100	30,000 (X)	1,540	2.3E+06	NS	<2000	<1000	<100	<2000	NS	<100	<100	<100	<100	<100	<100	<100	<100	<100
Naphthalene	ug/kg	1.0E+05	730	8,940	5.2E+07	NS	<400	**5,000**	<400	**18,000**	NS	<400	<400	<400	<400	<400	<400	<400	<400	<400
Styrene	ug/kg	2,700	2,100 (X)	3.0E+04	5.2E+05	NS	<1000	<800	<50	<5000	NS	<60	<60	<60	<50	<50	<50	<50	<50	<50
Tetrachloroethene	ug/kg	100	1,200 (X)	1,030	88,000	NS	<1000	<600	<50	<1000	NS	<60	<60	**170**	<50	<50	<50	<50	<50	<50
Toluene	ug/kg	16,000	5,400	1.7E+05	2.5E+05	NS	<2000	2,000	<100	**104,000**	NS	<100	<100	<100	<100	<100	<100	<100	<100	<100
Trichloroethene	ug/kg	100	4,000 (X)	50	5.0E+05	NS	<1000	<600	<50	<1000	NS	<60	<60	<60	<50	<50	<50	**70**	<50	<50
Vinyl chloride	ug/kg	40	260 (X)	40	34,000	NS	<1000	<600	<50	<1000	NS	<60	<60	<60	<50	<50	<50	<50	<50	<50
cis-1,2-Dichloroethene	ug/kg	1,400	12,000	165	6.4E+05	NS	<1000	<600	<50	<1000	NS	<60	<60	<60	<50	<50	<50	<50	<50	<50
cis-1,3-Dichloropropene	ug/kg	NA	NA	NA	NA	NS	<1000	<600	<50	<1000	NS	<60	<60	<60	<50	<50	<50	<50	<50	<50
m,p-Xylene	ug/kg	NA	NA	NA	NA	NS	116,000	98,000	1500	291,000	NS	<100	<100	<100	<100	<100	<100	<100	<100	<100
o-Xylene	ug/kg	NA	NA	NA	NA	NS	15,000	20,900	240	149,000	NS	<60	<60	<60	<50	<50	<50	<50	<50	<50
trans-1,2-Dichloroethene	ug/kg	2,000	30,000 (X)	NA	1.4E+06	NS	<1000	<600	<50	<1000	NS	<60	<60	<60	<50	<50	<50	<50	<50	<50
trans-1,3-Dichloropropene	ug/kg	NA	NA	NA	NA	NS	<1000	<600	<50	<1000	NS	<60	<60	<60	<50	<50	<50	<50	<50	<50
Xylenes, Total	ug/kg	5,600	820	4,890	1.5E+05	NS	**131,000**	**118,900**	**1,740**	**440,000**	NS	<160	<160	<160	<150	<150	<150	<150	<150	<150
1,2-Dichloroethene (total)	ug/kg	100	7,200 (X)	84	4.2E+05	NS	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other Target VOCs	ug/kg	various	various	various	various	NS	ND	4,000	ND	7,000	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE (EPA Method 8021B/8260B)	ug/kg	800	1.4E+05	2.38E+05	5.9E+06	NS	<5000	<2000	<200	<4000	NS	<200	<200	<200	<200	<200	<200	<200	<200	<200
Total Metals (EPA Method 6010B/6020)																				
Arsenic	mg/kg	4.6	4.6	NLV	37	0.85	NS	NS	NS	NS	1.32	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/kg	1,300	440	NLV	1.3E+05	4.30	NS	NS	NS	NS	24.6	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium	mg/kg	6	3	NLV	2,100	<0.20	NS	NS	NS	NS	<0.20	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Trivalent)	mg/kg	1.0E+06	2.9E+6	NLV	1.0E+06	1.29	NS	NS	NS	NS	3.29	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/kg	5,800	75	NLV	73,000	3.58	NS	NS	NS	NS	10.2	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/kg	700	2,500	NLV	900 (DD)	10.40	7.0	4.1	18.8	3.1	4.41	8.1	3.0	9.7	3.8	16.1	1.1	4.9	2.6	10.7
Mercury **(7471A)**	mg/kg	1.7	0.05	ID	580	<0.050	NS	NS	NS	NS	<0.050	NS	NS	NS	NS	NS	NS	NS	NS	NS
Selenium	mg/kg	4	0.4	NLV	9,600	<0.4	NS	NS	NS	NS	<0.4	NS	NS	NS	NS	NS	NS	NS	NS	NS
Silver	mg/kg	13	0.1	NLV	9,000	<0.1	NS	NS	NS	NS	<0.1	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/kg	5,000	170	NLV	6.3E+5	7.43	NS	NS	NS	NS	20.7	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs (EPA Method 8082)																				
PCBs, Total	ug/kg	NLL	NLL	NA	(T)	<330	NA	NA	NA	NA	<330	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: See Last Page

TABLE 1A

Soil Analytical Data - Boring Locations

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:	Units	Michigan Department of Environmental Quality Part 201 Non-Residential Soil Cleanup Criteria				B-33	B-34	B-34	B-35	DUPE-2 (B-35)	B-35	B-36	B-36	B-37	B-37	B-38	B-39	B-40	B-40	B-41
						Inside - Western Side of Building, 2nd Classroom to South, Along East Wall	Inside - Eastern Side of Building, 2nd Classroom to South, Along North Wall	Inside - Eastern Side of Building, 2nd Classroom to South, Along North Wall	Outside - Outside Gate on Western Sidewalk, South of Gate		Outside - Outside Gate on Western Sidewalk, South of Gate	Inside - Middle of Auditorium	Inside - Middle of Auditorium	Outside - North of Building Along East Fence, North of Gate	Outside - North of Building Along East Fence, North of Gate	Outside - Eastern Parking Lot, North of Fence Dividing Site	Outside - Eastern Parking Lot, 30-40' West of B-38	Outside - Eastern Parking Lot, West of B-39	Outside - Eastern Parking Lot, West of B-39	Outside - In Corner of Building East of Auditorium and South of Building Wall
Date Collected:						9/12/2007	9/13/2007	9/13/2007	9/14/2007	9/14/2007	9/14/2007	9/14/2007	9/14/2007	9/17/2007	9/17/2007	9/17/2007	9/17/2007	9/18/2007	9/18/2007	9/18/2007
Sample Depth (feet bgl):		Drinking Water Protection	Groundwater Surface Water Interface Protection	Soil Vapor Intrusion	Direct Contact Criteria	8.5-10.5'	0-2'	8-10'	0-2'	0-2'	6.8-8.8'	0-2'	6-8'	0-2'	8-10'	NS	NS	0-2'	NA	0-2'
Analytical Parameter																				
TPH (EPA Method 418.1/1664A)	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NA	NA	NA
PAHs (EPA Method 8310/8270C)																				
1-Methylnaphthalene	ug/kg	NA	NA	NA	NA	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA	NA
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	1.3E+05	2.6E+07	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA	NA
Acenaphthene	ug/kg	8.8E+05	8,700	7.3E+06	1.3E+08	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA	NA
Acenaphthylene	ug/kg	17,000	ID	2.8E+06	5.2E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA	NA
Anthracene	ug/kg	41,000	ID	6.0E+08	7.3E+08	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA	NA
Benz(a)anthracene	ug/kg	NLL	NLL	NA	80,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA	NA
Benzo(a)pyrene	ug/kg	NLL	NLL	NA	8,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA	NA
Benzo(b)fluoranthene	ug/kg	NLL	NLL	NA	80,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA	NA
Benzo(g,h,i)perylene	ug/kg	NLL	NLL	NA	7.0E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA	NA
Benzo(k)fluoranthene	ug/kg	NLL	NLL	NA	8.0E+05	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA	NA
Chrysene	ug/kg	NLL	NLL	NA	8.0E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA	NA
Dibenzo(a,h)anthracene	ug/kg	NLL	NLL	NA	8,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA	NA
Fluoranthene	ug/kg	7.3E+05	5,500	NA	1.3E+08	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA	NA
Fluorene	ug/kg	8.9E+05	5,300	1.2E+07	8.7E+07	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA	NA
Indeno(1,2,3-cd)pyrene	ug/kg	NLL	NLL	NA	80,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA	NA
Naphthalene	ug/kg	1.0E+05	730	8,940	5.2E+07	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA	NA
Phenanthrene	ug/kg	1.6E+05	2,100	8.6E+04	5.2E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA	NA
Pyrene	ug/kg	4.8E+05	ID	1.1E+09	8.4E+07	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA	NA
Other Target PAHs	ug/kg	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NA	NA	NA
VOCs (EPA Method 8260B)																				
1,1,1-Trichloroethane	ug/kg	4,000	1,800	6.7E+04	4.6E+05	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA	NA
1,1,2,2-Tetrachloroethane	ug/kg	700	1,600 (X)	230	2.4E+05	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA	NA
1,1,2-Trichloroethane	ug/kg	100	6,600 (X)	365	8.4E+05	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA	NA
1,1-Dichloroethane	ug/kg	50,000	15,000	83.7	8.9E+05	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA	NA
1,1-Dichloroethene	ug/kg	140	2,600	7,330	5.7E+05	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA	NA
1,2,3-Trimethylbenzene	ug/kg	NA	NA	5.35E+04	NA	<100	<100	100	<100	<100	<100	<100	<100	<100	<100	NS	NS	NA	NA	NA
1,2,4-Trimethylbenzene	ug/kg	2,100	570	3.7E+04	1.10E+05	<100	200	400	<100	<100	<100	<100	<100	<100	<100	NS	NS	NA	NA	NA
1,2-Dichloroethane	ug/kg	100	7,200 (X)	84	91,000	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA	NA
1,2-Dichloropropane	ug/kg	100	4,600 (X)	151	5.5E+05	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA	NA
1,3,5-Trimethylbenzene	ug/kg	1,800	1,100	2.8E+04	94,000	<100	<100	200	<100	<100	<100	<100	<100	<100	<100	NS	NS	NA	NA	NA
2-Butanone	ug/kg	7.6E+05	44,000	3.0E+06	2.7E+07	<800	<800	<800	<900	<900	<800	<800	<900	<800	<900	NS	NS	NA	NA	NA
2-Hexanone	ug/kg	58,000	ID	1.7E+04	2.5E+06	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	NS	NS	NA	NA	NA
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	1.3E+05	<400	<400	<400	<400	<400	<400	<400	<400	<400	<400	NS	NS	NA	NA	NA
4-Methyl-2-pentanone	ug/kg	1.5E+05	ID	1.0E+06	2.7E+06	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	NS	NS	NA	NA	NA
Acetone	ug/kg	42,000	34,000	5.2E+06	7.3E+07	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	NS	NS	NA	NA	NA
Benzene	ug/kg	100	4,000 (X)	85	4.0E+05	<50	<60	<50	<60	<60	**960**	<50	<60	<50	**440**	NS	NS	NA	NA	NA
Bromodichloromethane	ug/kg	1,600 (W)	ID	104	4.9E+05	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	NS	NS	NA	NA	NA
Bromoform	ug/kg	1,600 (W)	ID	1.1E+04	8.7E+05	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	NS	NS	NA	NA	NA
Bromomethane	ug/kg	580	700	200	1.0E+06	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	NS	NS	NA	NA	NA
n-Butylbenzene	ug/kg	4,600	ID	7,650	8.00E+06	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA	NA
sec-Butylbenzene	ug/kg	4,600	ID	738	8.00E+06	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA	NA
Carbon disulfide	ug/kg	46,000	ID	3,800	2.8E+05 (C,DD)	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA	NA
Carbon tetrachloride	ug/kg	100	900 (X)	50	3.9E+05	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA	NA
Chlorobenzene	ug/kg	2,000	500	5,850	2.6E+05	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA	NA
Chloroethane	ug/kg	34,000	22,000 (X)	6.7E+04	9.5E+05	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA	NA
Chloroform	ug/kg	1,600 (W)	7,000	340	1.5E+06	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA	NA
Chloromethane	ug/kg	22,000	ID	323	1.1E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA	NA
Dibromochloromethane	ug/kg	4,600	ID	266	5.0E+05	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	NS	NS	NA	NA	NA
Ethylbenzene	ug/kg	1,500	360	3,990	1.4E+05	<50	<60	360	<60	<60	**1960**	<50	<60	<50	<60	NS	NS	NA	NA	NA
p-Isopropyltoluene	ug/kg	2.6E+06	3,200	NA	3.9E+05	<50	<100	300	<100	<100	<100	<100	<100	<100	<100	NS	NS	NA	NA	NA
n-Propylbenzene	ug/kg	4,600	ID	2,370	8.0E+06	<100	<100	100	<100	<100	<100	<100	<100	<100	<107	<108	NS	NA	NA	NA
Methylene chloride	ug/kg	100	30,000 (X)	1,540	2.3E+06	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	NS	NS	NA	NA	NA
Naphthalene	ug/kg	1.0E+05	730	8,940	5.2E+07	<400	<400	<400	<400	<400	<400	<400	<400	<400	<400	NS	NS	NA	NA	NA
Styrene	ug/kg	2,700	2,100 (X)	3.0E+04	5.2E+05	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA	NA
Tetrachloroethene	ug/kg	100	1,200 (X)	1,030	88,000	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA	NA
Toluene	ug/kg	16,000	5,400	1.7E+05	2.5E+05	<100	<100	500	<100	<100	**6100**	<100	<100	<100	<100	NS	NS	NA	NA	NA
Trichloroethene	ug/kg	100	4,000 (X)	50	5.0E+05	<100	<60	**3,580**	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA	NA
Vinyl chloride	ug/kg	40	260 (X)	40	34,000	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA	NA
cis-1,2-Dichloroethene	ug/kg	1,400	12,000	165	6.4E+05	<50	<60	1,010	<60	<60	<50	<50	<60	<50	90	NS	NS	NA	NA	NA
cis-1,3-Dichloropropene	ug/kg	NA	NA	NA	NA	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA	NA
m,p-Xylene	ug/kg	NA	NA	NA	NA	<100	<100	1,700	<100	<100	5,500	<100	<100	<100	<100	NS	NS	NA	NA	NA
o-Xylene	ug/kg	NA	NA	NA	NA	<50	<60	880	<60	<60	2,510	<50	<60	<50	<60	NS	NS	NA	NA	NA
trans-1,2-Dichloroethene	ug/kg	2,000	30,000 (X)	NA	1.4E+06	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA	NA
trans-1,3-Dichloropropene	ug/kg	NA	NA	NA	NA	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA	NA
Xylenes, Total	ug/kg	5,600	820	4,890	1.5E+05	<150	<160	**2,580**	<160	<160	**8,010**	<150	<160	<150	<160	NS	NS	NA	NA	NA
1,2-Dichloroethene (total)	ug/kg	100	7,200 (X)	84	4.2E+05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NA	NA	NA
Other Target VOCs	ug/kg	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NA	NA	NA
MTBE (EPA Method 8021B/8260B)	ug/kg	800	1.4E+05	2.38E+05	5.9E+06	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	NS	NS	NA	NA	NA
Total Metals (EPA Method 6010B/6020)																				
Arsenic	mg/kg	4.6	4.6	NLV	37	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	mg/kg	1,300	440	NLV	1.3E+05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium	mg/kg	6	3	NLV	2,100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (Trivalent)	mg/kg	1.0E+06	2.9E+6	NLV	1.0E+06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	mg/kg	5,800	75	NLV	73,000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	mg/kg	700	2,500	NLV	900 (DD)	5.4	67.2	5.0	7.0	8.4	2.9	74.2	5.2	3.4	8.2	NS	NS	NA	NA	NA
Mercury **(7471A)**	mg/kg	1.7	0.05	ID	580	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Selenium	mg/kg	4	0.4	NLV	9,600	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Silver	mg/kg	13	0.1	NLV	9,000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	mg/kg	5,000	170	NLV	6.3E+5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs (EPA Method 8082)																				
PCBs, Total	ug/kg	NLL	NLL	NA	(T)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NA	NA	NA

Notes: See Last Page

TABLE 1A

Soil Analytical Data - Boring Locations

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID: / Date Collected: / Sample Depth (feet bgl): / Analytical Parameter	Units	Michigan Department of Environmental Quality Part 201 Non-Residential Soil Cleanup Criteria				B-41 Outside - In Corner of Building East of Auditorium and South of Building Wall 9/18/2007 6-8'	B-41 Outside - In Corner of Building East of Auditorium and South of Building Wall 9/18/2007 12-14'	B-42 Outside - Outside Gate on Southern Sidewalk, South of Auditorium 9/19/2007 NS	B-43 Outside - Eastern Parking Lot, West of B-40 9/20/2007 NS	B-44 Inside - East Side of Building, Classroom North of Freight Elevator, Along North Wall 9/24/2007 0-2'	B-44 Inside - East Side of Building, Classroom North of Freight Elevator, Along North Wall 9/24/2007 8-10'	B-45 Inside - Large Classroom West of Freight Elevator, Along North Wall 9/24/2007 0-2'	DUPE-4 (B-45) 9/24/2007 0-2'	B-45 Inside - Large Classroom West of Freight Elevator, Along North Wall 9/24/2007 10-12'	B-46 Inside - Basement, Along North Wall 2/14/2008 NS	B-47 Inside - Basement, Southeastern Corner 2/14/2008 NS	B-55 Former Lift Location (eastern-most) 1/25/2011 1-3'	B-56 Former Lift Location (western-most) 1/25/2011 4-5'	DUP-1 (B-56) 1/25/2011 4-5'
		Drinking Water Protection	Groundwater Surface Water Interface Protection	Soil Vapor Intrusion	Direct Contact Criteria														
TPH (EPA Method 418.1/1664A)	mg/kg	NA	NA	NA	NA	NA	NA	NS	NS	NA	NA	NA	NA	NA	NS	NS	40	7,274	7,767
PAHs (EPA Method 8310/8270C)																			
1-Methylnaphthalene	ug/kg	NA	NA	NA	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS	<300	<600	<600
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	1.3E+05	2.6E+07	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS	<300	<600	<600
Acenaphthene	ug/kg	8.8E+05	8,700	7.3E+06	1.3E+08	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS	<300	<600	<600
Acenaphthylene	ug/kg	17,000	ID	2.8E+06	5.2E+06	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS	<300	<600	<600
Anthracene	ug/kg	41,000	ID	6.0E+08	7.3E+08	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS	<300	<600	<600
Benz(a)anthracene	ug/kg	NLL	NLL	NA	80,000	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS	<300	<600	<600
Benzo(a)pyrene	ug/kg	NLL	NLL	NA	8,000	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS	<300	<600	<600
Benzo(b)fluoranthene	ug/kg	NLL	NLL	NA	80,000	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS	<300	<600	<600
Benzo(g,h,i)perylene	ug/kg	NLL	NLL	NA	7.0E+06	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS	<300	<600	<600
Benzo(k)fluoranthene	ug/kg	NLL	NLL	NA	8.0E+05	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS	<300	<600	<600
Chrysene	ug/kg	NLL	NLL	NA	8.0E+06	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS	<300	<600	<600
Dibenzo(a,h)anthracene	ug/kg	NLL	NLL	NA	8,000	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS	<300	<600	<600
Fluoranthene	ug/kg	7.3E+05	5,500	NA	1.3E+08	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS	<300	<600	<600
Fluorene	ug/kg	8.9E+05	5,300	1.2E+07	8.7E+07	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS	<300	<600	<600
Indeno(1,2,3-cd)pyrene	ug/kg	NLL	NLL	NA	80,000	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS	<300	<600	<600
Naphthalene	ug/kg	1.0E+05	730	8,940	5.2E+07	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS	<300	<600	<600
Phenanthrene	ug/kg	1.6E+05	2,100	8.6E+04	5.2E+06	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS	<300	<600	<600
Pyrene	ug/kg	4.8E+05	ID	1.1E+09	8.4E+07	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS	<300	<600	<600
Other Target PAHs	ug/kg	various	various	various	various	NA	NA	NS	NS	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND
VOCs (EPA Method 8260B)																			
1,1,1-Trichloroethane	ug/kg	4,000	1,800	6.7E+04	4.6E+05	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS	<60	<80	<80
1,1,2,2-Tetrachloroethane	ug/kg	700	1,600 (X)	230	2.4E+05	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS	<60	<80	<80
1,1,2-Trichloroethane	ug/kg	100	6,600 (X)	365	8.4E+05	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS	<60	<80	<80
1,1-Dichloroethane	ug/kg	50,000	15,000	83.7	8.9E+05	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS	<60	<80	<80
1,1-Dichloroethene	ug/kg	140	2,600	7,330	5.7E+05	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS	<60	<80	<80
1,2,3-Trimethylbenzene	ug/kg	NA	NA	5.35E+04	NA	NA	NA			<100	<100	<100	<100	<100			<100	<200	<200
1,2,4-Trimethylbenzene	ug/kg	2,100	570	3.7E+04	1.10E+05	NA	NA	NS	NS	<100	<100	<100	<100	<100	NS	NS	<100	<100	<100
1,2-Dichloroethane	ug/kg	100	7,200 (X)	84	91,000	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS	<60	<80	<80
1,2-Dichloropropane	ug/kg	100	4,600 (X)	151	5.5E+05	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS	<60	<80	<80
1,3,5-Trimethylbenzene	ug/kg	1,800	1,100	2.8E+04	94,000	NA	NA	NS	NS	<100	<100	<100	<100	<100	NS	NS	<100	<200	<200
2-Butanone	ug/kg	7.6E+05	44,000	3.0E+06	2.7E+07	NA	NA	NS	NS	<800	<800	<800	<800	<800	NS	NS	<960	<1200	<1200
2-Hexanone	ug/kg	58,000	ID	1.7E+04	2.5E+06	NA	NA	NS	NS	<3000	<3000	<3000	<3000	<3000	NS	NS	<3000	<4000	<4000
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	1.3E+05	NA	NA	NS	NS	<400	<400	<400	<400	<400	NS	NS	<400	<550	<550
4-Methyl-2-pentanone	ug/kg	1.5E+05	ID	1.0E+06	2.7E+06	NA	NA	NS	NS	<3000	<3000	<3000	<3000	<3000	NS	NS	<3000	<4000	<4000
Acetone	ug/kg	42,000	34,000	5.2E+06	7.3E+07	NA	NA	NS	NS	<1000	<1000	<1000	<1000	<1000	NS	NS	<1000	<2000	<2000
Benzene	ug/kg	100	4,000 (X)	85	4.0E+05	NA	NA	NS	NS	<50	<60	<50	<60	60	NS	NS	<60	<80	<80
Bromodichloromethane	ug/kg	1,600 (W)	ID	104	4.9E+05	NA	NA	NS	NS	<100	<100	<100	<100	<100	NS	NS	<100	<200	<200
Bromoform	ug/kg	1,600 (W)	ID	1.1E+04	8.7E+05	NA	NA	NS	NS	<100	<100	<100	<100	<100	NS	NS	<100	<200	<200
Bromomethane	ug/kg	580	700	200	1.0E+06	NA	NA	NS	NS	<200	<200	<200	<200	<200	NS	NS	<300	<300	<300
n-Butylbenzene	ug/kg	4,600	ID	7,650	8.00E+06	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS	<60	<80	<80
sec-Butylbenzene	ug/kg	4,600	ID	738	8.00E+06	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS	<60	<80	<80
Carbon disulfide	ug/kg	46,000	ID	3,800	2.8E+05 (C,DD)	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS	<300	<400	<400
Carbon tetrachloride	ug/kg	100	900 (X)	50	3.9E+05	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS	<60	<80	<80
Chlorobenzene	ug/kg	2,000	500	5,850	2.6E+05	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS	<60	<80	<80
Chloroethane	ug/kg	34,000	22,000 (X)	6.7E+04	9.5E+05	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS	<300	<400	<400
Chloroform	ug/kg	1,600 (W)	7,000	340	1.5E+06	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS	<60	<80	<80
Chloromethane	ug/kg	22,000	ID	323	1.1E+06	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS	<300	<400	<400
Dibromochloromethane	ug/kg	4,600	ID	266	5.0E+05	NA	NA	NS	NS	<100	<100	<100	<100	<100	NS	NS	<100	<200	<200
Ethylbenzene	ug/kg	1,500	360	3,990	1.4E+05	NA	NA	NS	NS	<50	<60	<50	<60	60	NS	NS	<60	<80	<80
p-Isopropyltoluene	ug/kg	2.6E+06	3,200	NA	3.9E+05	NA	NA	NS	NS	<100	<100	<100	<100	<100	NS	NS	<100	<200	<200
n-Propylbenzene	ug/kg	4,600	ID	2,370	8.0E+06	NA	NA	NS	NS	<100	<100	<100	<100	<100	NS	NS	<100	<200	<200
Methylene chloride	ug/kg	100	30,000 (X)	1,540	2.3E+06	NA	NA	NS	NS	<100	<100	<100	<100	<100	NS	NS	<100	<200	<200
Naphthalene	ug/kg	1.0E+05	730	8,940	5.2E+07	NA	NA	NS	NS	<400	<400	<400	<400	<400	NS	NS	<400	<550	<550
Styrene	ug/kg	2,700	2,100 (X)	3.0E+04	5.2E+05	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS	<60	<80	<80
Tetrachloroethene	ug/kg	100	1,200 (X)	1,030	88,000	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS	<60	<80	<80
Toluene	ug/kg	16,000	5,400	1.7E+05	2.5E+05	NA	NA	NS	NS	<100	<100	<100	<100	200	NS	NS	<100	<200	<200
Trichloroethene	ug/kg	100	4,000 (X)	50	5.0E+05	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS	<60	<80	<80
Vinyl chloride	ug/kg	40	260 (X)	40	34,000	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS	<40	<40	<40
cis-1,2-Dichloroethene	ug/kg	1,400	12,000	165	6.4E+05	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS	<60	<80	<80
cis-1,3-Dichloropropene	ug/kg	NA	NA	NA	NA	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS	<60	<80	<80
m,p-Xylene	ug/kg	NA	NA	NA	NA	NA	NA	NS	NS	<100	<100	<100	<100	<100	NS	NS	<100	<200	<200
o-Xylene	ug/kg	NA	NA	NA	NA	NA	NA	NS	NS	<50	<60	<50	<60	90	NS	NS	<60	<80	<80
trans-1,2-Dichloroethene	ug/kg	2,000	30,000 (X)	NA	1.4E+06	NA	NA	NS	NS	<50	<60	<50	<60	200	NS	NS	<60	<80	<80
trans-1,3-Dichloropropene	ug/kg	NA	NA	NA	NA	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS	<60	<80	<80
Xylenes, Total	ug/kg	5,600	820	4,890	1.5E+05	NA	NA	NS	NS	<150	<160	<150	<160	290	NS	NS	<160	<280	<280
1,2-Dichloroethene (total)	ug/kg	100	7,200 (X)	84	4.2E+05	NA	NA	NS	NS	NA	NA	NA	NA	NA	NS	NS	NA	NA	NA
Other Target VOCs	ug/kg	various	various	various	various	NA	NA	NS	NS	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND
MTBE (EPA Method 8021B/8260B)	ug/kg	800	1.4E+05	2.38E+05	5.9E+06	NA	NA	NS	NS	<200	<200	<200	<200	<200	NS	NS	<300	<300	<300
Total Metals (EPA Method 6010B/6020)																			
Arsenic	mg/kg	4.6	4.6	NLV	37	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4.09	0.69	0.53
Barium	mg/kg	1,300	440	NLV	1.3E+05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	40.1	7.90	7.05
Cadmium	mg/kg	6	3	NLV	2,100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.20	<0.20	<0.20
Chromium (Trivalent)	mg/kg	1.0E+06	2.9E+6	NLV	1.0E+06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	7.76	1.25	1.26
Copper	mg/kg	5,800	75	NLV	73,000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	11.4	2.72	2.89
Lead	mg/kg	700	2,500	NLV	900 (DD)	NA	NA	NS	NS	16.2	6.2	15.6	19.7	2.9	NS	NS	11.6	2.12	2.00
Mercury **(7471A)**	mg/kg	1.7	0.05	ID	580	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.050	<0.050	<0.050
Selenium	mg/kg	4	0.4	NLV	9,600	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.4	<0.4	<0.4
Silver	mg/kg	13	0.1	NLV	9,000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.1	<0.1	<0.1
Zinc	mg/kg	5,000	170	NLV	6.3E+5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	28.4	5.21	6.57
PCBs (EPA Method 8082)																			
PCBs, Total	ug/kg	NLL	NLL	NA	(T)	NA	NA	NS	NS	NA	NA	NA	NA	NA	NS	NS	<330	<330	<330

Notes: See Last Page

TABLE 1A, 1B, 1C and 1D NOTES

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Notes:

Exceedances: Cleanup Criteria and Screening Level Exceedances are bold.
Samples with TPH results greater than 100 mg/kg were analyzed for PAHs.
Soils were removed as part of the June 2012 soil excavation activities.
bgl: below ground level
NS: Not sampled.
ND / <: Not detected / <detection limit
NA: Not analyzed/Not Available
Soil Cleanup Criteria: - Part 201 (Environmental Remediation) of the Michigan Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451 (Revised December 30, 2013). Referenced are Non-Residential Cleanup Criteria and Screening Levels
- Groundwater Protection Criteria: Lowest value of Drinking Water Protection Criteria (DW), Groundwater/Surface Water Interface Protection Criteria (GSIP), and Groundwater Contact Protection Criteria (GWC).
- Indoor Air: Soil Volatilization to Indoor Air Inhalation Criteria. Ambient Air: Lowest Value of Infinite Source Volatile Soil Inhalation Criteria, Finite Source 2,5 Meter Thickness, and Particulate Soil Inhalation Criteria.
- Direct Contact: Lowest Value of Direct Contact Criteria and Soil Saturation Concentration Screening Levels.
Effective Solubility Screening Levels were obtained from the Effective Solubility Workgroup Report of Findings, dated February 28, 2008

C: Value presented is a screening level based on the chemical-specific generic soil saturation concentration (Csat) since the calculated risk-based criterion is greater than Csat. Concentrations greater than Csat are acceptable cleanup criteria for this pathway where a site-specific demonstration indicates that free-phase material containing a hazardous substance is not present.
D: Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0E+09 ug/kg.
DD: Hazardous substance causes developmental effects. Residential direct contact criteria are protective of both prenatal and postnatal exposure. Nonresidential direct contact criteria are protective for a pregnant adult receptor.
G: Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water. A value of 150 mg/L was used to calculate the GSI protection criteria value based on MDEQ Remediation Division, Operational Memorandum No. 5.
ID: Insufficient data to develop criterion.
J: Estimated value between method detection limit and practical quantitation limit.
NLL: Hazardous substance is not likely to leach under most soil conditions.
NLV: Hazardous substance is not likely to volatilize under most conditions.
T: Refer to the federal Toxic Substances Control Act (TSCA), 40 C.F.R. 761, Subpart D and 40 C.F.R. 761, Subpart G, to determine the applicability of TSCA cleanup standards.
W: Concentrations of trihalomethanes in soil shall be added together to determine compliance with the drinking water protection criteria of 1,6000 ug/kg.
X: The GSI criterion shown is not protective for surface water that is used as a drinking water source. For groundwater discharges to the Great Lakes and their connecting waters or discharges in close proximity to water supply intake(s) in inland surface waters, the generic GSI criterion is the Surface Water Human Drinking Water Value (HDV) listed in the table below except for those HDV indicted with an asterisk. For HDV with an asterisk, the generic GSI criterion is the lesser of the HDV, the WV and the calculated FCV (see formulas in footnote {G}). Soil protection criteria based on the HDV are listed below except for those values with an asterisk. Soil GSI protection criteria for compounds with an asterisk are the greater of the 20 X GSI and GSI soil-water partition values using the GSI criteria developed with the procedure described in this footnote.

TABLE 1B

Soil Analytical Data - Monitoring Well Locations

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:	Units	Michigan Department of Environmental Quality Part 201 Non-Residential Soil Cleanup Criteria				EW-1	EW-2	DUPE-3 (EW-2)	EW-2	MW-2	MW-2	MW-3	MW-4	MW-5	MW-6	DUPE-1(MW-6)	MW-6	B-52 Re-Occupy of Boring MW-6 -	MW-7	MW-7
						Outside - North of East Garage Door, East of Concrete Slab	Inside - Eastern Garage, South of Overhead Door		Inside - Eastern Garage, South of Overhead Door	Northwest Portion of Site - Release Delineation Monitoring Well	Northwest Portion of Site - Release Delineation Monitoring Well	Outside - North of Building, Along Western Fence, South of Gate	Outside - Southeastern Corner of Site, North of Catch Basin	Outside - Parking Lot East of Auditorium, Northwest of Sewer Grate	Inside - Northeastern Corner of Northern-most Classroom, East Side of Building		Inside - Northeastern Corner of Northern-most Classroom, East Side of Building	Inside - Northeastern Corner of Northern-most Classroom, East Side of Building	Inside - Southern End of Eastern Garage	Inside - Southern End of Eastern Garage
Date Collected:						12/1/2006	9/19/2007	9/19/2007	9/19/2007	12/1/2006	12/1/2006	12/1/2006	12/1/2006	12/1/2006	9/13/2007	9/13/2007	9/13/2007	1/25/2012	9/14/2007	9/14/2007
Sample Depth (feet bgl):						NA	0-2'	0-2'	3-5'	0-2'	3-5'	NA	0-2'	NA	0-2'	0-2'	6-8'	4-5'	0-2'	5-7'
Analytical Parameter		Drinking Water Protection	Groundwater Surface Water Interface Protection	Soil Vapor Intrusion	Direct Contact Criteria															
TPH (EPA Method 418.1)	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	18	17	NA	NA	NA	NA	NA	NA	NS	NA	NA
PAHs (EPA Method 8310)																				
1-Methylnaphthalene	ug/kg	NA	NA	NA	NA	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	400	NS	<300	<300
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	1.3E+05	2.6E+07	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	1,000	NS	<300	500
Acenaphthene	ug/kg	8.8E+05	8,700	7.3E+06	1.3E+08	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	NS	<300	<300
Acenaphthylene	ug/kg	17,000	ID	2.8E+06	5.2E+06	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	NS	<300	<300
Anthracene	ug/kg	41,000	ID	6.0E+08	7.3E+08	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	NS	<300	<300
Benz(a)anthracene	ug/kg	NLL	NLL	NA	80,000	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	NS	<300	<300
Benzo(a)pyrene	ug/kg	NLL	NLL	NA	8,000	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	NS	<300	<300
Benzo(b)fluoranthene	ug/kg	NLL	NLL	NA	80,000	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	NS	<300	<300
Benzo(g,h,i)perylene	ug/kg	NLL	NLL	NA	7.0E+06	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	NS	<300	<300
Benzo(k)fluoranthene	ug/kg	NLL	NLL	NA	8.0E+05	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	NS	<300	<300
Chrysene	ug/kg	NLL	NLL	NA	8.0E+06	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	NS	<300	<300
Dibenzo(a,h)anthracene	ug/kg	NLL	NLL	NA	8,000	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	NS	<300	<300
Fluoranthene	ug/kg	7.3E+05	5,500	NA	1.3E+08	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	NS	<300	<300
Fluorene	ug/kg	8.9E+05	5,300	1.2E+07	8.7E+07	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	NS	<300	<300
Indeno(1,2,3-cd)pyrene	ug/kg	NLL	NLL	NA	80,000	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	NS	<300	<300
Naphthalene	ug/kg	1.0E+05	730	8,940	5.2E+07	NA	<300	<300	400	<4	<3.7	NA	NA	NA	<300	<300	600	NS	<300	500
Phenanthrene	ug/kg	1.6E+05	2,100	8.6E+04	5.2E+06	NA	<300	<300	<300	5.3	<3.7	NA	NA	NA	<300	<300	<300	NS	<300	<300
Pyrene	ug/kg	4.8E+05	ID	1.1E+09	8.4E+07	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	NS	<300	<300
Other Target PAHs	ug/kg	various	various	various	various	NA	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	ND	NS	ND	ND
VOCs (EPA Method 8260B)																				
1,1,1-Trichloroethane	ug/kg	4,000	1800	6.7E+04	4.6E+05	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	NS	<60	<60
1,1,2,2-Tetrachloroethane	ug/kg	700	1,600 (X)	230	2.4E+05	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	NS	<60	<60
1,1,2-Trichloroethane	ug/kg	100	6,600 (X)	365	8.4E+05	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	NS	<60	<60
1,1-Dichloroethane	ug/kg	50,000	15,000	83.7	8.9E+05	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	NS	<60	<60
1,1-Dichloroethene	ug/kg	140	2,600	7,330	5.7E+05	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	NS	<60	<60
1,2,3-Trimethylbenzene	ug/kg	NA	NA	5.35E+04	NA	NA	<100	<100	1,300	NA	NA	NA	NA	NA	<100	<100	2,000		<100	2,200
1,2,4-Trimethylbenzene	ug/kg	2,100	570	3.7E+04	1.10E+05	NA	<100	<100	**5,800**	<6.1	<5.6	NA	NA	NA	<100	<100	**9,000**	NS	<100	**7,600**
1,2-Dichloroethane	ug/kg	100	7,200 (X)	84	91,000	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	NS	<60	<60
1,2-Dichloropropane	ug/kg	100	4,600 (X)	151	5.5E+05	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	NS	<60	<60
1,3,5-Trimethylbenzene	ug/kg	1,800	1,100	2.8E+04	94,000	NA	<100	<100	**1,500**	<6.1	<5.6	NA	NA	NA	<100	<100	**3,000**	NS	<100	**3,000**
n-Butylbenzene	ug/kg	4,600	ID	7,650	8.00E+06	NA	<60	<60	120	NA	NA	NA	NA	NA	<60	<60	900	NS	<60	850
sec-Butylbenzene	ug/kg	4,600	ID	738	8.00E+06	NA	<60	<60	<60	NA	NA	NA	NA	NA	<60	<60	<600	NS	<60	170
2-Butanone	ug/kg	7.6E+05	44,000	3.0E+06	2.7E+07	NA	<900	<900	<900	<25	<22	NA	NA	NA	<900	<900	<9000	NS	<900	<900
2-Hexanone	ug/kg	58,000	ID	1.7E+04	2.5E+06	NA	<3000	<3000	<3000	<12	<11	NA	NA	NA	<3000	<3000	<30000	NS	<3000	<3000
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	2.6E+07	NA	<400	<400	<400	NA	NA	NA	NA	NA	<400	<400	<4000	NS	<400	1,100
4-Methyl-2-pentanone	ug/kg	1.5E+05	ID	1.0E+06	2.7E+06	NA	<3000	<3000	<3000	<12	<11	NA	NA	NA	<3000	<3000	<30000	NS	<3000	<3000
Acetone	ug/kg	42,000	34,000	5.2E+06	7.3E+07	NA	<1000	<1000	<1000	<120	<110	NA	NA	NA	<1000	<1000	<10000	NS	<1000	<1000
Benzene	ug/kg	100	4,000 (X)	85	4.0E+05	NA	<60	<60	**7,900**	<6.1	<5.6	NA	NA	NA	<60	<60	**14,900**	NS	<60	**7,720**
Bromodichloromethane	ug/kg	1,600 (W)	ID	104	4.9E+05	NA	<100	<100	<100	<6.1	<5.6	NA	NA	NA	<100	<100	<1000	NS	<100	<300
Bromoform	ug/kg	1,600 (W)	ID	1.1E+04	8.7E+05	NA	<100	<100	<100	<6.1	<5.6	NA	NA	NA	<100	<100	<1000	NS	<100	<100
Bromomethane	ug/kg	580	700	200	1.0E+06	NA	<200	<200	<200	<12	<11	NA	NA	NA	<200	<200	<2000	NS	<200	<200
Carbon disulfide	ug/kg	46,000	ID	3,800	2.8E+05 (C,DD)	NA	<300	<300	<300	<6.1	<5.6	NA	NA	NA	<300	<300	<3000	NS	<300	<300
Carbon tetrachloride	ug/kg	100	900 (X)	50	3.9E+05	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	NS	<60	<60
Chlorobenzene	ug/kg	2,000	500	5,850	2.6E+05	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	NS	<60	<60
Chloroethane	ug/kg	34,000	22,000 (X)	6.7E+04	9.5E+05	NA	<300	<300	<300	<12	<11	NA	NA	NA	<300	<300	<3000	NS	<300	<300
Chloroform	ug/kg	1,600 (W)	7,000	340	1.5E+06	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	NS	<60	<60
Chloromethane	ug/kg	22,000	ID	323	1.1E+06	NA	<300	<300	<300	<12	<5.6	NA	NA	NA	<300	<300	<3000	NS	<300	<300
Dibromochloromethane	ug/kg	4,600	ID	266	5.0E+05	NA	<100	<100	<100	<6.1	<5.6	NA	NA	NA	<100	<100	<1000	NS	<100	<100
Ethylbenzene	ug/kg	1,500	360	3,990	1.4E+05	NA	<60	<60	**6,880**	<6.1	<5.6	NA	NA	NA	<60	<60	**9,500**	NS	<60	**8,530**
Isopropylbenzene	ug/kg	2.6E+06	3,200	NA	3.9E+05	NA	<300	<300	300	NA	NA	NA	NA	NA	<300	<300	<3000	NS	<300	600
Naphthalene	ug/kg	1.0E+05	730	8,940	5.2E+07	NA	<400	<400	**800**	NA	NA	NA	NA	NA	<400	<400	<4000	NS	<400	**1,500**
n-Propylbenzene	ug/kg	4,600	ID	2,370	8.0E+06	NA	<100	<100	1,200	NA	NA	NA	NA	NA	<100	<100	2,000	NS	<100	2,100
Methylene chloride	ug/kg	100	30,000 (X)	1,540	2.3E+06	NA	<100	<100	<100	<6.1	<5.6	NA	NA	NA	<100	<100	<1000	NS	<100	<100
Styrene	ug/kg	2,700	2,100 (X)	3.0E+04	5.2E+05	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	NS	<60	<60
Tetrachloroethene	ug/kg	100	1,200 (X)	1,030	88,000	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	NS	<60	<60
Toluene	ug/kg	16,000	5,400	1.7E+05	2.5E+05	NA	<100	<100	**12,000**	<6.1	<5.6	NA	NA	NA	<100	<100	**37,000**	NS	<100	**6,300**
Trichloroethene	ug/kg	100	4,000 (X)	50	5.0E+05	NA	**100**	**80**	**560**	<6.1	<5.6	NA	NA	NA	<60	<60	<600	NS	<60	<60
Vinyl chloride	ug/kg	40	260 (X)	40	34,000	NA	<60	<60	<60	<12	<5.6	NA	NA	NA	<60	<60	**800**	NS	<60	<60
cis-1,2-Dichloroethene	ug/kg	1,400	12,000	165	6.4E+05	NA	<60	<60	100	<6.1	<5.6	NA	NA	NA	<60	<60	**1,700**	NS	<60	<60
cis-1,3-Dichloropropene	ug/kg	NA	NA	NA	NA	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	NS	<60	<60
m,p-Xylene	ug/kg	NA	NA	NA	NA	NA	<100	<100	12,900	<6.1	<5.6	NA	NA	NA	100	<100	31,000	NS	<100	21,000
o-Xylene	ug/kg	NA	NA	NA	NA	NA	<60	<60	840	<6.1	<5.6	NA	NA	NA	<60	<60	10,700	NS	<60	3,510
trans-1,2-Dichloroethene	ug/kg	2,000	30,000 (X)	NA	1.4E+06	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	NS	<60	<60
trans-1,3-Dichloropropene	ug/kg	NA	NA	NA	NA	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	NS	<60	<60
Xylenes, Total	ug/kg	5,600	820	4,890	1.5E+05	NA	<160	<160	**13,740**	<12.2	<11.2	NA	NA	NA	<160	<160	**41,700**	NS	<160	**24,510**
1,2-Dichloroethene (total)	ug/kg	100	7,200 (X)	84	4.2E+05	NA	NA	NA	NA	<6.1	<5.6	NA	NA	NA	NA	NA	NA	NS	NA	NA
Other Target VOCs	ug/kg	various	various	various	various	NA	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	ND	NS	ND	ND
MTBE (EPA Method 8021B)	ug/kg	800	1.4E+05	2.38E+05	5.9E+06	NA	<200	<200	<200	<1.2	<1.1	NA	NA	NA	<200	<200	<30000	NS	<200	<200
Total Metals (EPA Method 6010B)																				
Arsenic	mg/kg	4.6	4.6	NLV	37	NA	NA	NA	NA	NS	NS	NA	NA	NA	NA	NA	NA	2.88	NA	NA
Barium	mg/kg	1,300	440	NLV	1.3E+05	NA	NA	NA	NA	NS	NS	NA	NA	NA	NA	NA	NA	10.50	NA	NA
Cadmium	mg/kg	6	3	NLV	2,100	NA	NA	NA	NA	NS	NS	NA	NA	NA	NA	NA	NA	<0.20	NA	NA
Chromium (Trivalent)	mg/kg	1.0E+06	2.9E+6	NLV	1.0E+06	NA	NA	NA	NA	NS	NS	NA	NA	NA	NA	NA	NA	2.79	NA	NA
Copper		5,800	75	NLV	73,000	NA	NA	NA	NA	NS	NS	NA	NA	NA	NA	NA	NA	6.09	NA	NA
Lead	mg/kg	700	2,500	NLV	900 (DD)	NA	6.0	8.0	11.7	NS	NS	NA	NA	NA	7.1	7.8	4.5	2.67	268.0	278.0
Mercury	mg/kg	1.7	0.05	ID	580	NA	NA	NA	NA	NS	NS	NA	NA	NA	NA	NA	NA	<0.050	NA	NA
Selenium	mg/kg	4	0.4	NLV	9,600	NA	NA	NA	NA	NS	NS	NA	NA	NA	NA	NA	NA	<0.4	NA	NA
Silver	mg/kg	13	0.1	NLV	9,000	NA	NA	NA	NA	NS	NS	NA	NA	NA	NA	NA	NA	<0.1	NA	NA
Zinc		5,000	170	NLV	6.3E+5	NA	NA	NA	NA	NS	NS	NA	NA	NA	NA	NA	NA	12.8	NA	NA
PCBs (EPA Method 8082)																				
PCBs, Total	ug/kg	NLL	NLL	NA	(T)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<330	NA	NA

Notes: See Last Page

TABLE 1B

Soil Analytical Data - Monitoring Well Locations

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:	Units	Michigan Department of Environmental Quality Part 201 Non-Residential Soil Cleanup Criteria				MW-8	MW-8	MW-9	MW-9	MW-10	MW-10	MW-11	MW-11	MW-12	MW-12	MW-13	MW-13	MW-14	MW-14
						Inside - Southern End of Western Garage	Inside - Southern End of Western Garage	Outside - Outside Gate on Southern Sidewalk, East of Building	Outside - Outside Gate on Southern Sidewalk, East of Building	Outside - Eastern Parking Lot, East of MW-16	Outside - Eastern Parking Lot, East of MW-16	Outside Gate on Western Sidewalk, Near Hydrant on Building Wall	Outside - Outside Gate on Western Sidewalk, Near Hydrant on Building Wall	Outside - East side of Building, North of Freight Elevator Door	Outside - East side of Building, North of Freight Elevator Door	Outside - Northern End of Parking Lot Along Mill Street Fence, East of MW-14 and Gate	Outside - Northern End of Parking Lot Along Mill Street Fence, East of MW-14 and Gate	Outside - Northern End of Parking Lot Along Mill Street Fence, West of MW-13	Outside - Northern End of Parking Lot Along Mill Street Fence, West of MW-14
Date Collected:						9/17/2007	9/17/2007	9/19/2007	9/19/2007	9/20/2007	9/20/2007	9/21/2007	9/21/2007	9/21/2007	9/21/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007
Sample Depth (feet bgl):						0-2'	8.5-10.5'	0-2'	3-5'	0-2'	7.75-9.75'	0-2'	13-15'	0-2'	9-11'	0-2'	8-10'	0-2'	7-9'
Analytical Parameter		Drinking Water Protection	Groundwater Surface Water Interface Protection	Soil Vapor Intrusion	Direct Contact Criteria														
TPH (EPA Method 418.1)	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (EPA Method 8310)																			
1-Methylnaphthalene	ug/kg	NA	NA	NA	NA	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	1.3E+05	2.6E+07	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Acenaphthene	ug/kg	8.8E+05	8,700	7.3E+06	1.3E+08	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Acenaphthylene	ug/kg	17,000	ID	2.8E+06	5.2E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Anthracene	ug/kg	41,000	ID	6.0E+08	7.3E+08	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benz(a)anthracene	ug/kg	NLL	NLL	NA	80,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(a)pyrene	ug/kg	NLL	NLL	NA	8,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(b)fluoranthene	ug/kg	NLL	NLL	NA	80,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(g,h,i)perylene	ug/kg	NLL	NLL	NA	7.0E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(k)fluoranthene	ug/kg	NLL	NLL	NA	8.0E+05	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Chrysene	ug/kg	NLL	NLL	NA	8.0E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Dibenzo(a,h)anthracene	ug/kg	NLL	NLL	NA	8,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Fluoranthene	ug/kg	7.3E+05	5,500	NA	1.3E+08	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Fluorene	ug/kg	8.9E+05	5,300	1.2E+07	8.7E+07	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Indeno(1,2,3-cd)pyrene	ug/kg	NLL	NLL	NA	80,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Naphthalene	ug/kg	1.0E+05	730	8,940	5.2E+07	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Phenanthrene	ug/kg	1.6E+05	2,100	8.6E+04	5.2E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Pyrene	ug/kg	4.8E+05	ID	1.1E+09	8.4E+07	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Other Target PAHs	ug/kg	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOCs (EPA Method 8260B)																			
1,1,1-Trichloroethane	ug/kg	4,000	1800	6.7E+04	4.6E+05	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
1,1,2,2-Tetrachloroethane	ug/kg	700	1,600 (X)	230	2.4E+05	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
1,1,2-Trichloroethane	ug/kg	100	6,600 (X)	365	8.4E+05	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
1,1-Dichloroethane	ug/kg	50,000	15,000	83.7	8.9E+05	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
1,1-Dichloroethene	ug/kg	140	2,600	7,330	5.7E+05	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
1,2,3-Trimethylbenzene	ug/kg	NA	NA	5.35E+04	NA	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<200	<100	<100
1,2,4-Trimethylbenzene	ug/kg	2,100	570	3.7E+04	1.10E+05	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<200	<100	<100
1,2-Dichloroethane	ug/kg	100	7,200 (X)	84	91,000	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
1,2-Dichloropropane	ug/kg	100	4,600 (X)	151	5.5E+05	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
1,3,5-Trimethylbenzene	ug/kg	1,800	1,100	2.8E+04	94,000	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<200	<100	<100
n-Butylbenzene	ug/kg	4,600	ID	7,650	8.00E+06	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
sec-Butylbenzene	ug/kg	4,600	ID	738	8.00E+06	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
2-Butanone	ug/kg	7.6E+05	44,000	3.0E+06	2.7E+07	<900	<800	<900	<800	<800	<800	<800	<800	<800	<800	<900	<1000	<900	<800
2-Hexanone	ug/kg	58,000	ID	1.7E+04	2.5E+06	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<4000	<3000	<3000
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	2.6E+07	<400	<300	<400	<300	<300	<400	<400	<300	<300	<300	<400	<500	<400	<400
4-Methyl-2-pentanone	ug/kg	1.5E+05	ID	1.0E+06	2.7E+06	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<4000	<3000	<3000
Acetone	ug/kg	42,000	34,000	5.2E+06	7.3E+07	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<2000	<1000	<1000
Benzene	ug/kg	100	4,000 (X)	85	4.0E+05	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
Bromodichloromethane	ug/kg	1,600 (W)	ID	104	4.9E+05	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<200	<100	<100
Bromoform	ug/kg	1,600 (W)	ID	1.1E+04	8.7E+05	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<200	<100	<100
Bromomethane	ug/kg	580	700	200	1.0E+06	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<300	<200	<200
Carbon disulfide	ug/kg	46,000	ID	3,800	2.8E+05 (C,DD)	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<400	<300	<300
Carbon tetrachloride	ug/kg	100	900 (X)	50	3.9E+05	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
Chlorobenzene	ug/kg	2,000	500	5,850	2.6E+05	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
Chloroethane	ug/kg	34,000	22,000 (X)	6.7E+04	9.5E+05	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<400	<300	<300
Chloroform	ug/kg	1,600 (W)	7,000	340	1.5E+06	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
Chloromethane	ug/kg	22,000	ID	323	1.1E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<400	<300	<300
Dibromochloromethane	ug/kg	4,600	ID	266	5.0E+05	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<200	<100	<100
Ethylbenzene	ug/kg	1,500	360	3,990	1.4E+05	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
Isopropylbenzene	ug/kg	2.6E+06	3,200	NA	3.9E+05	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<400	<300	<300
Naphthalene	ug/kg	1.0E+05	730	8,940	5.2E+07	<400	<300	<400	<300	<300	<400	<400	<300	<300	<300	<400	<500	<400	<400
n-Propylbenzene	ug/kg	4,600	ID	2,370	8.0E+06	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<200	<300	<100
Methylene chloride	ug/kg	100	30,000 (X)	1,540	2.3E+06	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<200	<100	<100
Styrene	ug/kg	2,700	2,100 (X)	3.0E+04	5.2E+05	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
Tetrachloroethene	ug/kg	100	1,200 (X)	1,030	88,000	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
Toluene	ug/kg	16,000	5,400	1.7E+05	2.5E+05	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<200	<100	<100
Trichloroethene	ug/kg	100	4,000 (X)	50	5.0E+05	<60	<50	<60	<50	<50	<50	<50	<50	**330**	**1,120**	<60	<80	<60	<50
Vinyl chloride	ug/kg	40	260 (X)	40	34,000	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
cis-1,2-Dichloroethene	ug/kg	1,400	12,000	165	6.4E+05	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
cis-1,3-Dichloropropene	ug/kg	NA	NA	NA	NA	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
m,p-Xylene	ug/kg	NA	NA	NA	NA	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<200	<100	<100
o-Xylene	ug/kg	NA	NA	NA	NA	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
trans-1,2-Dichloroethene	ug/kg	2,000	30,000 (X)	NA	1.4E+06	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
trans-1,3-Dichloropropene	ug/kg	NA	NA	NA	NA	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50
Xylenes, Total	ug/kg	5,600	820	4,890	1.5E+05	<160	<150	<160	<150	<150	<150	<150	<150	<150	<150	<160	<280	<160	<150
1,2-Dichloroethene (total)	ug/kg	100	7,200 (X)	84	4.2E+05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other Target VOCs	ug/kg	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE (EPA Method 8021B)	ug/kg	800	1.4E+05	2.38E+05	5.9E+06	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<300	<200	<200
Total Metals (EPA Method 6010B)																			
Arsenic	mg/kg	4.6	4.6	NLV	37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	mg/kg	1,300	440	NLV	1.3E+05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	mg/kg	6	3	NLV	2,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium (Trivalent)	mg/kg	1.0E+06	2.9E+6	NLV	1.0E+06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper		5,800	75	NLV	73,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/kg	700	2,500	NLV	900 (DD)	10.4	2.5	6.5	6.7	5.2	4.1	5.6	3.7	4.3	4.7	44.7	33.4	148	34.7
Mercury	mg/kg	1.7	0.05	ID	580	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/kg	4	0.4	NLV	9,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	mg/kg	13	0.1	NLV	9,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc		5,000	170	NLV	6.3E+5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (EPA Method 8082)																			
PCBs, Total	ug/kg	NLL	NLL	NA	(T)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: See Last Page

TABLE 1B

Soil Analytical Data - Monitoring Well Locations

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:	Units	Michigan Department of Environmental Quality Part 201 Non-Residential Soil Cleanup Criteria				MW-15	MW-15	MW-16	MW-16	MW-17	MW-18	MW-18	MW-19	MW-20	MW-24D	MW-24D	MW-25	MW-26	MW-27
						Outside - Parking Lot East of Building, Off Northeast Corner of Building, West of MW-16	Outside - Parking Lot East of Building, Off Northeast Corner of Building, West of MW-16	Outside - Parking Lot East of Building, Off Northeast Corner of Building, East of MW-15	Outside - Parking Lot East of Building, Off Northeast Corner of Building, East of MW-15	Outside - Parking Lot East of Building, Off Southeast Corner of Building, West of MW-18	Outside - Parking Lot East of Building, Off Southeast Corner of Building, East of MW-17	Outside - Parking Lot East of Building, Off Southeast Corner of Building, East of MW-17	Outside - City of Pontiac Property Located West of the Site	Outside - City of Pontiac Property Located West of the Site	Re-Occupy of Boring B-28 - Inside	Re-Occupy of Boring B-28 - Inside	Outside - Mill Street ROW	Outside - Mill Street ROW	Outside - Mill Street ROW
Date Collected:						10/3/2007	10/3/2007	10/3/2007	10/3/2007	10/3/2007	10/3/2007	10/3/2007	11/17/2010	11/17/2010	1/7/2013	1/7/2013	1/8/2013	1/8/2013	1/8/2013
Sample Depth (feet bgl):						0-2'	4.5-6.5'	0-2'	3-5'	NC	0-2'	5.5-7.5'	4-5'	4.5-5.5'	13-14'	24-25'	6-7'	4-5'	6-8'
Analytical Parameter		Drinking Water Protection	Groundwater Surface Water Interface Protection	Soil Vapor Intrusion	Direct Contact Criteria														
TPH (EPA Method 418.1)	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (EPA Method 8310)																			
1-Methylnaphthalene	ug/kg	NA	NA	NA	NA	<300	<300	<300	<300	NS	<300	<300	NA	NA	500	NA	NA	NA	NA
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	1.3E+05	2.6E+07	<300	<300	<300	<300	NS	<300	<300	<300	<300	1,200	<300	<300	<300	<300
Acenaphthene	ug/kg	8.8E+05	8,700	7.3E+06	1.3E+08	<300	<300	<300	<300	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Acenaphthylene	ug/kg	17,000	ID	2.8E+06	5.2E+06	<300	<300	<300	<300	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Anthracene	ug/kg	41,000	ID	6.0E+08	7.3E+08	<300	<300	<300	<300	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benz(a)anthracene	ug/kg	NLL	NLL	NA	80,000	<300	<300	<300	<300	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(a)pyrene	ug/kg	NLL	NLL	NA	8,000	<300	<300	<300	<300	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(b)fluoranthene	ug/kg	NLL	NLL	NA	80,000	<300	<300	<300	<300	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(g,h,i)perylene	ug/kg	NLL	NLL	NA	7.0E+06	<300	<300	<300	<300	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(k)fluoranthene	ug/kg	NLL	NLL	NA	8.0E+05	<300	<300	<300	<300	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Chrysene	ug/kg	NLL	NLL	NA	8.0E+06	<300	<300	<300	<300	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Dibenzo(a,h)anthracene	ug/kg	NLL	NLL	NA	8,000	<300	<300	<300	<300	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Fluoranthene	ug/kg	7.3E+05	5,500	NA	1.3E+08	<300	<300	<300	<300	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Fluorene	ug/kg	8.9E+05	5,300	1.2E+07	8.7E+07	<300	<300	<300	<300	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Indeno(1,2,3-cd)pyrene	ug/kg	NLL	NLL	NA	80,000	<300	<300	<300	<300	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Naphthalene	ug/kg	1.0E+05	730	8,940	5.2E+07	<300	<300	<300	<300	NS	<300	<300	<300	<300	**1,500**	<300	<300	<300	<300
Phenanthrene	ug/kg	1.6E+05	2,100	8.6E+04	5.2E+06	<300	<300	<300	<300	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Pyrene	ug/kg	4.8E+05	ID	1.1E+09	8.4E+07	<300	<300	<300	<300	NS	<300	<300	<300	<300	<300	<300	<300	<300	<300
Other Target PAHs	ug/kg	various	various	various	various	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOCs (EPA Method 8260B)										NS									
1,1,1-Trichloroethane	ug/kg	4,000	1800	6.7E+04	4.6E+05	<60	<60	<50	<50	NS	<50	<50	<70	<70	<600	<60	<60	<70	<60
1,1,2,2-Tetrachloroethane	ug/kg	700	1,600 (X)	230	2.4E+05	<60	<60	<50	<50	NS	<50	<50	<70	<70	<600	<60	<60	<70	<60
1,1,2-Trichloroethane	ug/kg	100	6,600 (X)	365	8.4E+05	<60	<250	<50	<50	NS	<50	<50	<70	<70	<600	<60	<60	<70	<60
1,1-Dichloroethane	ug/kg	50,000	15,000	83.7	8.9E+05	<60	<60	<50	<50	NS	<50	<50	<70	<70	<600	<60	<60	<70	<60
1,1-Dichloroethene	ug/kg	140	2,600	7,330	5.7E+05	<60	<60	<50	<50	NS	<50	<50	<70	<70	<600	<60	<60	<70	<60
1,2,3-Trimethylbenzene	ug/kg	NA	NA	5.35E+04	NA	<100	2,100	<100	<100	NS	<100	<100	<100	<100	5,000	<100	<100	<100	<100
1,2,4-Trimethylbenzene	ug/kg	2,100	570	3.7E+04	1.10E+05	<100	**9,800**	<100	<100	NS	<100	<100	<100	<100	**20,000**	<100	<100	<100	<100
1,2-Dichloroethane	ug/kg	100	7,200 (X)	84	91,000	<60	<60	<50	<50	NS	<50	<50	<70	<70	<600	<60	<60	<70	<60
1,2-Dichloropropane	ug/kg	100	4,600 (X)	151	5.5E+05	<60	<80	<50	<50	NS	<50	<50	<70	<70	<600	<60	<60	<70	<60
1,3,5-Trimethylbenzene	ug/kg	1,800	1,100	2.8E+04	94,000	<100	**3,100**	<100	<100	NS	<100	<100	<100	<100	**7,000**	<100	<100	<100	<100
n-Butylbenzene	ug/kg	4,600	ID	7,650	8.00E+06	<60	1,160	<50	<50	NS	<50	<50	<70	<70	1,000	<60	<60	<70	<60
sec-Butylbenzene	ug/kg	4,600	ID	738	8.00E+06	<60	210	<50	<50	NS	<50	<50	<70	<70	<600	<60	<60	<70	<60
2-Butanone	ug/kg	7.6E+05	44,000	3.0E+06	2.7E+07	<900	<900	<800	<800	NS	<800	<800	<1000	<1000	<9,600	<900	<970	<1,100	<940
2-Hexanone	ug/kg	58,000	ID	1.7E+04	2.5E+06	<3000	<3000	<3000	<3000	NS	<3000	<3000	<3000	<4000	<30,000	<3,000	<3,000	<4,000	<3,000
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	2.6E+07	<400	1,600	<400	<400	NS	<400	<400	<500	<500	<4,200	<390	<430	<460	<410
4-Methyl-2-pentanone	ug/kg	1.5E+05	ID	1.0E+06	2.7E+06	<3000	<3000	<3000	<3000	NS	<3000	<3000	<3000	<4000	<30,000	<3,000	<3,000	<4,000	<3,000
Acetone	ug/kg	42,000	34,000	5.2E+06	7.3E+07	<1000	<5000	<1000	<1000	NS	<1000	<1000	<1000	<1000	<10,000	<1,000	<1,000	<1,000	<1,000
Benzene	ug/kg	100	4,000 (X)	85	4.0E+05	<60	<60	<50	<50	NS	<50	<50	<70	<70	**12,400**	**390**	<60	<70	<60
Bromodichloromethane	ug/kg	1,600 (W)	ID	104	4.9E+05	<100	<200	<100	<100	NS	<100	<100	<100	<100	<1,000	<100	<100	<100	<100
Bromoform	ug/kg	1,600 (W)	ID	1.1E+04	8.7E+05	<100	<100	<100	<100	NS	<100	<100	<100	<100	<1,000	<100	<100	<100	<100
Bromomethane	ug/kg	580	700	200	1.0E+06	<200	<200	<200	<200	NS	<200	<200	<300	<300	<3,000	<200	<300	<300	<300
Carbon disulfide	ug/kg	46,000	ID	3,800	2.8E+05 (C,DD)	<300	<300	<300	<300	NS	<300	<300	<300	<400	<3,000	<300	<300	<400	<300
Carbon tetrachloride	ug/kg	100	900 (X)	50	3.9E+05	<60	<60	<50	<50	NS	<50	<50	<70	<70	<600	<60	<60	<70	<60
Chlorobenzene	ug/kg	2,000	500	5,850	2.6E+05	<60	<60	<50	<50	NS	<50	<50	<70	<70	<600	<60	<60	<70	<60
Chloroethane	ug/kg	34,000	22,000 (X)	6.7E+04	9.5E+05	<300	<300	<300	<300	NS	<300	<300	<300	<400	<3,000	<300	<300	<400	<300
Chloroform	ug/kg	1,600 (W)	7,000	340	1.5E+06	<60	<140	<50	<50	NS	<50	<50	<70	<70	<600	<60	<60	<70	<60
Chloromethane	ug/kg	22,000	ID	323	1.1E+06	<300	<300	<300	<300	NS	<300	<300	<300	<400	<3,000	<300	<300	<400	<300
Dibromochloromethane	ug/kg	4,600	ID	266	5.0E+05	<100	<100	<100	<100	NS	<100	<100	<100	<100	<3,000	<100	<100	<100	<100
Ethylbenzene	ug/kg	1,500	360	3,990	1.4E+05	<60	**7,280**	<50	<50	NS	<50	<50	<70	<70	**16,200**	<60	<60	<70	<60
Isopropylbenzene	ug/kg	2.6E+06	3,200	NA	3.9E+05	<300	500	<300	<300	NS	<300	<300	<300	<400	<3,000	<300	<300	<400	<300
Naphthalene	ug/kg	1.0E+05	730	8,940	5.2E+07	<400	**1,700**	<400	<400	NS	<400	<400	<500	<500	<4,200	<390	<430	<460	<410
n-Propylbenzene	ug/kg	4,600	ID	2,370	8.0E+06	<100	2,400	<100	<100	NS	<100	<100	<100	<100	**5,000**	<100	<100	<100	<100
Methylene chloride	ug/kg	100	30,000 (X)	1,540	2.3E+06	<100	<100	<100	<100	NS	<100	<100	<100	<100	<1,000	<100	<100	<100	<100
Styrene	ug/kg	2,700	2,100 (X)	3.0E+04	5.2E+05	<60	<60	<50	<50	NS	<50	<50	<70	<70	<600	<60	<60	<70	<60
Tetrachloroethene	ug/kg	100	1,200 (X)	1,030	88,000	<60	<60	<50	<50	NS	<50	<50	<70	<70	<600	<60	<60	<70	<60
Toluene	ug/kg	16,000	5,400	1.7E+05	2.5E+05	<100	100	<100	<100	NS	<100	<100	<100	<100	**63,000**	<100	<100	<100	<100
Trichloroethene	ug/kg	100	4,000 (X)	50	5.0E+05	<60	<60	<50	<50	NS	<50	<50	<70	<70	<600	<60	<60	<70	**90**
Vinyl chloride	ug/kg	40	260 (X)	40	34,000	<60	<60	<50	<50	NS	<50	<50	<70	<70	<600	<60	<60	<70	<60
cis-1,2-Dichloroethene	ug/kg	1,400	12,000	165	6.4E+05	<60	<60	<50	<50	NS	<50	<50	<70	<70	<600	<60	<60	<70	<60
cis-1,3-Dichloropropene	ug/kg	NA	NA	NA	NA	<60	<60	<50	<50	NS	<50	<50	<70	<70	<600	<60	<60	<70	<60
m,p-Xylene	ug/kg	NA	NA	NA	NA	<100	12,900	<100	<100	NS	<100	<100	<100	<100	59,000	<100	<100	<100	<100
o-Xylene	ug/kg	NA	NA	NA	NA	<60	830	<50	<50	NS	<50	<50	<70	<70	23,600	<60	<60	<70	<60
trans-1,2-Dichloroethene	ug/kg	2,000	30,000 (X)	NA	1.4E+06	<60	<60	<50	<50	NS	<50	<50	<70	<70	<600	<60	<60	<70	<60
trans-1,3-Dichloropropene	ug/kg	NA	NA	NA	NA	<60	<60	<50	<50	NS	<50	<50	<70	<70	<600	<60	<60	<70	<60
Xylenes, Total	ug/kg	5,600	820	4,890	1.5E+05	<160	**13,730**	<150	<150	NS	<150	<150	<170	<170	**82,600**	<160	<160	<170	<160
1,2-Dichloroethene (total)	ug/kg	100	7,200 (X)	84	4.2E+05	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other Target VOCs	ug/kg	various	various	various	various	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE (EPA Method 8021B)	ug/kg	800	1.4E+05	2.38E+05	5.9E+06	<200	<200	<200	<200	NS	<200	<200	<300	<300	<3,000	<200	<300	<300	<300
Total Metals (EPA Method 6010B)																			
Arsenic	mg/kg	4.6	4.6	NLV	37	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	mg/kg	1,300	440	NLV	1.3E+05	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	mg/kg	6	3	NLV	2,100	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium (Trivalent)	mg/kg	1.0E+06	2.9E+6	NLV	1.0E+06	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper		5,800	75	NLV	73,000	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/kg	700	2,500	NLV	900 (DD)	4.7	5.9	4.4	3.8	NS	4.2	3.9	2.2	7.7	4.6	9.1	2.1	8.4	3.3
Mercury	mg/kg	1.7	0.05	ID	580	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/kg	4	0.4	NLV	9,600	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	mg/kg	13	0.1	NLV	9,000	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc		5,000	170	NLV	6.3E+5	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (EPA Method 8082)																			
PCBs, Total	ug/kg	NLL	NLL	NA	(T)	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: See Last Page

TABLE 1A, 1B, 1C and 1D NOTES

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Notes:

Exceedances: Cleanup Criteria and Screening Level Exceedances are bold.
Samples with TPH results greater than 100 mg/kg were analyzed for PAHs.
Soils were removed as part of the June 2012 soil excavation activities.
bgl: below ground level
NS: Not sampled.
ND / <: Not detected / <detection limit
NA: Not analyzed/Not Available
Soil Cleanup Criteria: - Part 201 (Environmental Remediation) of the Michigan Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451 (Revised December 30, 2013). Referenced are Non-Residential Cleanup Criteria and Screening Levels
- Groundwater Protection Criteria: Lowest value of Drinking Water Protection Criteria (DW), Groundwater/Surface Water Interface Protection Criteria (GSIP), and Groundwater Contact Protection Criteria (GWC).
- Indoor Air: Soil Volatilization to Indoor Air Inhalation Criteria. Ambient Air: Lowest Value of Infinite Source Volatile Soil Inhalation Criteria, Finite Source 2,5 Meter Thickness, and Particulate Soil Inhalation Criteria.
- Direct Contact: Lowest Value of Direct Contact Criteria and Soil Saturation Concentration Screening Levels.
Effective Solubility Screening Levels were obtained from the Effective Solubility Workgroup Report of Findings, dated February 28, 2008

C: Value presented is a screening level based on the chemical-specific generic soil saturation concentration (Csat) since the calculated risk-based criterion is greater than Csat. Concentrations greater than Csat are acceptable cleanup criteria for this pathway where a site-specific demonstration indicates that free-phase material containing a hazardous substance is not present.
D: Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0E+09 ug/kg.
DD: Hazardous substance causes developmental effects. Residential direct contact criteria are protective of both prenatal and postnatal exposure. Nonresidential direct contact criteria are protective for a pregnant adult receptor.
G: Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water. A value of 150 mg/L was used to calculate the GSI protection criteria value based on MDEQ Remediation Division, Operational Memorandum No. 5.
ID: Insufficient data to develop criterion.
J: Estimated value between method detection limit and practical quantitation limit.
NLL: Hazardous substance is not likely to leach under most soil conditions.
NLV: Hazardous substance is not likely to volatilize under most conditions.
T: Refer to the federal Toxic Substances Control Act (TSCA), 40 C.F.R. 761, Subpart D and 40 C.F.R. 761, Subpart G, to determine the applicability of TSCA cleanup standards.
W: Concentrations of trihalomethanes in soil shall be added together to determine compliance with the drinking water protection criteria of 1,6000 ug/kg.
X: The GSI criterion shown is not protective for surface water that is used as a drinking water source. For groundwater discharges to the Great Lakes and their connecting waters or discharges in close proximity to water supply intake(s) in inland surface waters, the generic GSI criterion is the Surface Water Human Drinking Water Value (HDV) listed in the table below except for those HDV indicted with an asterisk. For HDV with an asterisk, the generic GSI criterion is the lesser of the HDV, the WV and the calculated FCV (see formulas in footnote {G}). Soil protection criteria based on the HDV are listed below except for those values with an asterisk. Soil GSI protection criteria for compounds with an asterisk are the greater of the 20 X GSI and GSI soil-water partition values using the GSI criteria developed with the procedure described in this footnote.

Table 1C
Soil Analytical Data - September 2014 Delineation Soil Boring Locations

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:	Units	Michigan Department of Environmental Quality Part 201 Non-Residential Soil Cleanup Criteria				B-57	B-58		B-59	B-60	B-60	B-60
Date Collected:						9/23/2014	9/23/2014		9/23/2014	9/23/2014	9/23/2014	9/23/2014
Sample Depth (feet bgl):		Drinking Water Protection	Groundwater Surface Water Interface	Soil Vapor Intrusion	Direct Contact Criteria	14-15'	14-15'	DUP	12-13'	8-10'	12-13'	18-20'
Analytical Parameter												
VOCs (EPA Method 8260B)												
1,2,3-Trimethylbenzene	ug/kg	NA	NA	5.35E+04	NA	<100	<100	<100	100	200	2,100	<100
1,2,4-Trimethylbenzene	ug/kg	2,100	570	3.7E+04	1.0E+08 {C}	<100	<100	<100	<100	400	**7,700**	<100
1,3,5-Trimethylbenzene	ug/kg	1,800	1,100	27,900	1.0E+08 {C}	<100	<100	<100	200	100	**2,800**	<100
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	1.3E+05	2.6E+07	<390	<440	<440	<430	<370	<420	<390
Benzene	ug/kg	100	4,000 (X)	85	8.4E+05 {C}	<60	<70	<70	**7,630**	<60	**3,410**	<60
n-Butylbenzene	ug/kg	4,600	ID	7,650	8.00E+06	<60	<70	<70	<70	100	370	<60
Ethylbenzene	ug/kg	1,500	360	3,990	7.1E+07 {C}	<60	<70	<70	**2,180**	<60	**9,790**	<60
Isopropylbenzene	ug/kg	2.6.E+05	3,200	3.04E+02	8.0E+7 (C)	<300	<300	<300	<300	<300	600	<300
n-Propylbenzene	ug/kg	4,600	ID	2,370	8.0E+06	<100	<100	<100	<100	<100	2,000	<100
Naphthalene	ug/kg	1.0E+05	730	8,940	5.2E+07	<390	<440	<440	<430	<370	**1,820**	<390
Toluene	ug/kg	16,000	5,400	1.7E+05	1.6E+08 {C}	<100	200	200	<100	<100	200	<100
Trichloroethene	ug/kg	100	4,000 (X)	50	6.6E+05 (C,DD)	<60	**340**	**330**	<70	<60	<60	<60
m,p-Xylene	ug/kg	NA	NA	NA	NA	<100	300	300	400	<100	21,800	<100
o-Xylene	ug/kg	NA	NA	NA	NA	<60	130	160	150	<60	410	<60
Xylenes, Total	ug/kg	5,600	820	4,890	1.0E+09 (C,DD)	<160	430	460	550	<160	**22,210**	<160
Other Target VOCs	ug/kg	various	various	various	various	ND	ND	ND	ND	ND	ND	ND
MTBE (EPA Method 8021B/8260B)	ug/kg	800	1.4E+05	2.38E+05	5.9E+06	<200	<300	<300	<300	<200	<300	<200

Table 1C
Soil Analytical Data - September 2014 Delineation Soil Boring Locations

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:	Units	Michigan Department of Environmental Quality Part 201 Non-Residential Soil Cleanup Criteria				B-61	B-62	B-62	B-62		B-63	B-64
Date Collected:						9/23/2014	9/24/2014	9/24/2014	9/24/2014		9/23/2014	9/24/2014
Sample Depth (feet bgl):		Drinking Water Protection	Groundwater Surface Water Interface	Soil Vapor Intrusion	Direct Contact Criteria	11-13'	7-9'	12-13'	17.5-19.5'	DUP	11-12'	8.5-9.5'
Analytical Parameter												
VOCs (EPA Method 8260B)												
1,2,3-Trimethylbenzene	ug/kg	NA	NA	5.35E+04	NA	<100	<100	<200	<100	<100	<100	<100
1,2,4-Trimethylbenzene	ug/kg	2,100	570	3.7E+04	1.0E+08 {C}	<100	<100	<200	<100	<100	<100	<100
1,3,5-Trimethylbenzene	ug/kg	1,800	1,100	27,900	1.0E+08 {C}	<100	<100	<200	<100	<100	<100	<100
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	1.3E+05	2.6E+07	<410	<450	<500	<410	<420	<410	<430
Benzene	ug/kg	100	4,000 (X)	85	8.4E+05 {C}	**4,200**	<70	<80	**90**	**180**	<60	<70
n-Butylbenzene	ug/kg	4,600	ID	7,650	8.00E+06	<60	<70	<80	<60	<60	<60	<70
Ethylbenzene	ug/kg	1,500	360	3,990	7.1E+07 {C}	<60	<70	<80	<60	<60	<60	<70
Isopropylbenzene	ug/kg	2.6.E+05	3,200	3.04E+02	8.0E+7 (C)	<300	<300	<400	<300	<300	<300	<300
n-Propylbenzene	ug/kg	4,600	ID	2,370	8.0E+06	<100	<100	<200	<100	<100	<100	<100
Naphthalene	ug/kg	1.0E+05	730	8,940	5.2E+07	<410	<450	<500	<410	<420	<410	<430
Toluene	ug/kg	16,000	5,400	1.7E+05	1.6E+08 {C}	<100	<100	<200	<100	<100	<100	<100
Trichloroethene	ug/kg	100	4,000 (X)	50	6.6E+05 (C,DD)	<60	<70	100	<60	<60	<60	<70
m,p-Xylene	ug/kg	NA	NA	NA	NA	<100	<100	<200	<100	<100	<100	<100
o-Xylene	ug/kg	NA	NA	NA	NA	<60	<70	<80	<60	<60	<60	<70
Xylenes, Total	ug/kg	5,600	820	4,890	1.0E+09 (C,DD)	<160	<170	<280	<160	<160	<160	<170
Other Target VOCs	ug/kg	various	various	various	various	ND	ND	ND	ND	ND	ND	ND
MTBE (EPA Method 8021B/8260B)	ug/kg	800	1.4E+05	2.38E+05	5.9E+06	<200	<300	<300	<200	<300	<200	<300

TABLE 1A, 1B, 1C and 1D

Soil Analytical Data - Boring Locations

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Notes:

Exceedances: Cleanup Criteria and Screening Level Exceedances are bold.
Samples with TPH results greater than 100 mg/kg were analyzed for PAHs.
Soils were removed as part of the June 2012 soil excavation activities.
bgl: below ground level
NS: Not sampled.
ND / <: Not detected / <detection limit
NA: Not analyzed/Not Available
Soil Cleanup Criteria: - Part 201 (Environmental Remediation) of the Michigan Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451 (Revised December 30, 2013). Referenced are Non-Residential Cleanup Criteria and Screening Levels
- Groundwater Protection Criteria: Lowest value of Drinking Water Protection Criteria (DW), Groundwater/Surface Water Interface Protection Criteria (GSIP), and Groundwater Contact Protection Criteria (GWC).
- Indoor Air: Soil Volatilization to Indoor Air Inhalation Criteria. Ambient Air: Lowest Value of Infinite Source Volatile Soil Inhalation Criteria, Finite Source 2,5 Meter Thickness, and Particulate Soil Inhalation Criteria.
- Direct Contact: Lowest Value of Direct Contact Criteria and Soil Saturation Concentration Screening Levels.
Effective Solubility Screening Levels were obtained from the Effective Solubility Workgroup Report of Findings, dated February 28, 2008

C: Value presented is a screening level based on the chemical-specific generic soil saturation concentration (Csat) since the calculated risk-based criterion is greater than Csat. Concentrations greater than Csat are acceptable cleanup criteria for this pathway where a site-specific demonstration indicates that free-phase material containing a hazardous substance is not present.
D: Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0E+09 ug/kg.
DD: Hazardous substance causes developmental effects. Residential direct contact criteria are protective of both prenatal and postnatal exposure. Nonresidential direct contact criteria are protective for a pregnant adult receptor.
G: Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water. A value of 150 mg/L was used to calculate the GSI protection criteria value based on MDEQ Remediation Division, Operational Memorandum No. 5.
ID: Insufficient data to develop criterion.
J: Estimated value between method detection limit and practical quantitation limit.
NLL: Hazardous substance is not likely to leach under most soil conditions.
NLV: Hazardous substance is not likely to volatilize under most conditions.
T: Refer to the federal Toxic Substances Control Act (TSCA), 40 C.F.R. 761, Subpart D and 40 C.F.R. 761, Subpart G, to determine the applicability of TSCA cleanup standards.
W: Concentrations of trihalomethanes in soil shall be added together to determine compliance with the drinking water protection criteria of 1,6000 ug/kg.
X: The GSI criterion shown is not protective for surface water that is used as a drinking water source. For groundwater discharges to the Great Lakes and their connecting waters or discharges in close proximity to water supply intake(s) in inland surface waters, the generic GSI criterion is the Surface Water Human Drinking Water Value (HDV) listed in the table below except for those HDV indicted with an asterisk. For HDV with an asterisk, the generic GSI criterion is the lesser of the HDV, the WV and the calculated FCV (see formulas in footnote {G}). Soil protection criteria based on the HDV are listed below except for those values with an asterisk. Soil GSI protection criteria for compounds with an asterisk are the greater of the 20 X GSI and GSI soil-water partition values using the GSI criteria developed with the procedure described in this footnote.

TABLE 1D

Excavation Confirmation Sample Results (May-June 2012)

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID: Date/Time Collected: Sample Depth Shake Test Results Analytical Parameter	Units	Michigan Department of Environmental Quality Part 201 Non-Residential Soil Cleanup Criteria				Excavation Sidewall Samples													
		Drinking Water Protection	Groundwater Surface Water Interface Protection	Soil Vapor Intrusion	Direct Contact	ASW-01 5/30/2012 5-6 Neg	ASW-01 5/30/2012 11-12 Neg	ASW-02 5/30/2012 6-7 Neg	ASW-03 5/31/2012 6-7 Neg	ASW-04 6/5/2012 5-6 Neg	ASW-05 6/6/2012 8-9 Neg	ASW-06 6/6/2012 5-6 Neg	ASW-07 6/6/2012 7-8 Neg	ASW-08 6/13/2012 0:00 7-8 Neg	ASW-09 6/12/2012 8-9 Neg	ASW-09R 6/15/2012 7-8 NA	ASW-10 6/13/2012 7-8 Neg	ASW-10R 6/15/2012 7-8 NA	ASW-11 6/12/2012 5-6 NA	ASW-12 6/11/2012 5-6 Neg
VOCs																			
1,1,1-Trichloroethane	ug/kg	4,000	1800	6.7E+04	4.6E+05	<80	NA	<60	<60	<60	<60	<60	<60	<70	<60	<60	<70	<70	<60	<60
1,1,2,2-Tetrachloroethane	ug/kg	700	1,600 (X)	230	2.4E+05	<80	NA	<60	<60	<60	<60	<60	<60	<70	<60	<60	<70	<70	<60	<60
1,1,2-Trichloroethane	ug/kg	100	6,600 (X)	365	8.4E+05	<80	NA	<60	<60	<60	<60	<60	<60	<70	<60	<60	<70	<70	<60	<60
1,1-Dichloroethane	ug/kg	50,000	15,000	83.7	8.9E+05	<80	NA	<60	<60	<60	<60	<60	<60	<70	<60	<60	<70	<70	<60	<60
1,1-Dichloroethene	ug/kg	140	2,600	7,330	5.7E+05	<80	NA	<60	<60	<60	<60	<60	<60	<70	<60	<60	<70	<70	<60	<60
1,2,3-Trimethylbenzene	ug/kg	NA	NA	5.35E+04	NA	200	NA	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
1,2,4-Trimethylbenzene	ug/kg	2,100	570	3.7E+04	110,000	500	NA	<100	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
1,2-Dichloroethane	ug/kg	100	7,200 (X)	84	4.20E+05	<80	NA	<60	<60	<60	<60	<60	<60	<70	<360	<60	<340	<70	<60	<60
1,2-Dichloropropane	ug/kg	100	4,600 (X)	151	5.5E+5 (C)	<80	e	<60	<60	<60	<60	<60	<60	<70	<60	<60	<70	<70	<60	<60
1,3,5-Trimethylbenzene	ug/kg	1,800	1,100	2.8E+04	94,000	<200	NA	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
n-Butylbenzene	ug/kg	4,600	ID	7,650	8,000,000	<80	NA	<60	<60	<60	<60	<60	<60	<70	<60	<60	<70	<70	<60	<60
sec-Butylbenzene	ug/kg	4,600	ID	738	8.00E+06	<80	NA	<60	<60	<60	<60	<60	<60	<70	<60	<60	<70	<70	<60	<60
2-Butanone (MEK)	ug/kg	7.6E+05	44,000	3.0E+06	2.7E+07	<1100	NA	<900	<920	<900	<930	<920	<900	<1000	<870	<880	<1100	<1100	<920	<930
2-Hexanone	ug/kg	58,000	ID	1.7E+04	2.5E+06	<4000	NA	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<4000	<4000	<3000	<3000
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	2.6E+07	<500	NA	<390	<400	<400	<410	<400	<400	<440	<380	<390	<470	<490	<400	<410
4-Methyl-2-pentanone (MIBK)	ug/kg	1.5E+05	ID	1.0E+06	2.7E+06	<4000	NA	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<4000	<4000	<3000	<3000
Acetone	ug/kg	42,000	34,000	5.2E+06	7.3E+07	<2000	NA	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000
Benzene	ug/kg	100	4,000 (X)	85	400,000	**770**	NA	<60	<60	120	<60	<60	<60	<70	**10,920**	**720**	**10,200**	<70	<60	<60
Bromodichloromethane	ug/kg	1,600 (W)	ID	104	4.9E+05	<200	NA	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Bromoform	ug/kg	1,600 (W)	ID	1.1E+04	8.7E+05	<200	NA	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Bromomethane	ug/kg	580	700	200	1.0E+06	<300	NA	<200	<200	<200	<200	<200	<200	<300	<200	<200	<300	<300	<200	<200
Carbon disulfide	ug/kg	46,000	ID	3,800	2.8E+05 (C,DD)	<400	NA	<300	<300	<300	<300	<300	<300	<300	<300	<300	<400	<400	<300	<300
Carbon tetrachloride	ug/kg	100	900 (X)	50	3.9E+05	<80	NA	<60	<60	<60	<60	<60	<60	<70	<60	<60	<70	<70	<60	<60
Chlorobenzene	ug/kg	2,000	500	5,850	2.6E+05	<80	NA	<60	<60	<60	<60	<60	<60	<70	<60	<60	<70	<70	<60	<60
Chloroethane	ug/kg	34,000	22,000 (X)	6.7E+04	9.5E+05	<400	NA	<300	<300	<300	<300	<300	<300	<300	<300	<300	<400	<400	<300	<300
Chloroform	ug/kg	1,600 (W)	7,000	340	1.5E+06	<80	NA	<60	<60	<60	<60	<60	<60	<70	<60	<60	<70	<70	<60	<60
Chloromethane	ug/kg	22,000	ID	323	1.1E+06	<400	NA	<300	<300	<300	<300	<300	<300	<300	<300	<300	<400	<400	<300	<300
Dibromochloromethane	ug/kg	4,600	ID	266	5.0E+05	<200	NA	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Ethylbenzene	ug/kg	1,500	3,600	3,990	140,000	770	NA	<60	70	<60	<60	<60	<60	<70	<60	<60	200	<70	<60	<60
Isopropylbenzene	ug/kg	2.6E+06	3,200	NA	3.9E+05	<400	NA	<300	<300	<300	<300	<300	<300	<300	<300	<300	<400	<400	<300	<300
Naphthalene	ug/kg	100,000	730	8,940	52,000,000	<500	NA	<390	<400	<400	<410	<400	<400	<440	<380	<390	<470	<490	<400	<410
n-Propylbenzene	ug/kg	4,600	ID	2,370	8,000,000	<200	NA	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Methylene chloride	ug/kg	100	30,000 (X)	1,540	2.3E+06	<200	NA	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Styrene	ug/kg	2,700	2,100 (X)	3.0E+04	5.2E+05	<80	NA	<60	<60	<60	<60	<60	<60	<70	<60	<60	<70	<70	<60	<60
Tetrachloroethene	ug/kg	100	1,200 (X)	1,030	88,000	**190**	NA	<60	<60	<60	<60	<60	<60	<70	<60	<60	<70	<70	<60	<60
Toluene	ug/kg	16,000	5,400	1.7E+05	250,000	<200	NA	<100	<100	<100	<100	<100	<100	<100	700	<100	**6,000**	<100	<100	<100
Trichloroethene	ug/kg	100	4,000 (X)	50	500,000 (C,DD)	<80	NA	<60	**210**	**200**	<60	<60	<60	<70	<60	**230**	<70	<70	<60	<60
Vinyl chloride	ug/kg	40	260 (X)	40	34,000	<80	NA	<60	<60	<60	<60	<60	<60	<70	**180**	<60	<70	<70	<60	<60
cis-1,2-Dichloroethene	ug/kg	1,400	12,000	165	6.4E+5 (C)	<80	NA	<60	<60	110	<60	<60	<60	<70	1110	190	<70	<70	<60	<60
cis-1,3-Dichloropropene	ug/kg	none	none	NA	none	<80	NA	<60	<60	<60	<60	<60	<60	<70	<60	<60	<70	<70	<60	<60
p,m-Xylene	ug/kg	NA	NA	NA	NA	0.6	NA	<100	300	<100	<100	<100	<100	<100	<100	<100	200	<100	<100	<100
o-Xylene	ug/kg	NA	NA	NA	NA	0.2	NA	<60	110	<60	<60	<60	<60	<70	<60	<60	<70	<70	<60	<60
Total Xylenes	ug/kg	5,600	820	4,890	150,000	800	NA	<160	410	<160	<160	<160	<160	<170	<160	<160	200	<170	<160	<160
trans-1,2-Dichloroethene	ug/kg	2,000	30,000 (X)	43,000	1.4E+06	<80	NA	<60	<60	<60	<60	<60	<60	<70	140	<60	<70	<70	<60	<60
trans-1,3-Dichloropropene	ug/kg	none	none	NA	none	<80	NA	<60	<60	<60	<60	<60	<60	<70	<60	<60	<70	<70	<60	<60
Other Target VOCs	ug/kg	various	various	various	various	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PAHs							NA													
Acenaphthene	ug/kg	8.8E+05	8,700	7.3E+06	1.3E+08	<330	NA	<330	<543	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Acenaphthylene	ug/kg	17,000	ID	2.8E+06	5.2E+06	<330	NA	<330	<543	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Anthracene	ug/kg	41,000	ID	6.0E+08	7.3E+08	<330	NA	<330	<543	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(a)anthracene	ug/kg	NLL	NLL	NA	80,000	<330	NA	<330	<543	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(a)pyrene	ug/kg	NLL	NLL	NA	8,000	<330	NA	<330	<543	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(b)fluoranthene	ug/kg	NLL	NLL	NA	80,000	<330	NA	<330	<543	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(k)fluoranthene	ug/kg	NLL	NLL	NA	8.0E+05	<330	NA	<330	<543	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(ghi)perylene	ug/kg	NLL	NLL	NA	7.0E+06	<330	NA	<330	<543	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Chrysene	ug/kg	NLL	NLL	NA	8.0E+06	<330	NA	<330	<543	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Dibenzo(ah)anthracene	ug/kg	NLL	NLL	NA	8,000	<330	NA	<330	<543	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Fluoranthene	ug/kg	7.3E+05	5,500	NA	1.3E+08	<330	NA	<330	<543	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Fluorene	ug/kg	8.9E+05	5,300	1.2E+07	8.7E+07	<330	NA	<330	<543	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Indeno(1,2,3-cd)pyrene	ug/kg	NLL	NLL	NA	80,000	<330	NA	<330	<543	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Naphthalene	ug/kg	1.0E+05	730	8,940	5.2E+07	<330	NA	<330	<543	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Phenanthrene	ug/kg	1.6E+05	2,100	8.6E+04	5.2E+06	<330	NA	<330	<543	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Pyrene	ug/kg	4.8E+05	ID	1.1E+09	8.4E+07	<330	NA	<330	<543	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	1.3E+05	2.6E+07	<330	NA	<330	<543	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
1-Methylnaphthalene	ug/kg	none	none	NA	none	NA	NA	NA	NA	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Metals							NA													
Lead	ug/kg	700,000	(G,X)	NA	900,000 (DD)	4,630	NA	4,100	5,090	3,840	4,740	2,140	4,620	3,580	4,380	3,670	8,750	8,430	7,490	3,290

Notes: See last page

TABLE 1D

Excavation Confirmation Sample Results (May-June 2012)

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:	Units	Michigan Department of Environmental Quality Part 201 Non-Residential Soil Cleanup Criteria				Excavation Sidewall Samples								Excavation Floor Samples						
Date/Time Collected: Sample Depth Shake Test Results Analytical Parameter		Drinking Water Protection	Groundwater Surface Water Interface Protection	Soil Vapor Intrusion	Direct Contact	ASW-13 6/13/2012 7-8 Neg	ASW-14 6/13/2012 7-8 Neg	ASW-15 6/4/2012 5-6 Neg	ASW-16 5/31/2012 7-8 Neg	ASW-16R 6/13/2012 6-7 Neg	ASW-17 6/6/2012 5-6 Neg	ASW-18 6/7/2012 5-6 Neg	ASW-19 6/7/2012 6-7 Pos	AFL-01 5/30/2012 11-12	AFL-01R 6/4/2012 12-13 Neg	AFL-01RR 6/8/2012 14-15 Neg	AFL-02 5/31/2012 13-14 Neg	AFL-02R 6/8/2012 14.5-15.5 Neg	AFL-02RR 6/12/2012 16-17 Neg	AFL-03 6/5/2012 10-11 Neg	AFL-04 6/4/2012 10-11 Neg
VOCs																				
1,1,1-Trichloroethane	ug/kg	4,000	1800	6.7E+04	4.6E+05	<60	<60	<60	<300	<60	<70	<70	<700	<600	<600	<60	<600	<60	<60	<60	<600
1,1,2,2-Tetrachloroethane	ug/kg	700	1,600 (X)	230	2.4E+05	<60	<60	<60	<300	<60	<70	<70	<700	<600	<600	<60	<600	<60	<60	<60	<600
1,1,2-Trichloroethane	ug/kg	100	6,600 (X)	365	8.4E+05	<60	<60	<60	<300	<60	<70	<110	<800	<600	<600	<60	<600	<60	<60	<60	<600
1,1-Dichloroethane	ug/kg	50,000	15,000	83.7	8.9E+05	<60	<60	<60	<300	<60	<70	<70	<700	<600	<600	<60	<600	<60	<60	<60	<600
1,1-Dichloroethene	ug/kg	140	2,600	7,330	5.7E+05	<60	<60	<60	<300	<60	<70	<70	<700	<600	<600	<60	<600	<60	<60	<60	<600
1,2,3-Trimethylbenzene	ug/kg	NA	NA	5.35E+04	NA	<100	<100	<100	1,200	<100	<100	<100	9,000	<1000	<1000	<100	300	<100	<100	<100	<1000
1,2,4-Trimethylbenzene	ug/kg	2,100	570	3.7E+04	110,000	<100	<100	<100	**4,800**	<100	<100	400	**39,000**	<1000	<1000	<100	**14,000**	<100	<100	<100	<1000
1,2-Dichloroethane	ug/kg	100	7,200 (X)	84	4.20E+05	<220	<80	<60	<300	<60	<70	<70	<700	<600	<600	<60	<600	<360	<60	<60	<600
1,2-Dichloropropane	ug/kg	100	4,600 (X)	151	5.5E+5 (C)	**480**	<60	<60	<300	<60	<70	<70	<700	<600	<600	<60	<600	<60	<60	<60	<600
1,3,5-Trimethylbenzene	ug/kg	1,800	1,100	2.8E+04	94,000	<100	<100	<100	**1,600**	<100	<100	<100	**13,000**	<1000	<1000	<100	**4,000**	<100	<100	<100	<1000
n-Butylbenzene	ug/kg	4,600	ID	7,650	8,000,000	<60	<60	<60	400	<60	<70	840	2,800	<600	<600	<60	<600	<60	<60	<60	<600
sec-Butylbenzene	ug/kg	4,600	ID	738	8.00E+06	<60	<60	<60	<300	<60	<70	280	700	<600	<600	<60	<600	<60	<60	<60	<600
2-Butanone (MEK)	ug/kg	7.6E+05	44,000	3.0E+06	2.7E+07	<910	<910	<880	<4700	<900	<990	<1100	<9800	<8600	<9000	<870	<9300	<870	<910	<920	<8900
2-Hexanone	ug/kg	58,000	ID	1.7E+04	2.5E+06	<3000	<3000	<3000	<20000	<3000	<3000	<4000	<30000	<30000	<30000	<3000	<30000	<3000	<3000	<3000	<30000
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	2.6E+07	<400	<400	<390	<2100	<400	<440	<490	<4300	<3800	<3900	<380	<4100	<380	<400	<410	<3900
4-Methyl-2-pentanone (MIBK)	ug/kg	1.5E+05	ID	1.0E+06	2.7E+06	<3000	<3000	<3000	<20000	<3000	<3000	<4000	<30000	<30000	<30000	<3000	<30000	<3000	<3000	<3000	<30000
Acetone	ug/kg	42,000	34,000	5.2E+06	7.3E+07	<1000	<1000	<1000	<6000	<1000	<1000	<1000	<10000	<10000	<10000	<1000	<10000	<1000	<1000	<1000	<10000
Benzene	ug/kg	100	4,000 (X)	85	400,000	**6,540**	**1,780**	<60	**900**	<60	<70	<70	<700	**14,200**	**2,000**	<60	**1,000**	**10,960**	**570**	<60	**1,300**
Bromodichloromethane	ug/kg	1,600 (W)	ID	104	4.9E+05	<100	<100	<100	<600	<100	<100	<100	<1000	<1000	<1000	<100	<1000	<100	<100	<100	<1000
Bromoform	ug/kg	1,600 (W)	ID	1.1E+04	8.7E+05	<100	<100	<100	<600	<100	<100	<100	<1000	<1000	<1000	<100	<1000	<100	<100	<100	<1000
Bromomethane	ug/kg	580	700	200	1.0E+06	<200	<200	<200	<1000	<200	<300	<300	<3000	<2000	<2000	<200	<2000	<200	<200	<200	<2000
Carbon disulfide	ug/kg	46,000	ID	3,800	2.8E+05 (C,DD)	<300	<300	<300	<2000	<300	<300	<400	<3000	<3000	<3000	<300	<3000	<300	<300	<300	<3000
Carbon tetrachloride	ug/kg	100	900 (X)	50	3.9E+05	<60	<60	<60	<300	<60	<70	<70	<700	<600	<600	<60	<600	<60	<60	<60	<600
Chlorobenzene	ug/kg	2,000	500	5,850	2.6E+05	<60	<60	<60	<300	<60	<70	<70	<700	<600	<600	<60	<600	<60	<60	<60	<600
Chloroethane	ug/kg	34,000	22,000 (X)	6.7E+04	9.5E+05	<300	<300	<300	<2000	<300	<300	<400	<3000	<3000	<3000	<300	<3000	<300	<300	<300	<3000
Chloroform	ug/kg	1,600 (W)	7,000	340	1.5E+06	<60	<60	<60	<300	<60	<70	<70	<700	<600	<600	<60	<600	<60	<60	<60	<600
Chloromethane	ug/kg	22,000	ID	323	1.1E+06	<300	<300	<300	<2000	<300	<300	<400	<3000	<3000	<3000	<300	<3000	<300	<300	<300	<3000
Dibromochloromethane	ug/kg	4,600	ID	266	5.0E+05	<100	<100	<100	<600	<100	<100	<100	<1000	<1000	<1000	<100	<1000	<100	<100	<100	<1000
Ethylbenzene	ug/kg	1,500	3,600	3,990	140,000	<60	200	<60	**4,700**	<60	<70	920	**25,200**	**5,200**	**5,500**	<60	**10,800**	<60	<60	<60	**7,000**
Isopropylbenzene	ug/kg	2.6E+06	3,200	NA	3.9E+05	<300	<300	<300	<2000	<300	<300	<400	<3000	<3000	<3000	<300	<3000	<300	<300	<300	<3000
Naphthalene	ug/kg	100,000	730	8,940	52,000,000	<400	<400	<390	<2100	<400	<440	<490	**4,400**	<3800	<3900	<380	<4100	<380	<400	<410	<3900
n-Propylbenzene	ug/kg	4,600	ID	2,370	8,000,000	<100	<100	<100	**1100**	<100	<100	800	**10,000**	<1000	<1000	<100	3,000	<100	<100	<100	<1000
Methylene chloride	ug/kg	100	30,000 (X)	1,540	2.3E+06	<100	<100	<100	<900	<100	<100	<100	<1000	<1000	<1000	<100	<1000	<100	<100	<100	<1000
Styrene	ug/kg	2,700	2,100 (X)	3.0E+04	5.2E+05	<60	<60	<60	<300	<60	<70	<70	<700	<600	<600	<60	<600	<60	<60	<60	<600
Tetrachloroethene	ug/kg	100	1,200 (X)	1,030	88,000	<60	<60	<60	<300	<60	<70	<70	<700	<600	<600	<60	<600	<60	<60	<60	<600
Toluene	ug/kg	16,000	5,400	1.7E+05	250,000	<100	<100	<100	**18,500**	<100	<100	<100	<1000	**73,000**	**11,000**	<100	<1000	**6,800**	<100	<100	<1000
Trichloroethene	ug/kg	100	4,000 (X)	50	500,000 (C,DD)	<60	<60	<60	<300	<60	<70	<70	<700	<600	<600	<60	<600	<60	<60	<60	<600
Vinyl chloride	ug/kg	40	260 (X)	40	34,000	<60	<60	<60	<300	<60	<70	<70	<700	<600	<600	<60	<600	<60	<60	<60	<600
cis-1,2-Dichloroethene	ug/kg	1,400	12,000	165	6.4E+5 (C)	<60	60	<60	<300	<60	<70	<70	<700	<600	<600	<60	<600	<60	<60	<60	<600
cis-1,3-Dichloropropene	ug/kg	none	none	NA	none	<60	<60	<60	<300	<60	<70	<70	<700	<600	<600	<60	<600	<60	<60	<60	<600
p,m-Xylene	ug/kg	NA	NA	NA	NA	<100	<100	<100	17.5	100	<100	1000	**90000**	16000	21000	<100	43000	<100	<100	<100	21000
o-Xylene	ug/kg	NA	NA	NA	NA	<60	<60	<60	6.6	<60	<70	<70	1800	7800	9400	<60	13000	<60	<60	<60	6700
Total Xylenes	ug/kg	5,600	820	4,890	150,000	<160	<160	<160	**24,100**	100	<170	**1,000**	**91,800**	**23,800**	**30,400**	<160	**56,000**	<160	<160	<160	**27,700**
trans-1,2-Dichloroethene	ug/kg	2,000	30,000 (X)	43,000	1.4E+06	<60	<60	<60	<300	<60	<70	<70	<700	<600	<600	<60	<600	<60	<60	<60	<600
trans-1,3-Dichloropropene	ug/kg	none	none	NA	none	<60	<60	<60	<300	<60	<70	<70	<700	<600	<600	<60	<600	<60	<60	<60	<600
Other Target VOCs	ug/kg	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PAHs																					
Acenaphthene	ug/kg	8.8E+05	8,700	7.3E+06	1.3E+08	<300	<300	<330	<330	<300	<300	<300	<300	<330	<330	<300	<330	<300	<300	<300	<330
Acenaphthylene	ug/kg	17,000	ID	2.8E+06	5.2E+06	<300	<300	<330	<330	<300	<300	<300	<300	<330	<330	<300	<330	<300	<300	<300	<330
Anthracene	ug/kg	41,000	ID	6.0E+08	7.3E+08	<300	<300	<330	<330	<300	<300	<300	<300	<330	<330	<300	<330	<300	<300	<300	<330
Benzo(a)anthracene	ug/kg	NLL	NLL	NA	80,000	<300	<300	<330	<330	<300	<300	<300	<300	<330	<330	<300	<330	<300	<300	<300	<330
Benzo(a)pyrene	ug/kg	NLL	NLL	NA	8,000	<300	<300	<330	<330	<300	<300	<300	<300	<330	<330	<300	<330	<300	<300	<300	<330
Benzo(b)fluoranthene	ug/kg	NLL	NLL	NA	80,000	<300	<300	<330	<330	<300	<300	<300	<300	<330	<330	<300	<330	<300	<300	<300	<330
Benzo(k)fluoranthene	ug/kg	NLL	NLL	NA	8.0E+05	<300	<300	<330	<330	<300	<300	<300	<300	<330	<330	<300	<330	<300	<300	<300	<330
Benzo(ghi)perylene	ug/kg	NLL	NLL	NA	7.0E+06	<300	<300	<330	<330	<300	<300	<300	<300	<330	<330	<300	<330	<300	<300	<300	<330
Chrysene	ug/kg	NLL	NLL	NA	8.0E+06	<300	<300	<330	<330	<300	<300	<300	<300	<330	<330	<300	<330	<300	<300	<300	<330
Dibenzo(ah)anthracene	ug/kg	NLL	NLL	NA	8,000	<300	<300	<330	<330	<300	<300	<300	<300	<330	<330	<300	<330	<300	<300	<300	<330
Fluoranthene	ug/kg	7.3E+05	5,500	NA	1.3E+08	<300	<300	<330	<330	<300	<300	<300	<300	<330	<330	<300	<330	<300	<300	<300	<330
Fluorene	ug/kg	8.9E+05	5,300	1.2E+07	8.7E+07	<300	<300	<330	<330	<300	<300	<300	<300	<330	<330	<300	<330	<300	<300	<300	<330
Indeno(1,2,3-cd)pyrene	ug/kg	NLL	NLL	NA	80,000	<300	<300	<330	<330	<300	<300	<300	<300	<330	<330	<300	<330	<300	<300	<300	<330
Naphthalene	ug/kg	1.0E+05	730	8,940	5.2E+07	<300	<300	<330	609	<300	<300	<300	**800**	<330	<330	<300	<330	<300	<300	<300	<330
Phenanthrene	ug/kg	1.6E+05	2,100	8.6E+04	5.2E+06	<300	<300	<330	<330	<300	<300	<300	<300	<330	<330	<300	<330	<300	<300	<300	<330
Pyrene	ug/kg	4.8E+05	ID	1.1E+09	8.4E+07	<300	<300	<330	<330	<300	<300	<300	<300	<330	<330	<300	<330	<300	<300	<300	<330
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	1.3E+05	2.6E+07	<300	<300	<330	520	<300	<300	<300	**500**	<330	<330	<300	<330	<300	<300	<300	<330
1-Methylnaphthalene	ug/kg	none	none	NA	none	<300	<300	NA	NA	<300	<300	<300	<300	NA	NA	<300	NA	<300	<300	<300	NA
Metals																					
Lead	ug/kg	700,000	(G,X)	NA	900,000 (DD)	2,820	3,780	2,220	24,700	2,240	4,420	3,420	6,150	4,400	3,410	3,860	10,400	3,820	3,950	5,210	3,480

Notes: See last page

TABLE 1D

Excavation Confirmation Sample Results (May-June 2012)

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID: / Date/Time Collected: / Sample Depth / Shake Test Results / Analytical Parameter	Units	Michigan Department of Environmental Quality Part 201 Non-Residential Soil Cleanup Criteria				Excavation Floor Samples												
		Drinking Water Protection	Groundwater Surface Water Interface Protection	Soil Vapor Intrusion	Direct Contact	AFL-04R 6/8/2012 12-13 Neg	AFL-04RR 6/12/2012 16-17 Neg	AFL-05 6/5/2012 9-10 Neg	AFL-05R 6/8/2012 10-11 Neg	AFL-06 6/13/2012 12.5-13.5 Neg	AFL-06R 6/15/2012 14-15 NA	AFL-07 6/12/2012 13-14 Neg	AFL-08 6/7/2012 11.5-12.5 Neg	AFL-08R 6/12/2012 16-17 Neg	AFL-09 6/6/2012 9-10 Neg	AFL-10 6/13/2012 7-8 Neg	AFL-10R 6/15/2012 14-15 NA	AFL-11 6/13/2012 12-13 Neg	AFL-12 6/13/2012 12-13 Neg
VOCs																			
1,1,1-Trichloroethane	ug/kg	4,000	1800	6.7E+04	4.6E+05	<70	<60	<700	<70	<300	<60	<60	<300	<60	<60	<300	<60	<60	<60
1,1,2,2-Tetrachloroethane	ug/kg	700	1,600 (X)	230	2.4E+05	<70	<60	<700	<70	<300	<60	<60	<300	<60	<60	<300	<60	<60	<60
1,1,2-Trichloroethane	ug/kg	100	6,600 (X)	365	8.4E+05	<70	<60	<700	<70	<300	<60	<60	<300	<60	<60	<300	<60	<60	<60
1,1-Dichloroethane	ug/kg	50,000	15,000	83.7	8.9E+05	<70	<60	<700	<70	<300	<60	<60	<300	<60	<60	<300	<60	<60	<60
1,1-Dichloroethene	ug/kg	140	2,600	7,330	5.7E+05	<70	<60	<700	<70	<300	<60	<60	<300	<60	<60	<300	<60	<60	<60
1,2,3-Trimethylbenzene	ug/kg	NA	NA	5.35E+04	NA	<100	<100	<1000	<100	<600	<100	<100	<600	<100	<100	<600	<100	<100	<100
1,2,4-Trimethylbenzene	ug/kg	2,100	570	3.7E+04	110,000	<100	<100	<1000	<100	<600	<100	<100	<600	<100	<100	<600	<100	<100	<100
1,2-Dichloroethane	ug/kg	100	7,200 (X)	84	4.20E+05	<370	<60	<700	**130**	<900	<60	<60	<600	<60	<60	<500	<60	<60	<60
1,2-Dichloropropane	ug/kg	100	4,600 (X)	151	5.5E+5 (C)	<70	<60	<700	<70	<300	<60	<60	<300	<60	<60	<300	<60	<60	<60
1,3,5-Trimethylbenzene	ug/kg	1,800	1,100	2.8E+04	94,000	<100	<100	<1000	<100	<600	<100	<100	<600	<100	<100	<600	<100	<100	<100
n-Butylbenzene	ug/kg	4,600	ID	7,650	8,000,000	<70	<60	<700	<70	<300	<60	<60	<300	<60	<60	<300	<60	<60	<60
sec-Butylbenzene	ug/kg	4,600	ID	738	8.00E+06	<70	<60	<700	<70	<300	<60	<60	<300	<60	<60	<300	<60	<60	<60
2-Butanone (MEK)	ug/kg	7.6E+05	44,000	3.0E+06	2.7E+07	<1000	<870	<9900	<990	<4700	<880	<870	<4500	<920	<900	<4400	<840	<900	<880
2-Hexanone	ug/kg	58,000	ID	1.7E+04	2.5E+06	<3000	<3000	<30000	<3000	<20000	<3000	<3000	<20000	<3000	<3000	<10000	<3000	<3000	<3000
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	2.6E+07	<460	<380	<4300	<430	<2100	<390	<380	<2000	<400	<400	<1900	<370	<400	<390
4-Methyl-2-pentanone (MIBK)	ug/kg	1.5E+05	ID	1.0E+06	2.7E+06	<3000	<3000	<30000	<3000	<20000	<3000	<3000	<20000	<3000	<3000	<10000	<3000	<3000	<3000
Acetone	ug/kg	42,000	34,000	5.2E+06	7.3E+07	<1000	<1000	<10000	<1000	<6000	<1000	<1000	<6000	<1000	<1000	<6000	<1000	<1000	<1000
Benzene	ug/kg	100	4,000 (X)	85	400,000	**11440**	<60	**7,500**	<70	**13,800**	<60	<60	**14,200**	<60	<60	**12,900**	<60	<60	<60
Bromodichloromethane	ug/kg	1,600 (W)	ID	104	4.9E+05	<100	<100	<1000	<100	<600	<100	<100	<600	<100	<100	<600	<100	<100	<100
Bromoform	ug/kg	1,600 (W)	ID	1.1E+04	8.7E+05	<100	<100	<1000	<100	<600	<100	<100	<600	<100	<100	<600	<100	<100	<100
Bromomethane	ug/kg	580	700	200	1.0E+06	<300	<200	<3000	<300	<1000	<200	<200	<1000	<200	<200	<1000	<200	<200	<200
Carbon disulfide	ug/kg	46,000	ID	3,800	2.8E+05 (C,DD)	<300	<300	<3000	<300	<2000	<300	<300	<2000	<300	<300	<1000	<300	<300	<300
Carbon tetrachloride	ug/kg	100	900 (X)	50	3.9E+05	<70	<60	<700	<70	<300	<60	<60	<300	<60	<60	<300	<60	<60	<60
Chlorobenzene	ug/kg	2,000	500	5,850	2.6E+05	<70	<60	<700	<70	<300	<60	<60	<300	<60	<60	<300	<60	<60	<60
Chloroethane	ug/kg	34,000	22,000 (X)	6.7E+04	9.5E+05	<300	<300	<3000	<300	<2000	<300	<300	<2000	<300	<300	<1000	<300	<300	<300
Chloroform	ug/kg	1,600 (W)	7,000	340	1.5E+06	<70	<60	<700	<70	<300	<60	<60	<300	<60	<60	<300	<60	<60	<60
Chloromethane	ug/kg	22,000	ID	323	1.1E+06	<300	<300	<3000	<300	<2000	<300	<300	<2000	<300	<300	<1000	<300	<300	<300
Dibromochloromethane	ug/kg	4,600	ID	266	5.0E+05	<100	<100	<1000	<100	<600	<100	<100	<600	<100	<100	<600	<100	<100	<100
Ethylbenzene	ug/kg	1,500	3,600	3,990	140,000	**4,290**	<60	1,100	<70	<300	<60	<60	<300	<60	310	<300	<60	<60	<60
Isopropylbenzene	ug/kg	2.6E+06	3,200	NA	3.9E+05	<300	<300	<3000	<300	<2000	<300	<300	<2000	<300	<300	<1000	<300	<300	<300
Naphthalene	ug/kg	100,000	730	8,940	52,000,000	<460	<380	<4300	<430	<2100	<390	<380	<2000	<400	<400	<1900	<370	<400	<390
n-Propylbenzene	ug/kg	4,600	ID	2,370	8,000,000	<100	<100	<1000	<100	<600	<100	<100	<600	<100	<100	<600	<100	<100	<100
Methylene chloride	ug/kg	100	30,000 (X)	1,540	2.3E+06	<100	<100	<1000	<100	<600	<100	<100	<600	<100	<100	<600	<100	<100	<100
Styrene	ug/kg	2,700	2,100 (X)	3.0E+04	5.2E+05	<70	<60	<700	<70	<300	<60	<60	<300	<60	<60	<300	<60	<60	<60
Tetrachloroethene	ug/kg	100	1,200 (X)	1,030	88,000	<70	<60	<700	<70	<300	<60	<60	<300	<60	<60	<300	<60	<60	<60
Toluene	ug/kg	16,000	5,400	1.7E+05	250,000	3,100	<100	**19,000**	<100	<600	<100	<100	**35,500**	<100	<100	<600	<100	<100	<100
Trichloroethene	ug/kg	100	4,000 (X)	50	500,000 (C,DD)	<70	<60	<700	<70	<300	<60	<60	<300	<60	**1,970**	<300	<60	<60	<60
Vinyl chloride	ug/kg	40	260 (X)	40	34,000	<70	<60	**1400**	980	2200	<60	<60	**500**	<60	<60	<300	<60	150	<60
cis-1,2-Dichloroethene	ug/kg	1,400	12,000	165	6.4E+5 (C)	<70	<60	**22,600**	1,130	**4,900**	<60	<60	600	<60	<60	<300	<60	<60	<60
cis-1,3-Dichloropropene	ug/kg	none	none	NA	none	<70	<60	<700	<70	<300	<60	<60	<300	<60	<60	<300	<60	<60	<60
p,m-Xylene	ug/kg	NA	NA	NA	NA	6200	<100	2000	<100	<600	<100	<100	<600	<100	<100	<600	<100	<100	<100
o-Xylene	ug/kg	NA	NA	NA	NA	950	<60	900	<70	<300	<60	<60	<300	<60	<60	<300	<60	<60	<60
Total Xylenes	ug/kg	5,600	820	4,890	150,000	**7,150**	<160	**2,900**	<170	<900	<160	<160	<900	<160	<160	<900	<160	<160	<160
trans-1,2-Dichloroethene	ug/kg	2,000	30,000 (X)	43,000	1.4E+06	<70	<60	<700	<70	<300	<60	<60	<300	<60	<60	<300	<60	<60	<60
trans-1,3-Dichloropropene	ug/kg	none	none	NA	none	<70	<60	<700	<70	<300	<60	<60	<300	<60	<60	<300	<60	<60	<60
Other Target VOCs	ug/kg	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PAHs																			
Acenaphthene	ug/kg	8.8E+05	8,700	7.3E+06	1.3E+08	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Acenaphthylene	ug/kg	17,000	ID	2.8E+06	5.2E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Anthracene	ug/kg	41,000	ID	6.0E+08	7.3E+08	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(a)anthracene	ug/kg	NLL	NLL	NA	80,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(a)pyrene	ug/kg	NLL	NLL	NA	8,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(b)fluoranthene	ug/kg	NLL	NLL	NA	80,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(k)fluoranthene	ug/kg	NLL	NLL	NA	8.0E+05	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(ghi)perylene	ug/kg	NLL	NLL	NA	7.0E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Chrysene	ug/kg	NLL	NLL	NA	8.0E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Dibenzo(ah)anthracene	ug/kg	NLL	NLL	NA	8,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Fluoranthene	ug/kg	7.3E+05	5,500	NA	1.3E+08	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Fluorene	ug/kg	8.9E+05	5,300	1.2E+07	8.7E+07	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Indeno(1,2,3-cd)pyrene	ug/kg	NLL	NLL	NA	80,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Naphthalene	ug/kg	1.0E+05	730	8,940	5.2E+07	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Phenanthrene	ug/kg	1.6E+05	2,100	8.6E+04	5.2E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Pyrene	ug/kg	4.8E+05	ID	1.1E+09	8.4E+07	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	1.3E+05	2.6E+07	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
1-Methylnaphthalene	ug/kg	none	none	NA	none	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Metals																			
Lead	ug/kg	700,000	(G,X)	NA	900,000 (DD)	5,330	3,700	4,500	5,660	4,320	3,930	4,390	3,360	4,310	4,100	7,080	3,750	5,480	2,900

Notes: See last page

TABLE 1A, 1B, 1C and 1D

Soil Analytical Data - Boring Locations

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Notes:

Exceedances: Cleanup Criteria and Screening Level Exceedances are bold.
Samples with TPH results greater than 100 mg/kg were analyzed for PAHs.
Soils were removed as part of the June 2012 soil excavation activities.
bgl: below ground level
NS: Not sampled.
ND / <: Not detected / <detection limit
NA: Not analyzed/Not Available
Soil Cleanup Criteria: - Part 201 (Environmental Remediation) of the Michigan Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451 (Revised December 30, 2013). Referenced are Non-Residential Cleanup Criteria and Screening Levels
- Groundwater Protection Criteria: Lowest value of Drinking Water Protection Criteria (DW), Groundwater/Surface Water Interface Protection Criteria (GSIP), and Groundwater Contact Protection Criteria (GWC).
- Indoor Air: Soil Volatilization to Indoor Air Inhalation Criteria. Ambient Air: Lowest Value of Infinite Source Volatile Soil Inhalation Criteria, Finite Source 2,5 Meter Thickness, and Particulate Soil Inhalation Criteria.
- Direct Contact: Lowest Value of Direct Contact Criteria and Soil Saturation Concentration Screening Levels.
Effective Solubility Screening Levels were obtained from the Effective Solubility Workgroup Report of Findings, dated February 28, 2008

C: Value presented is a screening level based on the chemical-specific generic soil saturation concentration (Csat) since the calculated risk-based criterion is greater than Csat. Concentrations greater than Csat are acceptable cleanup criteria for this pathway where a site-specific demonstration indicates that free-phase material containing a hazardous substance is not present.
D: Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0E+09 ug/kg.
DD: Hazardous substance causes developmental effects. Residential direct contact criteria are protective of both prenatal and postnatal exposure. Nonresidential direct contact criteria are protective for a pregnant adult receptor.
G: Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water. A value of 150 mg/L was used to calculate the GSI protection criteria value based on MDEQ Remediation Division, Operational Memorandum No. 5.
ID: Insufficient data to develop criterion.
J: Estimated value between method detection limit and practical quantitation limit.
NLL: Hazardous substance is not likely to leach under most soil conditions.
NLV: Hazardous substance is not likely to volatilize under most conditions.
T: Refer to the federal Toxic Substances Control Act (TSCA), 40 C.F.R. 761, Subpart D and 40 C.F.R. 761, Subpart G, to determine the applicability of TSCA cleanup standards.
W: Concentrations of trihalomethanes in soil shall be added together to determine compliance with the drinking water protection criteria of 1,6000 ug/kg.
X: The GSI criterion shown is not protective for surface water that is used as a drinking water source. For groundwater discharges to the Great Lakes and their connecting waters or discharges in close proximity to water supply intake(s) in inland surface waters, the generic GSI criterion is the Surface Water Human Drinking Water Value (HDV) listed in the table below except for those HDV indicted with an asterisk. For HDV with an asterisk, the generic GSI criterion is the lesser of the HDV, the WV and the calculated FCV (see formulas in footnote {G}). Soil protection criteria based on the HDV are listed below except for those values with an asterisk. Soil GSI protection criteria for compounds with an asterisk are the greater of the 20 X GSI and GSI soil-water partition values using the GSI criteria developed with the procedure described in this footnote.

Table 2
Groundwater Analytical Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:		MDEQ Part 201 Non-Residential Cleanup Criteria				B-1 Outside SE of Building in Paved Lot	B-2 Outside East-SE Corner of Building - Boiler Room Sump Area	B-3 Outside East-SE Side of Building - Boiler Room Sump & Elevator Lift Area	B-4 Outside East Side of Building - Elevator Lift Area	B-5 Outside East-NE Side of Building - Former Service / Hydraulic Lift Area	B-6 Inside Northeast Portion of Building Near Hydraulic Lift South of Dispenser Area	B-7 Inside Northeast Portion of Building Near Hydraulic Lift Further South	B-8 Inside Northwest Portion of Building Near Hydraulic Lift	B-9 Inside Northwest Portion of Building Near Hydraulic Lift Further South	B-10 Outside West Side of Building - Vicinity of Hydraulic Lift	B-11 Outside West Side of Building - Vicinity of Hydraulic Lift	B-12 Outside West-NW Side of Building - Oil-Sand Separator	B-13 Outside NW Corner of Building - Dyno Pit / Oil-Sand Separator	B-14 Outside NW Corner of Building - Trench & Dyno Pit	B-15 Outside North Side of Building - Trench	B-16 Outside North-NE Corner of Building - Former Gas Dispenser	B-17 Outside Further North of North Side of Building - Release Delineation	B-18 Outside NE of NW Corner of Building - Release Delineation	B-19 Outside Further North of NE Corner of Building - Release Delineation	B-20 Outside Further North of B-17 & Sewer Line - Release Delineation
Date Collected:		Non-Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Criteria	Vapor Intrusion Groundwater Screening Level	Flammability and Explosivity Screening Level	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	NS***	11/30/2006	11/30/2006	11/30/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006
Screened Interval (feet bgl):						NA	10-15	NA	5-10	NA	NA	3-8	7-12	7-12	NA	NA	10-15	NA	5-10	5-10	5-10	5-10	5-10	5-10	5-10	10-15
Analytical Parameter	**Units**																									
TPH (EPA Method 418.1)	mg/L	NA	NA	NA	NA	NS **	0.9	NS **	0.9	NS *	NS***	**8.3**	NS****	**7.7**	NS *	NS **	< 0.5	NS *	**1.5**	**4.9**	**71**	**3.1**	**1.9**	< 0.5	0.9
Semivolatile Hydrocarbons (EPA Method 8015B)																										
Gasoline Range Organics	mg/L	NA	NA	NA	NA	NS **	NS	NS**	NS	NS*	NS***	NS	NS****	NS	NS*	NS**	NS	NS*	NS	NS	NS	NS	NS	NS	NS	NS
Diesel Range Organics	mg/L	NA	NA	NA	NA	NS **	NS	NS**	NS	NS*	NS***	NS	NS****	NS	NS*	NS**	NS	NS*	NS	NS	NS	NS	NS	NS	NS	NS
Fuel Oil	mg/L	NA	NA	NA	NA	NS **	NS	NS**	NS	NS*	NS***	NS	NS****	NS	NS*	NS**	NS	NS*	NS	NS	NS	NS	NS	NS	NS	NS
Hydraulic Fluid	mg/L	NA	NA	NA	NA	NS **	NS	NS**	NS	NS*	NS***	NS	NS****	NS	NS*	NS**	NS	NS*	NS	NS	NS	NS	NS	NS	NS	NS
Kerosene	mg/L	NA	NA	NA	NA	NS **	NS	NS**	NS	NS*	NS***	NS	NS****	NS	NS*	NS**	NS	NS*	NS	NS	NS	NS	NS	NS	NS	NS
Mineral Spirits	mg/L	NA	NA	NA	NA	NS **	NS	NS**	NS	NS*	NS***	NS	NS****	NS	NS*	NS**	NS	NS*	NS	NS	NS	NS	NS	NS	NS	NS
Motor Oil	mg/L	NA	NA	NA	NA	NS **	NS	NS**	NS	NS*	NS***	NS	NS****	NS	NS*	NS**	NS	NS*	NS	NS	NS	NS	NS	NS	NS	NS
PAH (EPA Method 8310)																										
1-Methylnaphthalene	ug/L	NA	NA	NA	NA	NS **	NA	NS **	NA	NS *	NS***	20	NS****	14	NS *	NS **	NA	NS *	26	27	210	< 0.13	1.1	NA	NA
2-Methylnaphthalene	ug/L	750	19	3.90E+03	ID	NS **	NA	NS **	NA	NS *	NS***	35	NS****	23	NS *	NS **	NA	NS *	19	24	**270**	< 0.13	1.1	NA	NA
Acenaphthene	ug/L	3,800	38	2.30E+05	ID	NS **	NA	NS **	NA	NS *	NS***	0.48	NS****	0.16	NS *	NS **	NA	NS *	0.14	0.22	1.5	< 0.13	< 0.1	NA	NA
Acenapthylene	ug/L	150	ID	6.20E+04	ID	NS **	NA	NS **	NA	NS *	NS***	0.87	NS****	0.15	NS *	NS **	NA	NS *	< 0.11	< 0.1	< 0.12	< 0.13	< 0.1	NA	NA
Anthracene	ug/L	43 (S)	ID	3.70E+06	ID	NS **	NA	NS **	NA	NS *	NS***	<0.17	NS****	<0.14	NS *	NS **	NA	NS *	< 0.11	< 0.1	< 0.12	< 0.13	< 0.1	NA	NA
Benz(a)anthracene	ug/L	8.5	ID	NA	ID	NS **	NA	NS **	NA	NS *	NS***	<0.17	NS****	0.28	NS *	NS **	NA	NS *	< 0.11	< 0.1	< 0.12	< 0.13	< 0.1	NA	NA
Benzo(a)pyrene	ug/L	5.0 (A)	ID	NA	ID	NS **	NA	NS **	NA	NS *	NS***	<0.17	NS****	<0.14	NS *	NS **	NA	NS *	< 0.11	< 0.1	< 0.12	< 0.13	< 0.1	NA	NA
Benzo(b)fluoranthene	ug/L	1.5 (S, AA)	ID	NA	ID	NS **	NA	NS **	NA	NS *	NS***	<0.17	NS****	<0.14	NS *	NS **	NA	NS *	< 0.11	< 0.1	< 0.12	< 0.13	< 0.1	NA	NA
Benzo(g,h,i)perylene	ug/L	1.0 (M); 0.26 (S)	NA	NA	ID	NS **	NA	NS **	NA	NS *	NS***	<0.17	NS****	<0.14	NS *	NS **	NA	NS *	< 0.11	< 0.1	< 0.12	< 0.13	< 0.1	NA	NA
Benzo(k)fluoranthene	ug/L	1.0 (M); 0.8 (S)	NA	NA	ID	NS **	NA	NS **	NA	NS *	NS***	<0.17	NS****	<0.14	NS *	NS **	NA	NS *	< 0.11	< 0.1	< 0.12	< 0.13	< 0.1	NA	NA
Chrysene	ug/L	1.6 (S)	ID	NA	ID	NS **	NA	NS **	NA	NS *	NS***	<0.17	NS****	<0.14	NS *	NS **	NA	NS *	< 0.11	< 0.1	< 0.12	< 0.13	< 0.1	NA	NA
Dibenzo(a,h)anthracene	ug/L	2.0 (M); 0.85	ID	NA	ID	NS **	NA	NS **	NA	NS *	NS***	<0.17	NS****	<0.14	NS *	NS **	NA	NS *	< 0.11	< 0.1	< 0.12	< 0.13	< 0.1	NA	NA
Fluoranthene	ug/L	210 (S)	1.6	NA	ID	NS **	NA	NS **	NA	NS *	NS***	<0.17	NS****	<0.14	NS *	NS **	NA	NS *	< 0.11	< 0.1	< 0.12	< 0.13	< 0.1	NA	NA
Fluorene	ug/L	2,000 (S)	12	3.00E+05	ID	NS **	NA	NS **	NA	NS *	NS***	<0.17	NS****	<0.14	NS *	NS **	NA	NS *	< 0.11	< 0.1	< 0.12	< 0.13	< 0.1	NA	NA
Indeno(1,2,3-cd)pyrene	ug/L	2.0 (M); 0.022 (S)	ID	NA	ID	NS **	NA	NS **	NA	NS *	NS***	<0.17	NS****	<0.14	NS *	NS **	NA	NS *	< 0.11	< 0.1	< 0.12	< 0.13	< 0.1	NA	NA
Naphthalene	ug/L	1,500	11	1,200	NA	NS **	NA	NS **	NA	NS *	NS***	**100**	NS****	**36**	NS *	NS **	NA	NS *	**27**	**34**	**320**	**45**	< 0.1	NA	NA
Phenanthrene	ug/L	150	2.0 (M); 1.4	480	ID	NS **	NA	NS **	NA	NS *	NS***	0.46	NS****	0.29	NS *	NS **	NA	NS *	< 0.11	< 0.1	< 0.12	< 0.13	< 0.1	NA	NA
Pyrene	ug/L	140 (S)	ID	1.70R+06	ID	NS **	NA	NS **	NA	NS *	NS***	0.31	NS****	<0.14	NS *	NS **	NA	NS *	< 0.11	< 0.1	< 0.12	< 0.13	< 0.1	NA	NA
Other Target PAHs	ug/L	various	various	various	various	NS **	NA	NS **	NA	NS *	NS***	ND	NS****	ND	NS *	NS **	NA	NS *	ND	ND	ND	ND	ND	NA	NA
VOCs (EPA Method 8260)																										
1,1,1-Trichloroethane	ug/L	200 (A)	89	7.10E+04	ID	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	ug/L	35	78 (X)	300	ID	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	ug/L	5.0 (A)	330 (X)	480	NA	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	ug/L	2,500	740	1.80E+04	3.80E+05	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	ug/L	7.0 (A)	130	1,600	97,000	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5	<5	<5
1,2,4-Trimethylbenzene	ug/L	63 (E)	17	7,300	56,000 (S)	NS**	NA	NS**	NA	NS*	NS***	**970**	<5	**1,200**	NS*	NS**	NA	NS*	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	ug/L	5.0 (A)	360 (X)	210	2.50E+06	NS **	< 5	NS **	< 5	NS *	NS***	5	< 5	<5	NS *	NS **	< 5	NS *	< 5	< 5	**39**	**8**	< 5	< 5	< 5
1,2-Dichloropropane	ug/L	5.0 (A)	230 (X)	290	5.50E+05	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5	<5	<5
1,3,5-Trimethylbenzene	ug/L	72 (E)	45	5,100	ID	NS**	NA	NS**	NA	NS*	NS***	**310**	<5	**370 J**	NS*	NS**	NA	NS*	NA	NA	NA	NA	NA	NA	NA
2-Butanone	ug/L	38,000	2,200	1.80E+07	ID	NS **	<20	NS **	<20	NS *	NS***	<20	<20	<20	NS *	NS **	<20	NS *	<20	<20	<20	<20	<20	<20	<20
2-Hexanone	ug/L	2,900	ID	6.70E+04	NA	NS **	<10	NS **	<10	NS *	NS***	<10	<10	<10	NS *	NS **	<10	NS *	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone	ug/L	5,200	ID	4.40E+06	ID	NS **	<10	NS **	<10	NS *	NS***	<10	<10	<10	NS *	NS **	<10	NS *	<10	<10	<10	<10	<10	<10	<10
Acetone	ug/L	2,100	1,700	3.40E+07	1.50E+07	NS **	<100	NS **	<100	NS *	NS***	<100	<100	<100	NS *	NS **	<100	NS *	<100	<100	<100	<100	<100	<100	<100
Benzene	ug/L	5.0 (A)	200 (X)	140	68,000	NS **	< 5	NS **	< 5	NS *	NS***	**420**	< 5	**7,200**	NS *	NS **	< 5	NS *	**37**	**180**	**730**	**1,400**	< 5	< 5	20
Bromochloromethane	ug/L	NA	NA	NA	NA	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5	<5	<5
Bromoform	ug/L	80 (A,W)	ID	1.10E+04	ID	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5	<5	<5
Bromomethane	ug/L	29	35	140	ID	NS **	<10	NS **	<10	NS *	NS***	<10	<10	<10	NS *	NS **	<10	NS *	<10	<10	<10	<10	<10	<10	<10
n-Butylbenzene	ug/L	230	ID	380	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	ug/L	230	ID	68	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	ug/L	2,300	ID	9,900	13,000	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	ug/L	5.0 (A)	45 (X)	38	ID	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5	<5	<5
Chlorobenzene	ug/L	100 (A)	25	NA	1.60E+05	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5	<5	<5
Chloroethane	ug/L	1,700	1,100 (X)	1.80E+05	1.10E+05	NS **	< 10	NS **	< 10	NS *	NS***	< 10	< 10	<10	NS *	NS **	< 10	NS *	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Chloroform	ug/L	80 (A, W)	350	720	ID	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5	<5	<5
Chloromethane	ug/L	1,100	ID	1,100	36,000	NS **	<10	NS **	<10	NS *	NS***	<10	<10	<10	NS *	NS **	<10	NS *	<10	<10	<10	<10	<10	<10	<10
Dibromochloromethane	ug/L	80 (A, W)	ID	330	ID	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	ug/L	74 (E)	18	2,600	43,000	NS **	< 5	NS **	< 5	NS *	NS***	**1400**	< 5	**860**	NS *	NS **	< 5	NS *	**130**	**1,100**	**1,300**	**1,200**	< 5	< 5	< 5
Isopropylbenzene	ug/L	2,300	28	5	29,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene chloride	ug/L	5.0 (A)	1,500 (X)	4,200	ID	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	ug/L	230	ID	390	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	ug/L	100 (A)	80 (X)	4,100	1.40E+05	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethylene	ug/L	5.0 (A)	60 (X)	460	ID	NS **	< 5	NS **	< 5	NS *	NS***	< 5	< 5	<5	NS *	NS **	< 5	NS *	**8**	< 5	< 5	< 5	< 5	< 5	< 5
Toluene	ug/L	790 (E)	270	1.50E+05	61,000	NS **	< 5	NS **	< 5	NS *	NS***	**3000**	< 5	**560**	NS *	NS **	< 5	NS *	30	**2,600**	**350**	**1,400**	< 5	< 5	< 5
Trichloroethene	ug/L	5.0 (A)	200 (X)	41	ID	NS **	**100**	NS **	**8**	NS *	NS***	<5	< 5	<5	NS *	NS **	**17**	NS *	< 5	**5**	< 5	< 5	< 5	< 5	< 5
Vinyl chloride	ug/L	2.0 (A)	13 (X)	42	33,000	NS **	< 10	NS **	< 10	NS *	NS***	<10	< 10	<10	NS *	NS **	< 10	NS *	< 10	< 10	**270 J**	< 10	< 10	< 10	< 10
cis-1,2-Dichloroethene	ug/L	70 (A)	620	350	5.30E+05	NS **	16	NS **	< 5	NS *	NS***	8	< 5	<5	NS *	NS **	< 5	NS *	< 5	5	**170**	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5	<5	<5
m,p-Xylene	ug/L	NA	NA	NA	NA	NS **	< 5	NS **	< 5	NS *	NS***	3800	< 5	2,900	NS *	NS **	< 5	NS *	230	3,900	3,100	4,000	< 5	< 5	< 5
o-Xylene	ug/L	NA	NA	NA	NA	NS **	< 5	NS **	< 5	NS *	NS***	1700	< 5	120	NS *	NS **	< 5	NS *	37	1,200	530	990	< 5	< 5	< 5
Xylenes, Total	ug/L	280 (E)	41	1.00E+04	70,000	NS **	< 5	NS **	< 5	NS *	NS***	**5500**	< 5	**3,020**	NS *	NS **	< 5	NS *	**267**	**5,100**	**3,630**	**4,990**	< 5	< 5	< 5
trans-1,2-Dichloroethene	ug/L	100 (A)	1,500 (X)	NA	2.3E+05 (S)	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5	<5	<5
trans-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloroethene (total)	ug/L	NA	NA	210	NA	NS **	16	NS **	< 5	NS *	NS***	8	< 5	<5	NS *	NS **	< 5	NS *	< 5	5	170	< 5	< 5	< 5	< 5
1,2,3-Trimethylbenzene	ug/L	NA	NA	1.00E+04	NA	NS **	ND	NS **	ND	NS *	NS***	ND	ND	ND	NS *	NS **	ND	NS *	ND	ND	ND	ND	ND	ND	ND
Other Target VOCs	ug/L	various	various	various	various	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MTBE (EPA Method 8021B)	ug/L	40 (E)	7,100 (X)	1.00E+06	ID	NS **	NA	NS **	NA	NS *	NS***	<5	<1	<10	NS *	NS **	NA	NS *	< 1	**60**	**87**	NA	NA	NA	NA
Dissolved Metals (Method 6020)																										
Lead	mg/L	0.004 (L)	(G,X)	NA	ID	NS **	NA	NS **	NA	NS *	NS***	NS	NS	NS	NS *	NS **	NA	NS *	NS	0.00211	0.00392	NA	NA	NA	NA

See Notes on last page.

Table 2
Groundwater Analytical Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:		MDEQ Part 201 Non-Residential Cleanup Criteria				B-21	EW-1	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-3	MW-3	MW-3	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4		MW-5
						Inside Northwest Portion of Building - South of B-15 - Release Delineation	Outside North-NE Corner of Building - Former Gas Dispenser	Northwest Portion of Site - Release Delineation Monitoring Well	Northwest Portion of Site - Release Delineation Monitoring Well	Northwest Portion of Site - Release Delineation Monitoring Well	Northwest Portion of Site - Release Delineation Monitoring Well	Northwest Portion of Site - Release Delineation Monitoring Well	Northwest Portion of Site - Release Delineation Monitoring Well	Northwest Portion of Site - Release Delineation Monitoring Well	Outside NW Corner of Building - Trench & Dyno Pit	Outside NW Corner of Building - Trench & Dyno Pit	Outside NW Corner of Building - Trench & Dyno Pit	Eastern Corner of Site	Eastern Corner of Site	Eastern Corner of Site	Eastern Corner of Site	Eastern Corner of Site	Eastern Corner of Site	Eastern Corner of Site	Sump in Basement	Outside East-SE Corner of Building - Boiler Room Sump Area
Date Collected:		Non-Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Criteria	Vapor Intrusion Groundwater Screening Level	Flammability and Explosivity Screening Level	11/30/2006	12/11/2006	12/11/2006	7/28/2008	11/1/2010	1/29/2013	6/26/2013	9/18/2013	5/21/2014	12/11/2006	2/11/2008	11/3/2010	12/11/2006	2/13/2008	11/2/2010	2/1/2013	6/26/2013	9/17/2013	5/22/2014	12/11/2006	12/11/2006
Screened Interval (feet bgl):						7-12	3-13	3-13	3-13	3-13	3-13	3-13	3-13	3-13	5-15	5-15	5-15	3-13	3-13	3-13	3-13	3-13	3-13	3-13		7-17
Analytical Parameter	**Units**																									
TPH (EPA Method 418.1)	mg/L	NA	NA	NA	NA	NS****	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Hydrocarbons (EPA Method 8015B)																										
Gasoline Range Organics	mg/L	NA	NA	NA	NA	NS****	29	<0.1	NA	NA	NA	NA	NA	NA	12	NA	NA	<0.1	NA	NA	NA	NA	NA	NA	<0.1	<0.1
Diesel Range Organics	mg/L	NA	NA	NA	NA	NS****	<0.5	<0.1	NA	NA	NA	NA	NA	NA	<0.1	NA	NA	<0.11	NA	NA	NA	NA	NA	NA	<0.1	<0.1
Fuel Oil	mg/L	NA	NA	NA	NA	NS****	12	<0.1	NA	NA	NA	NA	NA	NA	1.9	NA	NA	0.79	NA	NA	NA	NA	NA	NA	<0.1	<0.1
Hydraulic Fluid	mg/L	NA	NA	NA	NA	NS****	<0.5	<0.1	NA	NA	NA	NA	NA	NA	<0.1	NA	NA	<0.11	NA	NA	NA	NA	NA	NA	1.2	<0.1
Kerosene	mg/L	NA	NA	NA	NA	NS****	<0.5	<0.1	NA	NA	NA	NA	NA	NA	<0.1	NA	NA	<0.11	NA	NA	NA	NA	NA	NA	<0.1	<0.1
Mineral Spirits	mg/L	NA	NA	NA	NA	NS****	<0.5	<0.1	NA	NA	NA	NA	NA	NA	<0.1	NA	NA	<0.11	NA	NA	NA	NA	NA	NA	<0.1	<0.1
Motor Oil	mg/L	NA	NA	NA	NA	NS****	<0.5	0.26	NA	NA	NA	NA	NA	NA	<0.1	NA	NA	<0.11	NA	NA	NA	NA	NA	NA	<0.1	0.19
PAH (EPA Method 8310)																										
1-Methylnaphthalene	ug/L	NA	NA	NA	NA	NS****	56	<0.1	NA	NA	<5	<5	<5	<5	0.55	<5	NA	<0.1	<5	NA	<5	<5	<5	<5	<0.1	<0.1
2-Methylnaphthalene	ug/L	750	19	3.90E+03	ID	NS****	**98**	<0.1	<5	<5	<5	<5	<5	<5	0.41	<5	12	<0.1	<5	<5	<5	<5	<5	<5	<0.1	<0.1
Acenaphthene	ug/L	3,800	38	2.30E+05	ID	NS****	<1.5	<0.1	<5	<5	<5	<5	<5	<5	<0.1	<5	<5	<0.1	<5	<5	<5	<5	<5	<5	<0.1	<0.1
Acenapthylene	ug/L	150	ID	6.20E+04	ID	NS****	8.2	<0.1	<5	<5	<5	<5	<5	<5	<0.1	<5	<5	<0.1	<5	<5	<5	<5	<5	<5	<0.1	<0.1
Anthracene	ug/L	43 (S)	ID	3.70E+06	ID	NS****	<1.5	<0.1	<5	<5	<5	<5	<5	<5	<0.1	<5	<5	<0.1	<5	<5	<5	<5	<5	<5	<0.1	<0.1
Benz(a)anthracene	ug/L	8.5	ID	NA	ID	NS****	<1.5	<0.1	<1	<1	<1	<1	<1	<1	<0.1	<5	<1	<0.1	<5	<1	<1	<1	<1	<1	<0.1	<0.1
Benzo(a)pyrene	ug/L	5.0 (A)	ID	NA	ID	NS****	<1.5	<0.1	<1	<1	<1	<1	<1	<1	<0.1	<5	<1	<0.1	<5	<1	<1	<1	<1	<1	<0.1	<0.1
Benzo(b)fluoranthene	ug/L	1.5 (S, AA)	ID	NA	ID	NS****	<1.5	<0.1	<1	<1	<1	<1	<1	<1	<0.1	<5	<1	<0.1	<5	<1	<1	<1	<1	<1	<0.1	<0.1
Benzo(g,h,i)perylene	ug/L	1.0 (M); 0.26 (S)	NA	NA	ID	NS****	<1.5	<0.1	<1	<1	<1	<1	<1	<1	<0.1	<5	<1	<0.1	<5	<1	<1	<1	<1	<1	<0.1	<0.1
Benzo(k)fluoranthene	ug/L	1.0 (M); 0.8 (S)	NA	NA	ID	NS****	<1.5	<0.1	<1	<1	<1	<1	<1	<1	<0.1	<5	<1	<0.1	<5	<1	<1	<1	<1	<1	<0.1	<0.1
Chrysene	ug/L	1.6 (S)	ID	NA	ID	NS****	<1.5	<0.1	<1	<1	<1	<1	<1	<1	<0.1	<5	<1	<0.1	<5	<1	<1	<1	<1	<1	<0.1	<0.1
Dibenzo(a,h)anthracene	ug/L	2.0 (M); 0.85	ID	NA	ID	NS****	<1.5	<0.1	<2	<2	<2	<2	<2	<2	<0.1	<5	<2	<0.1	<5	<2	<2	<2	<2	<2	<0.1	<0.1
Fluoranthene	ug/L	210 (S)	1.6	NA	ID	NS****	<1.5	<0.1	<1	<1	<1	<1	<1	<1	<0.1	<5	<1	<0.1	<5	<1	<1	<1	<1	<1	<0.1	<0.1
Fluorene	ug/L	2,000 (S)	12	3.00E+05	ID	NS****	<1.5	<0.1	<5	<5	<5	<5	<5	<5	<0.1	<5	<5	<0.1	<5	<5	<5	<5	<5	<5	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	ug/L	2.0 (M); 0.022 (S)	ID	NA	ID	NS****	<0.19	<0.1	<2	<2	<2	<2	<2	<2	<0.1	<5	<2	<0.1	<5	<2	<2	<2	<2	<2	<0.015	<0.1
Naphthalene	ug/L	1,500	11	1,200	NA	NS****	**280**	<0.1	<5	<5	<5	<5	<5	<5	2.4	6	**31**	<0.1	<5	<5	<5	<5	<5	<5	<0.1	<0.1
Phenanthrene	ug/L	150	2.0 (M); 1.4	480	ID	NS****	<1.5	<0.1	<2	<2	<2	<2	<2	<2	0.13	<5	<2	0.12	<5	<2	<2	<2	<2	<2	<0.1	<0.1
Pyrene	ug/L	140 (S)	ID	1.70R+06	ID	NS****	<1.5	<0.1	<5	<5	<5	<5	<5	<5	<0.1	<5	<5	0.15	<5	<5	<5	<5	<5	<5	0.15	<0.1
Other Target PAHs	ug/L	various	various	various	various	NS****	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOCs (EPA Method 8260)																										
1,1,1-Trichloroethane	ug/L	200 (A)	89	7.10E+04	ID	<5	<5	<5	<1	<1	<1	<1	<1	<1	<5	<30	<50	<5	<1	<1	<1	<1	<1	<1	<5	<5
1,1,2,2-Tetrachloroethane	ug/L	35	78 (X)	300	ID	<5	<5	<5	<1	<1	<1	<1	<1	<1	<5	<30	<50	<5	<1	<1	<1	<1	<1	<1	<5	<5
1,1,2-Trichloroethane	ug/L	5.0 (A)	330 (X)	480	NA	<5	<5	<5	<1	<1	<1	<1	<1	<1	<5	<30	<50	<5	<1	<1	<1	<1	<1	<1	<5	<5
1,1-Dichloroethane	ug/L	2,500	740	1.80E+04	3.80E+05	<5	<5	<5	<1	<1	<1	<1	<1	<1	<5	<30	<50	<5	<1	<1	<1	<1	<1	<1	<5	<5
1,1-Dichloroethene	ug/L	7.0 (A)	130	1,600	97,000	<5	<5	<5	<1	<1	<1	<1	<1	<1	7	<30	<50	<5	<1	<1	<1	<1	<1	<1	<5	<5
1,2,4-Trimethylbenzene	ug/L	63 (E)	17	7,300	56,000 (S)	**2,800**	**790**	<5	<1	<1	<1	<1	<1	<1	**40**	**80**	**450 Y**	<5	<1	<1	<1	<1	<1	<1	<5	<5
1,2-Dichloroethane	ug/L	5.0 (A)	360 (X)	210	2.50E+06	<5	**13**	<5	<1	<1	<1	<1	<1	<1	**14**	<30	<160	<5	<1	<1	<1	<1	<1	<1	<5	<5
1,2-Dichloropropane	ug/L	5.0 (A)	230 (X)	290	5.50E+05	<5	<5	<5	<1	<1	<1	<1	<1	<1	**140**	**200**	<50	<5	<1	<1	<1	<1	<1	<1	<5	<5
1,3,5-Trimethylbenzene	ug/L	72 (E)	45	5,100	ID	**750 J**	**190**	<5	<1	<1	<1	<1	<1	<1	13	<30	**150 Y**	<5	<1	<1	<1	<1	<1	<1	<5	<5
2-Butanone	ug/L	38,000	2,200	1.80E+07	ID	<20	<20	<20	<30	<30	<25	<25	<25	<25	21	<600	<1000	<20	<30	<30	<25	<25	<25	<25	<20	<20
2-Hexanone	ug/L	2,900	ID	6.70E+04	NA	<10	11	<10	<50	<50	<50	<50	<50	<50	<10	<1,000	<3000	<10	<50	<50	<50	<50	<50	<50	<10	<10
4-Methyl-2-pentanone	ug/L	5,200	ID	4.40E+06	ID	<10	<10	<10	<50	<50	<50	<50	<50	<50	<10	<1,000	<3000	<10	<50	<50	<50	<50	<50	<50	<10	<10
Acetone	ug/L	2,100	1,700	3.40E+07	1.50E+07	<100	<100	<100	<50	<50	<50	<50	<50	<50	<100	<1,000	<3000	<100	<50	<50	<50	<50	<50	<50	<100	<100
Benzene	ug/L	5.0 (A)	200 (X)	140	68,000	**4,600**	**930**	<5	<1	<1	<1	<1	<1	<1	**3,000**	**2,530**	**4470 Y**	<5	<1	<1	<1	<1	<1	<1	**8**	<5
Bromochloromethane	ug/L	NA	NA	NA	NA	<5	<5	<5	<1	<1	<1	<1	<1	<1	<5	<30	<50	<5	<1	<1	<1	<1	<1	<1	<5	<5
Bromoform	ug/L	80 (A,W)	ID	1.10E+04	ID	<5	<5	<5	<1	<1	<1	<1	<1	<1	<5	<30	<50	<5	<1	<1	<1	<1	<1	<1	<5	<5
Bromomethane	ug/L	29	35	140	ID	<10	<10	<10	<5	<5	<5	<5	<5	<5	<10	<100	<300	<10	<5	<5	<5	<5	<5	<5	<10	<10
n-Butylbenzene	ug/L	230	ID	380	ID	NA	NA	NA	<1	<1	<1	<1	<1	<1	NA	<30	<50	NA	<1	<1	<1	<1	<1	<1	NA	NA
sec-Butylbenzene	ug/L	230	ID	68	ID	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	ug/L	2,300	ID	9,900	13,000	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<100	<300	<5	<5	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	ug/L	5.0 (A)	45 (X)	38	ID	<5	<5	<5	<1	<1	<1	<1	<1	<1	<5	<30	<50	<5	<1	<1	<1	<1	<1	<1	<5	<5
Chlorobenzene	ug/L	100 (A)	25	NA	1.60E+05	<5	<5	<5	<1	<1	<1	<1	<1	<1	<5	<30	<50	<5	<1	<1	<1	<1	<1	<1	<5	<5
Chloroethane	ug/L	1,700	1,100 (X)	1.80E+05	1.10E+05	< 10	<10	<10	<5	<5	<5	<5	<5	<5	<10	<100	<300	<10	<5	<5	<5	<5	<5	<5	<10	<10
Chloroform	ug/L	80 (A, W)	350	720	ID	<5	<5	<5	<1	<1	<1	<1	<1	<1	<5	<30	<50	<5	<1	<1	<1	<1	<1	<1	<5	<5
Chloromethane	ug/L	1,100	ID	1,100	36,000	<10	<10	<10	<5	<5	<5	<5	<5	<5	<10	<100	<300	<10	<5	<5	<5	<5	<5	<5	<10	<10
Dibromochloromethane	ug/L	80 (A, W)	ID	330	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<100	<300	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	ug/L	74 (E)	18	2,600	43,000	**4100**	**1,500**	<5	<1	<1	<1	<1	<1	<1	**54**	**150**	**650 Y**	<5	<1	<1	<1	<1	<1	<1	<5	<5
Isopropylbenzene	ug/L	2,300	28	5	29,000	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ug/L	5.0 (A)	1,500 (X)	4,200	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<100	<300	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	ug/L	230	ID	390	ID	NA	NA	NA	<1	<1	<1	<1	<1	<1	NA	<30	100 Y	NA	<1	<1	<1	<1	<1	<1	NA	NA
Styrene	ug/L	100 (A)	80 (X)	4,100	1.40E+05	<5	<5	<5	<1	<1	<1	<1	<1	<1	<5	<30	<50	<5	<1	<1	<1	<1	<1	<1	<5	<5
Tetrachloroethylene	ug/L	5.0 (A)	60 (X)	460	ID	<5	<5	<5	<1	<1	<1	<1	<1	<1	<5	<30	<50	<5	<1	<1	<1	<1	<1	<1	<5	<5
Toluene	ug/L	790 (E)	270	1.50E+05	61,000	**20,000**	**520**	<5	<1	<1	<1	<1	<1	<1	140 J	**740**	70 Y	<5	<1	<1	<1	<1	<1	<1	<5	<5
Trichloroethene	ug/L	5.0 (A)	200 (X)	41	ID	<5	<5	<5	<1	<1	<1	<1	<1	<1	<5	<30	<50	<5	<1	<1	<1	<1	<1	<1	<5	**11**
Vinyl chloride	ug/L	2.0 (A)	13 (X)	42	33,000	<10	<2	<2	<1	<1	<1	<1	<1	<1	<2	<30	<50	<2	<1	<1	<1	<1	<1	<1	<2	<2
cis-1,2-Dichloroethene	ug/L	70 (A)	620	350	5.30E+05	61	<5	<5	<1	<1	<1	<1	<1	<1	19	<30	<50	<5	<1	<1	<1	<1	<1	<1	<5	<5
cis-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	<5	<5	<5	<1	<1	<1	<1	<1	<1	<5	<30	<50	<5	<1	<1	<1	<1	<1	<1	<5	<5
m,p-Xylene	ug/L	NA	NA	NA	NA	13,000	4,400	<5	<2	<2	<1	<1	<1	<2	240	260	600 Y	<5	<2	<2	<1	<1	<2	<2	<5	<5
o-Xylene	ug/L	NA	NA	NA	NA	5900	1,200	<5	<1	<1	<2	<2	<2	<1	87	40	60 Y	<5	<1	<1	<2	<2	<1	<1	<5	<5
Xylenes, Total	ug/L	280 (E)	41	1.00E+04	70,000	**18,900**	**5,600**	<5	<3	NA	<3	<3	<3	<3	**327**	**300**	NA	<5	<3	NA	<3	<3	<3	<3	<5	<5
trans-1,2-Dichloroethene	ug/L	100 (A)	1,500 (X)	NA	2.3E+05 (S)	<5	<5	<5	<1	<1	<1	<1	<1	<1	<5	<30	<50	<5	<1	<1	<1	<1	<1	<1	<5	<5
trans-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	<5	<5	<5	<1	<1	<1	<1	<1	<1	<5	<30	<50	<5	<1	<1	<1	<1	<1	<1	<5	<5
1,2-Dichloroethene (total)	ug/L	NA	NA	210	NA	61	<5	<5	<2	NA	NA	NA	NA	NA	19	<30	NA	<5	<1	NA	NA	NA	NA	NA	<5	<5
1,2,3-Trimethylbenzene	ug/L	NA	NA	1.00E+04	NA	ND	NA	NA	<5	<1	<1	<1	<1	<1	NA	<30	<50	NA	<1	<1	<1	<1	<1	<1	NA	NA
Other Target VOCs	ug/L	various	various	various	various	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE (EPA Method 8021B)	ug/L	40 (E)	7,100 (X)	1.00E+06	ID	<25	**85**	<1	<5	<5	<5	<5	<5	<5	<10	<100	<300	<1	<5	<5	<5	<5	<5	<5	<1	<1
Dissolved Metals (Method 6020)																										
Lead	mg/L	0.004 (L)	(G,X)	NA	ID	NS	**0.00734**	<0.005	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.005	**0.019**	<0.003	<0.005	<0.001	<0.003	<0.003	<0.003	<0.003	<0.003	<0.005	<0.005

See Notes on last page.

Table 2
Groundwater Analytical Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:		MDEQ Part 201 Non-Residential Cleanup Criteria				MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-6	MW-6	MW-7	MW-7	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-9
						Outside East-SE Corner of Building - Boiler Room Sump Area	Outside East-SE Corner of Building - Boiler Room Sump Area	Outside East-SE Corner of Building - Boiler Room Sump Area	Outside East-SE Corner of Building - Boiler Room Sump Area	Outside East-SE Corner of Building - Boiler Room Sump Area	Outside East-SE Corner of Building - Boiler Room Sump Area	Outside East-SE Corner of Building - Boiler Room Sump Area	Outside East-SE Corner of Building - Boiler Room Sump Area	Northeast Corner of Building - Classroom	Northeast Corner of Building - Classroom	Southern Portion of East Garage	Southern Portion of East Garage	Southern Portion of West Garage	Southern Portion of West Garage	Southern Portion of West Garage	Southern Portion of West Garage	Southern Portion of West Garage	Southern Portion of West Garage	Southern Portion of West Garage	Southern Portion of West Garage	South of Building on Sidewalk
		Non-Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Criteria	Vapor Intrusion Groundwater Screening Level	Flammability and Explosivity Screening Level																					
Date Collected:						2/13/2008	11/3/2010	2/1/2013	6/25/2013	9/19/2013	5/22/2014	10/27/2014	4/15/2015	2/13/2008	11/3/2010	2/11/2008	11/3/2010	2/11/2008	11/3/2010	1/31/2013	6/27/2013	9/20/2013	5/22/2014	10/28/2014	4/16/2015	7/28/2008
Screened Interval (feet bgl):						7-17	7-17	7-17	7-17	7-17	7-17	7-17	7-17	3-13	3-13	5-15	5-15	8-18	8-18	8-18	8-18	8-18	8-18	8-18	8-18	3-13
Analytical Parameter	**Units**																									
TPH (EPA Method 418.1)	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Hydrocarbons (EPA Method 8015B)																										
Gasoline Range Organics	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diesel Range Organics	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fuel Oil	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydraulic Fluid	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kerosene	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mineral Spirits	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Motor Oil	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAH (EPA Method 8310)																										
1-Methylnaphthalene	ug/L	NA	NA	NA	NA	<5	NA	<5	<5	<5	<5	NA	NA	31	NA	31	NA	8	NA	<5	<5	<5	<5	NA	NA	NA
2-Methylnaphthalene	ug/L	750	19	3.90E+03	ID	<5	<5	<5	<5	<5	<5	<5**	<5**	**51**	**21**	**52**	**52**	17	**21**	<5	5	8	9	<100**	<100**	<5
Acenaphthene	ug/L	3,800	38	2.30E+05	ID	<5	<5	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA	NA	<5
Acenapthylene	ug/L	150	ID	6.20E+04	ID	<5	<5	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA	NA	<5
Anthracene	ug/L	43 (S)	ID	3.70E+06	ID	<5	<5	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA	NA	<5
Benz(a)anthracene	ug/L	8.5	ID	NA	ID	<5	<1	<1	<1	<1	<1	NA	NA	<5	<2	<5	<2	<5	<2	<1	<1	<1	<2	NA	NA	<1
Benzo(a)pyrene	ug/L	5.0 (A)	ID	NA	ID	<5	<1	<1	<1	<1	<1	NA	NA	<5	<2	<5	<2	<5	<2	<1	<1	<1	<2	NA	NA	<1
Benzo(b)fluoranthene	ug/L	1.5 (S, AA)	ID	NA	ID	<5	<1	<1	<1	<1	<1	NA	NA	<5	<2	<5	<2	<5	<2	<1	<1	<1	<2	NA	NA	<1
Benzo(g,h,i)perylene	ug/L	1.0 (M); 0.26 (S)	NA	NA	ID	<5	<1	<1	<1	<1	<1	NA	NA	<5	<2	<5	<2	<5	<2	<1	<1	<1	<2	NA	NA	<1
Benzo(k)fluoranthene	ug/L	1.0 (M); 0.8 (S)	NA	NA	ID	<5	<1	<1	<1	<1	<1	NA	NA	<5	<2	<5	<2	<5	<2	<1	<1	<1	<2	NA	NA	<1
Chrysene	ug/L	1.6 (S)	ID	NA	ID	<5	<1	<1	<1	<1	<1	NA	NA	<5	<2	<5	<2	<5	<2	<1	<1	<1	<2	NA	NA	<1
Dibenzo(a,h)anthracene	ug/L	2.0 (M); 0.85	ID	NA	ID	<5	<2	<2	<2	<2	<2	NA	NA	<5	<2	<5	<2	<5	<2	<2	<2	<2	<2	NA	NA	<2
Fluoranthene	ug/L	210 (S)	1.6	NA	ID	<5	<1	<1	<1	<1	<1	NA	NA	<5	<2	<5	<2	<5	<2	<1	<1	<1	<2	NA	NA	<1
Fluorene	ug/L	2,000 (S)	12	3.00E+05	ID	<5	<5	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA	NA	<5
Indeno(1,2,3-cd)pyrene	ug/L	2.0 (M); 0.022 (S)	ID	NA	ID	<5	<2	<2	<2	<2	<2	NA	NA	<5	<2	<5	<2	<5	<2	<2	<2	<2	<2	NA	NA	<2
Naphthalene	ug/L	1,500	11	1,200	NA	<5	<5	<5	<5	<5	<5	<5**	<5**	**135**	**72**	**142**	**156**	**109**	**134**	**21**	**39**	**43**	**54**	**100****	**100****	<5
Phenanthrene	ug/L	150	2.0 (M); 1.4	480	ID	<5	<2	<2	<2	<2	<2	NA	NA	<5	<2	<5	<2	<5	<2	<2	<2	<2	<2	NA	NA	<2
Pyrene	ug/L	140 (S)	ID	1.70R+06	ID	<5	<5	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA	NA	<5
Other Target PAHs	ug/L	various	various	various	various	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND
VOCs (EPA Method 8260)																										
1,1,1-Trichloroethane	ug/L	200 (A)	89	7.10E+04	ID	<1	<1	<1	<1	<1	<1	<1	<1	<300	<50	<50	<100	<200	<100	<20	<20	<20	<20	<20	<20	<1
1,1,2,2-Tetrachloroethane	ug/L	35	78 (X)	300	ID	<1	<1	<1	<1	<1	<1	<1	<1	<300	<50	<50	<100	<200	<100	<20	<20	<20	<20	<20	<20	<1
1,1,2-Trichloroethane	ug/L	5.0 (A)	330 (X)	480	NA	<1	<1	<1	<1	<1	<1	<1	<1	<300	<50	<50	<100	<200	<100	<20	<20	<20	<20	<20	<20	<1
1,1-Dichloroethane	ug/L	2,500	740	1.80E+04	3.80E+05	<1	<1	<1	<1	<1	<1	<1	<1	<300	<50	<50	<100	<200	<100	<20	<20	<20	<20	<20	<20	<1
1,1-Dichloroethene	ug/L	7.0 (A)	130	1,600	97,000	<1	<1	<1	<1	<1	<1	1	1	<300	<50	<50	<100	<200	<100	<20	<20	<20	<20	<20	<20	<1
1,2,4-Trimethylbenzene	ug/L	63 (E)	17	7,300	56,000 (S)	<1	<1	<1	<1	<1	<1	<1	<1	**500**	**610 Y**	**1,150**	**500 Y**	**900**	**400 Y**	**280**	**450**	**450**	**830**	**1,030**	**970**	<1
1,2-Dichloroethane	ug/L	5.0 (A)	360 (X)	210	2.50E+06	<1	<1	<1	<1	<1	<1	<1	<1	<300	<230	<50	<100	<200	<210	<20	<20	<20	<20	<20	<20	<1
1,2-Dichloropropane	ug/L	5.0 (A)	230 (X)	290	5.50E+05	<1	<1	<1	<1	<1	<1	<1	<1	<300	<50	<50	<100	<200	<100	<20	<20	<20	<20	<20	<20	<1
1,3,5-Trimethylbenzene	ug/L	72 (E)	45	5,100	ID	<1	<1	<1	<1	<1	<1	<1	<1	<300	**80 Y**	**310**	**200 Y**	**300**	**100 Y**	**50**	**70**	**100**	**230**	**300**	**130**	<1
2-Butanone	ug/L	38,000	2,200	1.80E+07	ID	<30	<30	<25	<25	<25	<25	<25	<25	<6,000	<1000	<1,000	<3000	<5,000	<3000	<500	<500	<500	<500	<500	<500	<30
2-Hexanone	ug/L	2,900	ID	6.70E+04	NA	<50	<50	<50	<50	<50	<50	<50	<50	<10,000	<3000	<3,000	<5000	<10,000	<5000	<1,000	<1,000	<1,000	<1,000	<1000	<1000	<50
4-Methyl-2-pentanone	ug/L	5,200	ID	4.40E+06	ID	<50	<50	<50	<50	<50	<50	<50	<50	<10,000	<3000	<3,000	<5000	<10,000	<5000	<1,000	<1,000	<1,000	<1,000	<1000	<1000	<50
Acetone	ug/L	2,100	1,700	3.40E+07	1.50E+07	<50	<50	<50	<50	<50	<50	<50	<50	<10,000	<3000	<3,000	<5000	<10,000	<5000	<1,000	<1,000	<1,000	<1,000	<1000	<1000	<50
Benzene	ug/L	5.0 (A)	200 (X)	140	68,000	<1	<1	<1	<1	<1	<1	<1	<1	**13,200**	**5930 Y**	**1,240**	**1700 Y**	**7,900**	**5800 Y**	**1,530**	**2,100**	**2,350**	**3,870**	**3,880**	**2,870**	<1
Bromochloromethane	ug/L	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<300	<50	<50	<100	<200	<100	<20	<20	<20	<20	<20	<20	<1
Bromoform	ug/L	80 (A,W)	ID	1.10E+04	ID	<1	<1	<1	<1	<1	<1	<1	<1	<300	<50	<50	<100	<200	<100	<20	<20	<20	<20	<20	<20	<1
Bromomethane	ug/L	29	35	140	ID	<5	<5	<5	<5	<5	<5	<5	<5	<1,000	<300	<300	<500	<1,000	<500	<100	<100	<100	<100	<100	<100	<5
n-Butylbenzene	ug/L	230	ID	380	ID	<1	<1	<1	<1	<1	<1	<1	<1	<300	<50	<50	<100	<200	<100	<20	<20	<20	<20	<20	<20	<1
sec-Butylbenzene	ug/L	230	ID	68	ID	ND	ND	ND	ND	ND	ND	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<20	<20	ND
Carbon disulfide	ug/L	2,300	ID	9,900	13,000	<5	<5	<5	<5	<5	<5	<5	<5	<1,000	<300	<300	<500	<1,000	<500	<100	<100	<100	<100	<100	<100	<5
Carbon tetrachloride	ug/L	5.0 (A)	45 (X)	38	ID	<1	<1	<1	<1	<1	<1	<1	<1	<300	<50	<50	<100	<200	<100	<20	<20	<20	<20	<20	<20	<1
Chlorobenzene	ug/L	100 (A)	25	NA	1.60E+05	<1	<1	<1	<1	<1	<1	<1	<1	<300	<50	<50	<100	<200	<100	<20	<20	<20	<20	<20	<20	<1
Chloroethane	ug/L	1,700	1,100 (X)	1.80E+05	1.10E+05	<5	<5	<5	<5	<5	<5	<5	<5	<1,000	<300	<300	<500	<1,000	<500	<100	<100	<100	<100	<100	<100	<5
Chloroform	ug/L	80 (A, W)	350	720	ID	<1	<1	<1	<1	<1	<1	<1	<1	<300	<50	<50	<100	<200	<100	<20	<20	<20	<20	<20	<20	<1
Chloromethane	ug/L	1,100	ID	1,100	36,000	<5	<5	<5	<5	<5	<5	<5	<5	<1,000	<300	<300	<500	<1,000	<500	<100	<100	<100	<100	<100	<100	<5
Dibromochloromethane	ug/L	80 (A, W)	ID	330	ID	<5	<5	<5	<5	<5	<5	<5	<5	<1,000	<300	<300	<500	<1,000	<500	<100	<100	<100	<100	<100	<100	<5
Ethylbenzene	ug/L	74 (E)	18	2,600	43,000	<1	<1	<1	<1	<1	<1	<1	<1	**1,000**	**1020 Y**	**2,980**	**2000 Y**	**2,000**	**1400 Y**	**460**	**770**	**910**	**1,730**	**2,050**	**1,790**	<1
Isopropylbenzene	ug/L	2,300	28	5	29,000	ND	ND	ND	ND	ND	ND	<5	<5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<100	<100	ND
Methylene chloride	ug/L	5.0 (A)	1,500 (X)	4,200	ID	<5	<5	<5	<5	<5	<5	<5	<5	<1,000	<300	<300	<500	<1,000	<500	<100	<100	<100	<100	<100	<100	<5
n-Propylbenzene	ug/L	230	ID	390	ID	<1	<1	<1	<1	<1	<1	<1	<1	<300	90	170	<100	<200	<100	40	80	80	160	200	190	<1
Styrene	ug/L	100 (A)	80 (X)	4,100	1.40E+05	<1	<1	<1	<1	<1	<1	<1	<1	<300	<50	<70	<100	<200	<100	<20	<20	<20	<40	<20	<20	<1
Tetrachloroethylene	ug/L	5.0 (A)	60 (X)	460	ID	<1	<1	<1	<1	<1	<1	<1	<1	<300	<50	<50	<100	<200	<100	<20	<20	<20	<20	<20	<20	<1
Toluene	ug/L	790 (E)	270	1.50E+05	61,000	<1	<1	<1	<1	<1	<1	<1	<1	**6,600**	**1890 Y**	**7,560**	**3800 Y**	**6,800**	**7900 Y**	40	130	130	**290**	240	80	<1
Trichloroethene	ug/L	5.0 (A)	200 (X)	41	ID	**14**	**23**	**59**	**62**	**65**	**49**	**65**	**50**	<300	<50	<50	<100	<200	<100	<20	<20	<20	<20	<20	<20	<1
Vinyl chloride	ug/L	2.0 (A)	13 (X)	42	33,000	<1	<1	<1	<1	<1	<1	1	<1	**1,500**	**170 Y**	<50	<100	<200	<100	<20	<20	<20	<20	<20	<20	<1
cis-1,2-Dichloroethene	ug/L	70 (A)	620	350	5.30E+05	<1	2	8	9	10	8	11	8	**2,200**	**480 Y**	<50	<100	<200	<100	<20	<20	<20	<20	<20	<20	<1
cis-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<300	<50	<50	<100	<200	<100	<20	<20	<20	<20	<20	<20	<1
m,p-Xylene	ug/L	NA	NA	NA	NA	<2	<2	<1	<1	<1	<2	<1	<1	2,600	1500 Y	9,000	5500 Y	7,000	4800 Y	900	1,340	590	4,540	880	2,540	<2
o-Xylene	ug/L	NA	NA	NA	NA	<1	<1	<2	<2	<2	<1	<2	<2	700	350 Y	1,990	1300 Y	1,600	2000 Y	270	430	1,920	910	5,850	80	<1
Xylenes, Total	ug/L	280 (E)	41	1.00E+04	70,000	<3	NA	<3	<3	<3	<3	<3	<3	**3,300**	**1850 Y**	**10,990**	**6800 Y**	**8,600**	**6800 Y**	**1,170**	**1,770**	**2,510**	**5,450**	**6,730**	**2,620**	<3
trans-1,2-Dichloroethene	ug/L	100 (A)	1,500 (X)	NA	2.3E+05 (S)	<1	<1	<1	<1	<1	<1	<1	<1	<300	<50	<50	<100	<200	<100	<20	<20	<20	<20	<20	<20	<1
trans-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<300	<50	<50	<100	<200	<100	<20	<20	<20	<20	<20	<20	<1
1,2-Dichloroethene (total)	ug/L	NA	NA	210	NA	<1	NA	NA	NA	NA	NA	NA	NA	<300	NA	<50	NA	<200	NA	NA	NA	NA	NA	NA	NA	<2
1,2,3-Trimethylbenzene	ug/L	NA	NA	1.00E+04	NA	<1	<1	<1	<1	<1	<1	<1	<1	<300	170 Y	310	200 Y	300	100 Y	60	110	140	210	290	280	<5
Other Target VOCs	ug/L	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE (EPA Method 8021B)	ug/L	40 (E)	7,100 (X)	1.00E+06	ID	<5	<5	<5	<5	<5	<5	<5	<5	<1	<300	<300	<500	<1,000	<500	<100	<100	<100	<100	<100	<100	<5
Dissolved Metals (Method 6020)																										
Lead	mg/L	0.004 (L)	(G,X)	NA	ID	<0.001	<0.003	<0.003	<0.003	<0.003	<0.003	NA	NA	0.004	<0.003	**0.034**	0.004	**0.010**	<0.003	<0.003	<0.003	<0.003	<0.003	NA	NA	<0.003

See Notes on last page.

Table 2
Groundwater Analytical Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:		MDEQ Part 201 Non-Residential Cleanup Criteria				MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11
						South of Building on Sidewalk	South of Building on Sidewalk	South of Building on Sidewalk	South of Building on Sidewalk	South of Building on Sidewalk	South of Building on Sidewalk	South of Building on Sidewalk	East-Northeast of Building	East-Northeast of Building	East-Northeast of Building	East-Northeast of Building	East-Northeast of Building	East-Northeast of Building	East-Northeast of Building	West of Building on Sidewalk	West of Building on Sidewalk	West of Building on Sidewalk	West of Building on Sidewalk	West of Building on Sidewalk	West of Building on Sidewalk	West of Building on Sidewalk
Date Collected:		Non-Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Criteria	Vapor Intrusion Groundwater Screening Level	Flammability and Explosivity Screening Level	11/3/2010	2/1/2013	6/27/2013	9/19/2013	5/23/2014	10/27/2014	4/15/2015	2/12/2008	7/28/2008	11/2/2010	1/29/2013	6/25/2013	9/17/2013	5/21/2014	2/13/2008	11/2/2010	1/30/2013	6/27/2013	9/19/2013	5/23/2014	10/27/2014
Screened Interval (feet bgl):						3-13	3-13	3-13	3-13	3-13	3-13	3-13	6-16	6-16	6-16	6-16	6-16	6-16	6-16	9-19	9-19	9-19	9-19	9-19	9-19	9-19
Analytical Parameter	**Units**																									
TPH (EPA Method 418.1)	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Hydrocarbons (EPA Method 8015B)																										
Gasoline Range Organics	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diesel Range Organics	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fuel Oil	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydraulic Fluid	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kerosene	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mineral Spirits	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Motor Oil	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAH (EPA Method 8310)																										
1-Methylnaphthalene	ug/L	NA	NA	NA	NA	NA	<5	<5	<5	<5	NA	NA	<5	NA	NA	<5	<5	<5	<5	<5	NA	<5	<5	<5	<5	NA
2-Methylnaphthalene	ug/L	750	19	3.90E+03	ID	<5	<5	<5	<5	<5	<5**	<5**	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5**
Acenaphthene	ug/L	3,800	38	2.30E+05	ID	<5	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA
Acenapthylene	ug/L	150	ID	6.20E+04	ID	<5	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA
Anthracene	ug/L	43 (S)	ID	3.70E+06	ID	<5	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA
Benz(a)anthracene	ug/L	8.5	ID	NA	ID	<1	<1	<1	<1	<1	NA	NA	<5	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	NA
Benzo(a)pyrene	ug/L	5.0 (A)	ID	NA	ID	<1	<1	<1	<1	<1	NA	NA	<5	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	NA
Benzo(b)fluoranthene	ug/L	1.5 (S, AA)	ID	NA	ID	<1	<1	<1	<1	<1	NA	NA	<5	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	NA
Benzo(g,h,i)perylene	ug/L	1.0 (M); 0.26 (S)	NA	NA	ID	<1	<1	<1	<1	<1	NA	NA	<5	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	NA
Benzo(k)fluoranthene	ug/L	1.0 (M); 0.8 (S)	NA	NA	ID	<1	<1	<1	<1	<1	NA	NA	<5	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	NA
Chrysene	ug/L	1.6 (S)	ID	NA	ID	<1	<1	<1	<1	<1	NA	NA	<5	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	NA
Dibenzo(a,h)anthracene	ug/L	2.0 (M); 0.85	ID	NA	ID	<2	<2	<2	<2	<2	NA	NA	<5	<2	<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	NA
Fluoranthene	ug/L	210 (S)	1.6	NA	ID	<1	<1	<1	<1	<1	NA	NA	<5	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	NA
Fluorene	ug/L	2,000 (S)	12	3.00E+05	ID	<5	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA
Indeno(1,2,3-cd)pyrene	ug/L	2.0 (M); 0.022 (S)	ID	NA	ID	<2	<2	<2	<2	<2	NA	NA	<5	<2	<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	NA
Naphthalene	ug/L	1,500	11	1,200	NA	<5	<5	<5	<5	<5	<5**	<5**	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5**
Phenanthrene	ug/L	150	2.0 (M); 1.4	480	ID	<2	<2	<2	<2	<2	NA	NA	<5	<2	<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	NA
Pyrene	ug/L	140 (S)	ID	1.70R+06	ID	<5	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA
Other Target PAHs	ug/L	various	various	various	various	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
VOCs (EPA Method 8260)																										
1,1,1-Trichloroethane	ug/L	200 (A)	89	7.10E+04	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	35	78 (X)	300	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	ug/L	5.0 (A)	330 (X)	480	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	2,500	740	1.80E+04	3.80E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	7.0 (A)	130	1,600	97,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	63 (E)	17	7,300	56,000 (S)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	5.0 (A)	360 (X)	210	2.50E+06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	ug/L	5.0 (A)	230 (X)	290	5.50E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	72 (E)	45	5,100	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Butanone	ug/L	38,000	2,200	1.80E+07	ID	<30	<25	<25	<25	<25	<25	<25	<30	<30	<30	<25	<25	<25	<25	<30	<30	<25	<25	<25	<25	<25
2-Hexanone	ug/L	2,900	ID	6.70E+04	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
4-Methyl-2-pentanone	ug/L	5,200	ID	4.40E+06	ID	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Acetone	ug/L	2,100	1,700	3.40E+07	1.50E+07	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	ug/L	5.0 (A)	200 (X)	140	68,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	80 (A,W)	ID	1.10E+04	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	29	35	140	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Butylbenzene	ug/L	230	ID	380	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	230	ID	68	ID	ND	ND	ND	ND	ND	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1
Carbon disulfide	ug/L	2,300	ID	9,900	13,000	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	ug/L	5.0 (A)	45 (X)	38	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	100 (A)	25	NA	1.60E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	1,700	1,100 (X)	1.80E+05	1.10E+05	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	ug/L	80 (A, W)	350	720	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	1,100	ID	1,100	36,000	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dibromochloromethane	ug/L	80 (A, W)	ID	330	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	ug/L	74 (E)	18	2,600	43,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Isopropylbenzene	ug/L	2,300	28	5	29,000	ND	ND	ND	ND	ND	<5	<5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<5
Methylene chloride	ug/L	5.0 (A)	1,500 (X)	4,200	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	ug/L	230	ID	390	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	100 (A)	80 (X)	4,100	1.40E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	5.0 (A)	60 (X)	460	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	ug/L	790 (E)	270	1.50E+05	61,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	5.0 (A)	200 (X)	41	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	2.0 (A)	13 (X)	42	33,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	70 (A)	620	350	5.30E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	NA	NA	NA	NA	<2	<1	<1	<1	<2	<1	<1	<2	<2	<2	<1	<1	<1	<2	<2	<2	<1	<1	<1	<2	<1
o-Xylene	ug/L	NA	NA	NA	NA	<1	<2	<2	<2	<1	<2	<2	<1	<1	<1	<2	<2	<2	<1	<1	<1	<2	<2	<2	<1	<2
Xylenes, Total	ug/L	280 (E)	41	1.00E+04	70,000	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
trans-1,2-Dichloroethene	ug/L	100 (A)	1,500 (X)	NA	2.3E+05 (S)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethene (total)	ug/L	NA	NA	210	NA	NA	NA	NA	NA	NA	NA	NA	<1	<2	NA	NA	NA	NA	NA	<1	NA	NA	NA	NA	NA	NA
1,2,3-Trimethylbenzene	ug/L	NA	NA	1.00E+04	NA	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Other Target VOCs	ug/L	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE (EPA Method 8021B)	ug/L	40 (E)	7,100 (X)	1.00E+06	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dissolved Metals (Method 6020)																										
Lead	mg/L	0.004 (L)	(G,X)	NA	ID	<0.003	<0.003	<0.003	<0.003	<0.003	NA	NA	<0.001	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.001	<0.003	<0.003	<0.003	<0.003	<0.003	NA

See Notes on last page.

Table 2
Groundwater Analytical Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:		MDEQ Part 201 Non-Residential Cleanup Criteria				MW-11	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-14	MW-14	MW-14
						West of Building on Sidewalk	Outside East of the Building - Northeast of Freight Elevator	Outside East of the Building - Northeast of Freight Elevator	Outside East of the Building - Northeast of Freight Elevator	Outside East of the Building - Northeast of Freight Elevator	Outside East of the Building - Northeast of Freight Elevator	Outside East of the Building - Northeast of Freight Elevator	Outside East of the Building - Northeast of Freight Elevator	Outside East of the Building - Northeast of Freight Elevator	North of Building Along Mill Street Fence	North of Building Along Mill Street Fence	North of Building Along Mill Street Fence	North of Building Along Mill Street Fence	North of Building Along Mill Street Fence	North of Building Along Mill Street Fence	North of Building Along Mill Street Fence	North of Building Along Mill Street Fence	North of Building Along Mill Street Fence
Date Collected:		Non-Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Criteria	Vapor Intrusion Groundwater Screening Level	Flammability and Explosivity Screening Level	4/15/2015	2/12/2008	11/3/2010	1/31/2013	6/27/2013	9/19/2013	5/22/2014		10/28/2014	4/15/2015	2/12/2008	11/1/2010	1/29/2013	6/26/2013	9/18/2013	5/21/2014	2/12/2008	11/1/2010	1/29/2013
Screened Interval (feet bgl):						9-19	9-19	9-19	9-19	9-19	9-19	9-19		9-19	9-19	8-18	8-18	8-18	8-18	8-18	8-18	5-15	5-15	5-15
Analytical Parameter	**Units**																							
TPH (EPA Method 418.1)	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Hydrocarbons (EPA Method 8015B)																								
Gasoline Range Organics	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diesel Range Organics	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fuel Oil	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydraulic Fluid	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kerosene	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mineral Spirits	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Motor Oil	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAH (EPA Method 8310)																								
1-Methylnaphthalene	ug/L	NA	NA	NA	NA	NA	<5	NA	<5	<5	<5	<5	<5	NA	NA	<5	NA	<5	<5	<5	<5	NA	<5	
2-Methylnaphthalene	ug/L	750	19	3.90E+03	ID	<5**	<5	<5	<5	<5	<5	<5	<5	<5**	<5**	<5**	<5**	<5	<5	<5	<5	<5	<5	<5
Acenaphthene	ug/L	3,800	38	2.30E+05	ID	NA	<5	<5	<5	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acenapthylene	ug/L	150	ID	6.20E+04	ID	NA	<5	<5	<5	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5
Anthracene	ug/L	43 (S)	ID	3.70E+06	ID	NA	<5	<5	<5	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5
Benz(a)anthracene	ug/L	8.5	ID	NA	ID	NA	<5	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1	<1	<1	<1	<1	<5	<1	<1
Benzo(a)pyrene	ug/L	5.0 (A)	ID	NA	ID	NA	<5	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1	<1	<1	<1	<1	<5	<1	<1
Benzo(b)fluoranthene	ug/L	1.5 (S, AA)	ID	NA	ID	NA	<5	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1	<1	<1	<1	<1	<5	<1	<1
Benzo(g,h,i)perylene	ug/L	1.0 (M); 0.26 (S)	NA	NA	ID	NA	<5	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1	<1	<1	<1	<1	<5	<1	<1
Benzo(k)fluoranthene	ug/L	1.0 (M); 0.8 (S)	NA	NA	ID	NA	<5	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1	<1	<1	<1	<1	<5	<1	<1
Chrysene	ug/L	1.6 (S)	ID	NA	ID	NA	<5	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1	<1	<1	<1	<1	<5	<1	<1
Dibenzo(a,h)anthracene	ug/L	2.0 (M); 0.85	ID	NA	ID	NA	<5	<2	<2	<2	<2	<2	<2	NA	NA	<5	<2	<2	<2	<2	<2	<5	<2	<2
Fluoranthene	ug/L	210 (S)	1.6	NA	ID	NA	<5	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1	<1	<1	<1	<1	<5	<1	<1
Fluorene	ug/L	2,000 (S)	12	3.00E+05	ID	NA	<5	<5	<5	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5
Indeno(1,2,3-cd)pyrene	ug/L	2.0 (M); 0.022 (S)	ID	NA	ID	NA	<5	<2	<2	<2	<2	<2	<2	NA	NA	<5	<2	<2	<2	<2	<2	<5	<2	<2
Naphthalene	ug/L	1,500	11	1,200	NA	<5**	<5	<5	<5	<5	<5	<5	<5	<5**	<5**	<5**	<5**	<5	<5	<5	<5	<5	<5	<5
Phenanthrene	ug/L	150	2.0 (M); 1.4	480	ID	NA	<5	<2	<2	<2	<2	<2	<2	NA	NA	<5	<2	<2	<2	<2	<2	<5	<2	<2
Pyrene	ug/L	140 (S)	ID	1.70R+06	ID	NA	<5	<5	<5	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5
Other Target PAHs	ug/L	various	various	various	various	NA	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOCs (EPA Method 8260)																								
1,1,1-Trichloroethane	ug/L	200 (A)	89	7.10E+04	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	35	78 (X)	300	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	ug/L	5.0 (A)	330 (X)	480	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	2,500	740	1.80E+04	3.80E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	7.0 (A)	130	1,600	97,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	63 (E)	17	7,300	56,000 (S)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	5.0 (A)	360 (X)	210	2.50E+06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	ug/L	5.0 (A)	230 (X)	290	5.50E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	72 (E)	45	5,100	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Butanone	ug/L	38,000	2,200	1.80E+07	ID	<25	<30	<30	<25	<25	<25	<25	<25	<25	<25	<30	<30	<25	<25	<25	<25	<30	<30	<25
2-Hexanone	ug/L	2,900	ID	6.70E+04	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
4-Methyl-2-pentanone	ug/L	5,200	ID	4.40E+06	ID	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Acetone	ug/L	2,100	1,700	3.40E+07	1.50E+07	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	ug/L	5.0 (A)	200 (X)	140	68,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	80 (A,W)	ID	1.10E+04	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	29	35	140	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Butylbenzene	ug/L	230	ID	380	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	230	ID	68	ID	<1	ND	ND	ND	ND	ND	ND	ND	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	ug/L	2,300	ID	9,900	13,000	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	ug/L	5.0 (A)	45 (X)	38	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	100 (A)	25	NA	1.60E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	1,700	1,100 (X)	1.80E+05	1.10E+05	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	ug/L	80 (A, W)	350	720	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	1,100	ID	1,100	36,000	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dibromochloromethane	ug/L	80 (A, W)	ID	330	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	ug/L	74 (E)	18	2,600	43,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Isopropylbenzene	ug/L	2,300	28	5	29,000	<5	ND	ND	ND	ND	ND	ND	ND	<5	<5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ug/L	5.0 (A)	1,500 (X)	4,200	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	ug/L	230	ID	390	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	100 (A)	80 (X)	4,100	1.40E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	5.0 (A)	60 (X)	460	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	ug/L	790 (E)	270	1.50E+05	61,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	5.0 (A)	200 (X)	41	ID	<1	5	**9**	**8**	**7**	**8**	5	5	**8**	**8**	5	5	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	2.0 (A)	13 (X)	42	33,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	70 (A)	620	350	5.30E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	NA	NA	NA	NA	<1	<2	<2	<1	<1	<1	<2	<2	<1	<1	<2	<2	<1	<1	<2	<2	<2	<2	<1
o-Xylene	ug/L	NA	NA	NA	NA	<2	<1	<1	<2	<2	<2	<1	<1	<2	<2	<2	<2	<1	<1	<2	<2	<2	<1	<2
Xylenes, Total	ug/L	280 (E)	41	1.00E+04	70,000	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
trans-1,2-Dichloroethene	ug/L	100 (A)	1,500 (X)	NA	2.3E+05 (S)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethene (total)	ug/L	NA	NA	210	NA	NA	<1	NA	NA	NA	NA	NA	NA	NA	NA	<1	NA	NA	NA	NA	NA	<1	NA	NA
1,2,3-Trimethylbenzene	ug/L	NA	NA	1.00E+04	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Other Target VOCs	ug/L	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE (EPA Method 8021B)	ug/L	40 (E)	7,100 (X)	1.00E+06	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dissolved Metals (Method 6020)																								
Lead	mg/L	0.004 (L)	(G,X)	NA	ID	NA	<0.001	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	NA	NA	<0.001	<0.003	<0.003	<0.003	<0.003	<0.003	<0.001	<0.003	<0.003

See Notes on last page.

Table 2
Groundwater Analytical Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:		MDEQ Part 201 Non-Residential Cleanup Criteria				MW-14	MW-14	MW-14	MW-15	MW-15	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-17		MW-17	MW-17	MW-17	MW-17	MW-17	MW-18	MW-18	MW-18
						North of Building Along Mill Street Fence	North of Building Along Mill Street Fence	North of Building Along Mill Street Fence	East-Northeast of Building	East-Northeast of Building	East-Northeast of Building	East-Northeast of Building	East-Northeast of Building	East-Northeast of Building	East-Northeast of Building	East-Northeast of Building	East of Building - Auditorium		East of Building - Auditorium	East of Building - Auditorium	East of Building - Auditorium	East of Building - Auditorium	East of Building - Auditorium	East of Building - Auditorium	East of Building - Auditorium	East of Building - Auditorium
Date Collected:		Non-Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Criteria	Vapor Intrusion Groundwater Screening Level	Flammability and Explosivity Screening Level	6/26/2013	9/19/2013	5/21/2014	2/12/2008	11/3/2010	2/12/2008	11/2/2010	2/1/2013	6/25/2013	9/17/2013	5/21/2014	7/28/2008		11/2/2010	2/1/2013	6/26/2013	9/17/2013	5/22/2014	2/13/2008	11/2/2010	2/1/2013
Screened Interval (feet bgl):						5-15	5-15	5-15	4-14	4-14	4-9	4-9	4-9	4-9	4-9	4-9	2-7		2-7	2-7	2-7	2-7	2-7	4-14	4-14	4-14
Analytical Parameter	**Units**																									
TPH (EPA Method 418.1)	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Hydrocarbons (EPA Method 8015B)																										
Gasoline Range Organics	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diesel Range Organics	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fuel Oil	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydraulic Fluid	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kerosene	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mineral Spirits	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Motor Oil	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAH (EPA Method 8310)																										
1-Methylnaphthalene	ug/L	NA	NA	NA	NA	<5	<5	<5	11	NA	<5	NA	<5	<5	<5	<5	NA	NA	<5	NA	NA	<5	<5	<5	NA	<5
2-Methylnaphthalene	ug/L	750	19	3.90E+03	ID	<5	<5	<5	16	**59**	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acenaphthene	ug/L	3,800	38	2.30E+05	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acenapthylene	ug/L	150	ID	6.20E+04	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Anthracene	ug/L	43 (S)	ID	3.70E+06	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Benz(a)anthracene	ug/L	8.5	ID	NA	ID	<1	<1	<1	<5	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
Benzo(a)pyrene	ug/L	5.0 (A)	ID	NA	ID	<1	<1	<1	<5	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
Benzo(b)fluoranthene	ug/L	1.5 (S, AA)	ID	NA	ID	<1	<1	<1	<5	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
Benzo(g,h,i)perylene	ug/L	1.0 (M); 0.26 (S)	NA	NA	ID	<1	<1	<1	<5	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
Benzo(k)fluoranthene	ug/L	1.0 (M); 0.8 (S)	NA	NA	ID	<1	<1	<1	<5	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
Chrysene	ug/L	1.6 (S)	ID	NA	ID	<1	<1	<1	<5	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
Dibenzo(a,h)anthracene	ug/L	2.0 (M); 0.85	ID	NA	ID	<2	<2	<2	<5	<2	<5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<5	<2	<2
Fluoranthene	ug/L	210 (S)	1.6	NA	ID	<1	<1	<1	<5	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
Fluorene	ug/L	2,000 (S)	12	3.00E+05	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Indeno(1,2,3-cd)pyrene	ug/L	2.0 (M); 0.022 (S)	ID	NA	ID	<2	<2	<2	<5	<2	<5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<5	<2	<2
Naphthalene	ug/L	1,500	11	1,200	NA	<5	<5	<5	**50**	**137**	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Phenanthrene	ug/L	150	2.0 (M); 1.4	480	ID	<2	<2	<2	<5	<2	<5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<5	<2	<2
Pyrene	ug/L	140 (S)	ID	1.70R+06	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Other Target PAHs	ug/L	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOCs (EPA Method 8260)																										
1,1,1-Trichloroethane	ug/L	200 (A)	89	7.10E+04	ID	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	35	78 (X)	300	ID	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	ug/L	5.0 (A)	330 (X)	480	NA	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	2,500	740	1.80E+04	3.80E+05	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	7.0 (A)	130	1,600	97,000	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	63 (E)	17	7,300	56,000 (S)	<1	<1	<1	**270**	**810 Y**	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	5.0 (A)	360 (X)	210	2.50E+06	<1	<1	<1	<30	<40	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	ug/L	5.0 (A)	230 (X)	290	5.50E+05	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	72 (E)	45	5,100	ID	<1	<1	<1	**80**	**250 Y**	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Butanone	ug/L	38,000	2,200	1.80E+07	ID	<25	<25	<25	<600	<500	<30	<30	<25	<25	<25	<25	<30	<30	<25	<25	<30	<30	<25	<25	<30	<30	<25
2-Hexanone	ug/L	2,900	ID	6.70E+04	NA	<50	<50	<50	<1,000	<1000	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
4-Methyl-2-pentanone	ug/L	5,200	ID	4.40E+06	ID	<50	<50	<50	<1,000	<1000	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Acetone	ug/L	2,100	1,700	3.40E+07	1.50E+07	<50	<50	<50	<1,000	<1000	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	ug/L	5.0 (A)	200 (X)	140	68,000	<1	<1	<1	**1,460**	**1000 Y**	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	NA	NA	NA	NA	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	80 (A,W)	ID	1.10E+04	ID	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	29	35	140	ID	<5	<5	<5	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Butylbenzene	ug/L	230	ID	380	ID	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	230	ID	68	ID	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	ug/L	2,300	ID	9,900	13,000	<5	<5	<5	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	ug/L	5.0 (A)	45 (X)	38	ID	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	100 (A)	25	NA	1.60E+05	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	1,700	1,100 (X)	1.80E+05	1.10E+05	<5	<5	<5	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	ug/L	80 (A, W)	350	720	ID	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	1,100	ID	1,100	36,000	<5	<5	<5	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dibromochloromethane	ug/L	80 (A, W)	ID	330	ID	<5	<5	<5	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	ug/L	74 (E)	18	2,600	43,000	<1	<1	<1	**640**	**1320 Y**	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Isopropylbenzene	ug/L	2,300	28	5	29,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ug/L	5.0 (A)	1,500 (X)	4,200	ID	<5	<5	<5	<100	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	ug/L	230	ID	390	ID	<1	<1	<1	40	100 Y	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	100 (A)	80 (X)	4,100	1.40E+05	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	5.0 (A)	60 (X)	460	ID	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	ug/L	790 (E)	270	1.50E+05	61,000	<1	<1	<1	**2,760**	**1410 Y**	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	5.0 (A)	200 (X)	41	ID	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	2.0 (A)	13 (X)	42	33,000	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	70 (A)	620	350	5.30E+05	<1	<1	<1	**80**	20 Y	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	NA	NA	NA	NA	<1	<1	<2	1,410	3020 Y	<2	<2	<1	<1	<1	<2	<2	<2	<1	<1	<2	<2	<2	<2	<2	<2	<1
o-Xylene	ug/L	NA	NA	NA	NA	<2	<2	<1	350	580 Y	<1	<1	<2	<2	<2	<1	<1	<1	<2	<1	<1	<1	<2	<1	<1	<1	<2
Xylenes, Total	ug/L	280 (E)	41	1.00E+04	70,000	<3	<3	<3	**1,710**	**3600 Y**	NA	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
trans-1,2-Dichloroethene	ug/L	100 (A)	1,500 (X)	NA	2.3E+05 (S)	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethene (total)	ug/L	NA	NA	210	NA	NA	NA	NA	<30	NA	NA	NA	NA	NA	NA	NA	<2	<2	NA	NA	NA	NA	NA	<1	NA	NA
1,2,3-Trimethylbenzene	ug/L	NA	NA	1.00E+04	NA	<1	<1	<1	80	270 Y	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Other Target VOCs	ug/L	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE (EPA Method 8021B)	ug/L	40 (E)	7,100 (X)	1.00E+06	ID	<5	<5	<5	<100	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dissolved Metals (Method 6020)																										
Lead	mg/L	0.004 (L)	(G,X)	NA	ID	<0.003	<0.003	<0.003	0.001	<0.003	0.001	<0.003	<0.003	<0.003	<0.003	<0.003	**0.011**	**0.011**	<0.003	<0.003	<0.003	<0.003	<0.003	<0.001	<0.003	<0.003

See Notes on last page.

Table 2
Groundwater Analytical Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:		MDEQ Part 201 Non-Residential Cleanup Criteria				MW-18	MW-18	MW-18	MW-19	MW-19	MW-19	MW-19	MW-19	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21
						East of Building - Auditorium	East of Building - Auditorium	East of Building - Auditorium	Off-site - City of Pontiac Property West of the Site	Off-site - City of Pontiac Property West of the Site	Off-site - City of Pontiac Property West of the Site	Off-site - City of Pontiac Property West of the Site	Off-site - City of Pontiac Property West of the Site	Off-site - City of Pontiac Property West of the Site	Off-site - City of Pontiac Property West of the Site	Off-site - City of Pontiac Property West of the Site	Off-site - City of Pontiac Property West of the Site	Off-site - City of Pontiac Property West of the Site	Off-site - City of Pontiac Property West of the Site	East-Northeast of Building, Along Augusta Relief Drain	East-Northeast of Building, Along Augusta Relief Drain	East-Northeast of Building, Along Augusta Relief Drain	East-Northeast of Building, Along Augusta Relief Drain	East-Northeast of Building, Along Augusta Relief Drain	East-Northeast of Building, Along Augusta Relief Drain
		Non-Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Criteria	Vapor Intrusion Groundwater Screening Level	Flammability and Explosivity Screening Level																				
Date Collected:						6/26/2013	9/17/2013	5/22/2014	12/2/2010	1/30/2013	6/27/2013	9/19/2013	5/23/2014	12/2/2010	1/30/2013	6/27/2013	9/20/2013	5/22/2014	10/27/2014	4/15/2015	1/28/2013	6/25/2013	9/19/2013	5/21/2014	10/28/2014	4/16/2015
Screened Interval (feet bgl):						4-14	4-14	4-14	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	5.5-10.5'	5.5-10.5'	5.5-10.5'	5.5-10.5'	5.5-10.5'	5.5-10.5'
Analytical Parameter	**Units**																								
TPH (EPA Method 418.1)	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Hydrocarbons (EPA Method 8015B)																									
Gasoline Range Organics	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diesel Range Organics	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fuel Oil	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydraulic Fluid	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kerosene	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mineral Spirits	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Motor Oil	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAH (EPA Method 8310)																									
1-Methylnaphthalene	ug/L	NA	NA	NA	NA	<5	<5	<5	NA	<5	<5	<5	<5	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA
2-Methylnaphthalene	ug/L	750	19	3.90E+03	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5**	<5**	<5	<5	<5	<5	<5**	<5**
Acenaphthene	ug/L	3,800	38	2.30E+05	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA
Acenapthylene	ug/L	150	ID	6.20E+04	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA
Anthracene	ug/L	43 (S)	ID	3.70E+06	ID	<5	<5	<5	<1	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA
Benz(a)anthracene	ug/L	8.5	ID	NA	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA
Benzo(a)pyrene	ug/L	5.0 (A)	ID	NA	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA
Benzo(b)fluoranthene	ug/L	1.5 (S, AA)	ID	NA	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA
Benzo(g,h,i)perylene	ug/L	1.0 (M); 0.26 (S)	NA	NA	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA
Benzo(k)fluoranthene	ug/L	1.0 (M); 0.8 (S)	NA	NA	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA
Chrysene	ug/L	1.6 (S)	ID	NA	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA
Dibenzo(a,h)anthracene	ug/L	2.0 (M); 0.85	ID	NA	ID	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	NA	NA	<2	<2	<2	<2	NA	NA
Fluoranthene	ug/L	210 (S)	1.6	NA	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA
Fluorene	ug/L	2,000 (S)	12	3.00E+05	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA
Indeno(1,2,3-cd)pyrene	ug/L	2.0 (M); 0.022 (S)	ID	NA	ID	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	NA	NA	<2	<2	<2	<2	NA	NA
Naphthalene	ug/L	1,500	11	1,200	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5**	<5**	<5	<5	<5	<5	<5**	<5**
Phenanthrene	ug/L	150	2.0 (M); 1.4	480	ID	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	NA	NA	<2	<2	<2	<2	NA	NA
Pyrene	ug/L	140 (S)	ID	1.70R+06	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA
Other Target PAHs	ug/L	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA
VOCs (EPA Method 8260)																									
1,1,1-Trichloroethane	ug/L	200 (A)	89	7.10E+04	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	35	78 (X)	300	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	ug/L	5.0 (A)	330 (X)	480	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	2,500	740	1.80E+04	3.80E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	7.0 (A)	130	1,600	97,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	63 (E)	17	7,300	56,000 (S)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	5.0 (A)	360 (X)	210	2.50E+06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	ug/L	5.0 (A)	230 (X)	290	5.50E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	72 (E)	45	5,100	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Butanone	ug/L	38,000	2,200	1.80E+07	ID	<25	<25	<25	<30	<25	<25	<25	<25	<30	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
2-Hexanone	ug/L	2,900	ID	6.70E+04	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
4-Methyl-2-pentanone	ug/L	5,200	ID	4.40E+06	ID	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Acetone	ug/L	2,100	1,700	3.40E+07	1.50E+07	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	ug/L	5.0 (A)	200 (X)	140	68,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	80 (A,W)	ID	1.10E+04	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	29	35	140	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Butylbenzene	ug/L	230	ID	380	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	230	ID	68	ID	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1	<1	ND	ND	ND	ND	<1	<1
Carbon disulfide	ug/L	2,300	ID	9,900	13,000	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	ug/L	5.0 (A)	45 (X)	38	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	100 (A)	25	NA	1.60E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	1,700	1,100 (X)	1.80E+05	1.10E+05	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	ug/L	80 (A, W)	350	720	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	1,100	ID	1,100	36,000	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dibromochloromethane	ug/L	80 (A, W)	ID	330	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	ug/L	74 (E)	18	2,600	43,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Isopropylbenzene	ug/L	2,300	28	5	29,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<5	<5	ND	ND	ND	ND	<5	<5
Methylene chloride	ug/L	5.0 (A)	1,500 (X)	4,200	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	ug/L	230	ID	390	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	100 (A)	80 (X)	4,100	1.40E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	5.0 (A)	60 (X)	460	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	ug/L	790 (E)	270	1.50E+05	61,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	5.0 (A)	200 (X)	41	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	2.0 (A)	13 (X)	42	33,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	70 (A)	620	350	5.30E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	NA	NA	NA	NA	<1	<1	<2	<2	<1	<1	<1	<2	<2	<1	<1	<1	<2	<1	<1	<1	<1	<1	<2	<1	<1
o-Xylene	ug/L	NA	NA	NA	NA	<2	<2	<1	<1	<2	<2	<2	<1	<1	<2	<2	<2	<1	<2	<2	<2	<2	<2	<1	<2	<2
Xylenes, Total	ug/L	280 (E)	41	1.00E+04	70,000	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
trans-1,2-Dichloroethene	ug/L	100 (A)	1,500 (X)	NA	2.3E+05 (S)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethene (total)	ug/L	NA	NA	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trimethylbenzene	ug/L	NA	NA	1.00E+04	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Other Target VOCs	ug/L	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE (EPA Method 8021B)	ug/L	40 (E)	7,100 (X)	1.00E+06	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dissolved Metals (Method 6020)																									
Lead	mg/L	0.004 (L)	(G,X)	NA	ID	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	NA	NA	<0.003	<0.003	<0.003	<0.003	NA	NA

See Notes on last page.

Table 2
Groundwater Analytical Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:		MDEQ Part 201 Non-Residential Cleanup Criteria				MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-24S	MW-24S	MW-24S	MW-24S	MW-24S	MW-24S	MW-24D	MW-24D	MW-24D
						East-Northeast of Building, Along Augusta Relief Drain	East-Northeast of Building, Along Augusta Relief Drain	East-Northeast of Building, Along Augusta Relief Drain	East-Northeast of Building, Along Augusta Relief Drain	East-Northeast of Building, Along Augusta Relief Drain	East-Northeast of Building, Along Augusta Relief Drain	Inside - Eastern Garage, Within Excavation Area	Inside - Eastern Garage, Within Excavation Area	Inside - Eastern Garage, Within Excavation Area	Inside - Eastern Garage, Within Excavation Area	Inside - Eastern Garage, Within Excavation Area	Inside - Eastern Garage, Within Excavation Area	Southern Portion of West Garage - Within Excavation Area	Southern Portion of West Garage - Within Excavation Area	Southern Portion of West Garage - Within Excavation Area	Southern Portion of West Garage - Within Excavation Area	Southern Portion of West Garage - Within Excavation Area	Southern Portion of West Garage - Within Excavation Area	Southern Portion of West Garage - Within Excavation Area	Southern Portion of West Garage - Within Excavation Area	Southern Portion of West Garage - Within Excavation Area
		Non-Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Criteria	Vapor Intrusion Groundwater Screening Level	Flammability and Explosivity Screening Level																					
Date Collected:						1/31/2013	6/25/2013	9/19/2013	5/21/2014	10/28/2014	4/16/2015	1/31/2013	6/26/2013	9/20/2013	5/22/2014	10/28/2014	4/16/2015	1/31/2013	6/28/2013	9/20/2013	5/22/2014	10/29/2014	4/15/2015	1/31/2013	6/28/2013	9/20/2013
Screened Interval (feet bgl):						4-14'	4-14'	4-14'	4-14'	4-14'	4-14'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	4-9'	4-9'	4-9'	4-9'	4-9'	4-9'	15-20'	15-20'	15-20'
Analytical Parameter	**Units**																									
TPH (EPA Method 418.1)	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Hydrocarbons (EPA Method 8015B)																										
Gasoline Range Organics	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diesel Range Organics	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fuel Oil	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydraulic Fluid	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kerosene	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mineral Spirits	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Motor Oil	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAH (EPA Method 8310)																										
1-Methylnaphthalene	ug/L	NA	NA	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	12	6	10
2-Methylnaphthalene	ug/L	750	19	3.90E+03	ID	<5	<5	<5	<5	<5**	<5**	<5	<5	<5	<5	<5**	<5**	<5	<5	<5	<5	<5**	<5**	**23**	13	19
Acenaphthene	ug/L	3,800	38	2.30E+05	ID	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5
Acenapthylene	ug/L	150	ID	6.20E+04	ID	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5
Anthracene	ug/L	43 (S)	ID	3.70E+06	ID	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5
Benz(a)anthracene	ug/L	8.5	ID	NA	ID	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<4	<5	<5
Benzo(a)pyrene	ug/L	5.0 (A)	ID	NA	ID	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<4	<5	<5
Benzo(b)fluoranthene	ug/L	1.5 (S, AA)	ID	NA	ID	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<4	<5	<5
Benzo(g,h,i)perylene	ug/L	1.0 (M); 0.26 (S)	NA	NA	ID	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<4	<5	<5
Benzo(k)fluoranthene	ug/L	1.0 (M); 0.8 (S)	NA	NA	ID	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<4	<5	<5
Chrysene	ug/L	1.6 (S)	ID	NA	ID	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<4	<5	<5
Dibenzo(a,h)anthracene	ug/L	2.0 (M); 0.85	ID	NA	ID	<2	<2	<2	<2	NA	NA	<2	<2	<2	<2	NA	NA	<2	<2	<2	<2	NA	NA	<4	<5	<5
Fluoranthene	ug/L	210 (S)	1.6	NA	ID	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<4	<5	<5
Fluorene	ug/L	2,000 (S)	12	3.00E+05	ID	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5
Indeno(1,2,3-cd)pyrene	ug/L	2.0 (M); 0.022 (S)	ID	NA	ID	<2	<2	<2	<2	NA	NA	<2	<2	<2	<2	NA	NA	<2	<2	<2	<2	NA	NA	<4	<5	<5
Naphthalene	ug/L	1,500	11	1,200	NA	<5	<5	<5	<5	<5**	<5**	<5	<5	<5	<5	<5**	<5**	<5	<5	<5	<5	<5**	<5**	**133**	**71**	**101**
Phenanthrene	ug/L	150	2.0 (M); 1.4	480	ID	<2	<2	<2	<2	NA	NA	<2	<2	<2	<2	NA	NA	<2	<2	<2	<2	NA	NA	<4	<5	<5
Pyrene	ug/L	140 (S)	ID	1.70R+06	ID	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5
Other Target PAHs	ug/L	various	various	various	various	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA	ND	ND	ND
VOCs (EPA Method 8260)																										
1,1,1-Trichloroethane	ug/L	200 (A)	89	7.10E+04	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
1,1,2,2-Tetrachloroethane	ug/L	35	78 (X)	300	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
1,1,2-Trichloroethane	ug/L	5.0 (A)	330 (X)	480	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
1,1-Dichloroethane	ug/L	2,500	740	1.80E+04	3.80E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
1,1-Dichloroethene	ug/L	7.0 (A)	130	1,600	97,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
1,2,4-Trimethylbenzene	ug/L	63 (E)	17	7,300	56,000 (S)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**700**	**800**	**600**
1,2-Dichloroethane	ug/L	5.0 (A)	360 (X)	210	2.50E+06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
1,2-Dichloropropane	ug/L	5.0 (A)	230 (X)	290	5.50E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
1,3,5-Trimethylbenzene	ug/L	72 (E)	45	5,100	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
2-Butanone	ug/L	38,000	2,200	1.80E+07	ID	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<5,000	<5,000	<500
2-Hexanone	ug/L	2,900	ID	6.70E+04	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<10,000	<10,000	<10,000
4-Methyl-2-pentanone	ug/L	5,200	ID	4.40E+06	ID	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<10,000	<10,000	<10,000
Acetone	ug/L	2,100	1,700	3.40E+07	1.50E+07	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<10,000	<10,000	<10,000
Benzene	ug/L	5.0 (A)	200 (X)	140	68,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**20,900**	**21,300**	**19,700**
Bromochloromethane	ug/L	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
Bromoform	ug/L	80 (A,W)	ID	1.10E+04	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
Bromomethane	ug/L	29	35	140	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1,000	<1,000	<1,000
n-Butylbenzene	ug/L	230	ID	380	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
sec-Butylbenzene	ug/L	230	ID	68	ID	ND	ND	ND	ND	<1	<1	ND	ND	ND	ND	<1	<1	ND	ND	ND	ND	<1	<1	ND	ND	ND
Carbon disulfide	ug/L	2,300	ID	9,900	13,000	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1,000	<1,000	<1,000
Carbon tetrachloride	ug/L	5.0 (A)	45 (X)	38	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
Chlorobenzene	ug/L	100 (A)	25	NA	1.60E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
Chloroethane	ug/L	1,700	1,100 (X)	1.80E+05	1.10E+05	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1,000	<1,000	<1,000
Chloroform	ug/L	80 (A, W)	350	720	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
Chloromethane	ug/L	1,100	ID	1,100	36,000	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1,000	<1,000	<1,000
Dibromochloromethane	ug/L	80 (A, W)	ID	330	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1,000	<1,000	<1,000
Ethylbenzene	ug/L	74 (E)	18	2,600	43,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**1,800**	**2,000**	**1,600**
Isopropylbenzene	ug/L	2,300	28	5	29,000	ND	ND	ND	ND	<5	<5	ND	ND	ND	ND	<5	<5	ND	ND	ND	ND	<5	<5	ND	ND	ND
Methylene chloride	ug/L	5.0 (A)	1,500 (X)	4,200	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1,000	<1,000	<1,000
n-Propylbenzene	ug/L	230	ID	390	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
Styrene	ug/L	100 (A)	80 (X)	4,100	1.40E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
Tetrachloroethylene	ug/L	5.0 (A)	60 (X)	460	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
Toluene	ug/L	790 (E)	270	1.50E+05	61,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**23,300**	**23,100**	**17,500**
Trichloroethene	ug/L	5.0 (A)	200 (X)	41	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
Vinyl chloride	ug/L	2.0 (A)	13 (X)	42	33,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
cis-1,2-Dichloroethene	ug/L	70 (A)	620	350	5.30E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
cis-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
m,p-Xylene	ug/L	NA	NA	NA	NA	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<2	<1	6,800	7,400	5,600
o-Xylene	ug/L	NA	NA	NA	NA	<2	<2	<2	<1	<2	<2	<2	<2	<2	<2	<1	<2	<2	<2	<2	<2	<1	<2	3,100	3,500	2,600
Xylenes, Total	ug/L	280 (E)	41	1.00E+04	70,000	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	**9,900**	**10,900**	**8,200**
trans-1,2-Dichloroethene	ug/L	100 (A)	1,500 (X)	NA	2.3E+05 (S)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
trans-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	<200	<200
1,2-Dichloroethene (total)	ug/L	NA	NA	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trimethylbenzene	ug/L	NA	NA	1.00E+04	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<200	200	<200
Other Target VOCs	ug/L	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE (EPA Method 8021B)	ug/L	40 (E)	7,100 (X)	1.00E+06	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1,000	<1,000	<1,000
Dissolved Metals (Method 6020)																										
Lead	mg/L	0.004 (L)	(G,X)	NA	ID	<0.003	<0.003	<0.003	<0.003	NA	NA	<0.003	<0.003	<0.003	<0.003	NA	NA	<0.003	<0.003	<0.003	<0.003	NA	NA	0.003	0.004	<0.003

See Notes on last page.

Table 2
Groundwater Analytical Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:		MDEQ Part 201 Non-Residential Cleanup Criteria				MW-24D		MW-24D		MW-24D		MW-25		MW-25		MW-25		MW-25		MW-25		MW-26		MW-26		MW-26		MW-26		MW-26	
						Southern Portion of West Garage - Within Excavation Area		Southern Portion of West Garage - Within Excavation Area		Southern Portion of West Garage - Within Excavation Area		Off-site - Right-of-Way of Mill Street		Off-site - Right-of-Way of Mill Street		Off-site - Right-of-Way of Mill Street		Off-site - Right-of-Way of Mill Street		Off-site - Right-of-Way of Mill Street		Off-site - Right-of-Way of Mill Street		Off-site - Right-of-Way of Mill Street		Off-site - Right-of-Way of Mill Street		Off-site - Right-of-Way of Mill Street		Off-site - Right-of-Way of Mill Street	
Date Collected:		Non-Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Criteria	Vapor Intrusion Groundwater Screening Level	Flammability and Explosivity Screening Level	5/22/2014		10/29/2014		4/15/2015		1/30/2013		6/24/2013		9/19/2013		5/22/2014		10/28/2014		4/15/2015		1/30/2013		6/24/2013		9/19/2013		5/23/2014		10/27/2014		4/15/2015	
Screened Interval (feet bgl):						15-20'		15-20'		15-20'		4-14'		4-14'		4-14'		4-14'		4-14'		3-13'		3-13'		3-13'		3-13'		3-13'		3-13'	
Analytical Parameter	**Units**																																
TPH (EPA Method 418.1)	mg/L	NA	NA	NA	NA	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Semivolatile Hydrocarbons (EPA Method 8015B)																																	
Gasoline Range Organics	mg/L	NA	NA	NA	NA	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Diesel Range Organics	mg/L	NA	NA	NA	NA	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Fuel Oil	mg/L	NA	NA	NA	NA	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Hydraulic Fluid	mg/L	NA	NA	NA	NA	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Kerosene	mg/L	NA	NA	NA	NA	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Mineral Spirits	mg/L	NA	NA	NA	NA	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Motor Oil	mg/L	NA	NA	NA	NA	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
PAH (EPA Method 8310)																																	
1-Methylnaphthalene	ug/L	NA	NA	NA	NA	10	12	NA		NA		<5		<5		<5		<5		NA		<5		<5		<5		<5	<5	NA		NA	
2-Methylnaphthalene	ug/L	750	19	3.90E+03	ID	18	**23**	<1,000	<1,000	<1,000	<1,000	<5		<5		<5		<5		<5**		<5**		<5		<5		<5	<5	<5	<300	<300	<300	<300
Acenaphthene	ug/L	3,800	38	2.30E+05	ID	<5	<5	NA		NA		<5		<5		<5		<5		NA		NA		<5		<5		<5	<5	<5		NA		NA	
Acenapthylene	ug/L	150	ID	6.20E+04	ID	<5	<5	NA		NA		<5		<5		<5		<5		NA		NA		<5		<5		<5	<5	<5		NA		NA	
Anthracene	ug/L	43 (S)	ID	3.70E+06	ID	<5	<5	NA		NA		<5		<5		<5		<5		NA		NA		<5		<5		<5	<5	<5		NA		NA	
Benz(a)anthracene	ug/L	8.5	ID	NA	ID	<1	<1	NA		NA		<1		<1		<1		<1		NA		NA		<1		<1		<1	<1	<1		NA		NA	
Benzo(a)pyrene	ug/L	5.0 (A)	ID	NA	ID	<1	<1	NA		NA		<1		<1		<1		<1		NA		NA		<1		<1		<1	<1	<1		NA		NA	
Benzo(b)fluoranthene	ug/L	1.5 (S, AA)	ID	NA	ID	<1	<1	NA		NA		<1		<1		<1		<1		NA		NA		<1		<1		<1	<1	<1		NA		NA	
Benzo(g,h,i)perylene	ug/L	1.0 (M); 0.26 (S)	NA	NA	ID	<1	<1	NA		NA		<1		<1		<1		<1		NA		NA		<1		<1		<1	<1	<1		NA		NA	
Benzo(k)fluoranthene	ug/L	1.0 (M); 0.8 (S)	NA	NA	ID	<1	<1	NA		NA		<1		<1		<1		<1		NA		NA		<1		<1		<1	<1	<1		NA		NA	
Chrysene	ug/L	1.6 (S)	ID	NA	ID	<1	<1	NA		NA		<1		<1		<1		<1		NA		NA		<1		<1		<1	<1	<1		NA		NA	
Dibenzo(a,h)anthracene	ug/L	2.0 (M); 0.85	ID	NA	ID	<2	<2	NA		NA		<2		<2		<2		<2		NA		NA		<2		<2		<2	<2	<2		NA		NA	
Fluoranthene	ug/L	210 (S)	1.6	NA	ID	<1	<1	NA		NA		<1		<1		<1		<1		NA		NA		<1		<1		<1	<1	<1		NA		NA	
Fluorene	ug/L	2,000 (S)	12	3.00E+05	ID	<5	<5	NA		NA		<5		<5		<5		<5		NA		NA		<5		<5		<5	<5	<5		NA		NA	
Indeno(1,2,3-cd)pyrene	ug/L	2.0 (M); 0.022 (S)	ID	NA	ID	<2	<2	NA		NA		<2		<2		<2		<2		NA		NA		<2		<2		<2	<2	<2		NA		NA	
Naphthalene	ug/L	1,500	11	1,200	NA	**94**	**118**	<1,000**	<1,000**	<1,000**	<1,000**	<5		<5		<5		<5		<5**		<5**		<5		<5		<5	<5	<5	<300	<300	<300	<300
Phenanthrene	ug/L	150	2.0 (M); 1.4	480	ID	<2	<2	NA		NA		<2		<2		<2		<2		NA		NA		<2		<2		<2	<2	<2		NA		NA	
Pyrene	ug/L	140 (S)	ID	1.70R+06	ID	<5	<5	NA		NA		<5		<5		<5		<5		NA		NA		<5		<5		<5	<5	<5		NA		NA	
Other Target PAHs	ug/L	various	various	various	various	ND	ND	NA		NA		ND		ND		ND		ND		NA		NA		ND		ND		ND	ND	ND		NA		NA	
VOCs (EPA Method 8260)																																	
1,1,1-Trichloroethane	ug/L	200 (A)	89	7.10E+04	ID	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
1,1,2,2-Tetrachloroethane	ug/L	35	78 (X)	300	ID	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
1,1,2-Trichloroethane	ug/L	5.0 (A)	330 (X)	480	NA	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
1,1-Dichloroethane	ug/L	2,500	740	1.80E+04	3.80E+05	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
1,1-Dichloroethene	ug/L	7.0 (A)	130	1,600	97,000	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
1,2,4-Trimethylbenzene	ug/L	63 (E)	17	7,300	56,000 (S)	**900**	**1,000**	**900**	**800**	**600**	**600**	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
1,2-Dichloroethane	ug/L	5.0 (A)	360 (X)	210	2.50E+06	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
1,2-Dichloropropane	ug/L	5.0 (A)	230 (X)	290	5.50E+05	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
1,3,5-Trimethylbenzene	ug/L	72 (E)	45	5,100	ID	**300**	**300**	**300**	**300**	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
2-Butanone	ug/L	38,000	2,200	1.80E+07	ID	<500	<500	<5000	<5000	<5,000	<5,000	<25		<25		<25		<25		<25		<25		<1,300		<1,300		<250	<1,300	<1,300	<1,300	<1,300	<1,300	<1,300	
2-Hexanone	ug/L	2,900	ID	6.70E+04	NA	<10,000	<10,000	<10000	<10000	<10,000	<10,000	<50		<50		<50		<50		<50		<50		<2,500		<2,500		<500	<2,500	<2,500	<2,500	<2,500	<2,500	<2,500	
4-Methyl-2-pentanone	ug/L	5,200	ID	4.40E+06	ID	<10,000	<10,000	<10000	<10000	<10,000	<10,000	<50		<50		<50		<50		<50		<50		<2,500		<2,500		<500	<2,500	<2,500	<2,500	<2,500	<2,500	<2,500	
Acetone	ug/L	2,100	1,700	3.40E+07	1.50E+07	<10,000	<10,000	<10000	<10000	<10,000	<10,000	<50		<50		<50		<50		<50		<50		<2,500		<2,500		<500	<2,500	<2,500	<2,500	<2,500	<2,500	<2,500	
Benzene	ug/L	5.0 (A)	200 (X)	140	68,000	**26,200**	**28,200**	**27,200**	**25,900**	**20,900**	**20,500**	<1		<1		<1		<1		<1		<1		**3,360**		**3,020**		**2,600**	**2,450**	**2,530**	**2,870**	**3,200**	**1,920**	**1,490**	
Bromochloromethane	ug/L	NA	NA	NA	NA	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
Bromoform	ug/L	80 (A,W)	ID	1.10E+04	ID	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
Bromomethane	ug/L	29	35	140	ID	<1,000	<1,000	<1000	<1000	<1,000	<1,000	<5		<5		<5		<5		<5		<5		<300		<300		<500	<300	<300	<300	<300	<300	<300	
n-Butylbenzene	ug/L	230	ID	380	ID	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
sec-Butylbenzene	ug/L	230	ID	68	ID	ND	ND	<200	<200	<200	<200	ND		ND		ND		ND		<1		<1		ND		ND		ND	ND	ND	<50	<50	<50	<50	
Carbon disulfide	ug/L	2,300	ID	9,900	13,000	<1,000	<1,000	<1000	<1000	<1,000	<1,000	<5		<5		<5		<5		<5		<5		<300		<300		<500	<300	<300	<300	<300	<300	<300	
Carbon tetrachloride	ug/L	5.0 (A)	45 (X)	38	ID	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
Chlorobenzene	ug/L	100 (A)	25	NA	1.60E+05	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
Chloroethane	ug/L	1,700	1,100 (X)	1.80E+05	1.10E+05	<1,000	<1,000	<1000	<1000	<1,000	<1,000	<5		<5		<5		<5		<5		<5		<300		<300		<500	<300	<300	<300	<300	<300	<300	
Chloroform	ug/L	80 (A, W)	350	720	ID	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
Chloromethane	ug/L	1,100	ID	1,100	36,000	<1,000	<1,000	<1000	<1000	<1,000	<1,000	<5		<5		<5		<5		<5		<5		<300		<300		<500	<300	<300	<300	<300	<300	<300	
Dibromochloromethane	ug/L	80 (A, W)	ID	330	ID	<1,000	<1,000	<1000	<1000	<1,000	<1,000	<5		<5		<5		<5		<5		<5		<300		<300		<500	<300	<300	<300	<300	<300	<300	
Ethylbenzene	ug/L	74 (E)	18	2,600	43,000	**2,100**	**2,300**	**2,100**	**2,100**	**1,200**	**1,300**	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
Isopropylbenzene	ug/L	2,300	28	5	29,000	ND	ND	<1000	<1000	<1,000	<1,000	ND		ND		ND		ND		<5		<5		ND		ND		ND	ND	ND	<300	<300	<300	<300	
Methylene chloride	ug/L	5.0 (A)	1,500 (X)	4,200	ID	<1,000	<1,000	<1000	<1000	<1,000	<1,000	<5		<5		<5		<5		<5		<5		<300		<300		<500	<300	<300	<300	<300	<300	<300	
n-Propylbenzene	ug/L	230	ID	390	ID	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
Styrene	ug/L	100 (A)	80 (X)	4,100	1.40E+05	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
Tetrachloroethylene	ug/L	5.0 (A)	60 (X)	460	ID	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
Toluene	ug/L	790 (E)	270	1.50E+05	61,000	**25,800**	**27,900**	**27,000**	**26,200**	**20,800**	**20,700**	<1		<1		<1		<1		<1		<1		<50		50		<100	<50	<50	<50	<50	<50	<50	
Trichloroethene	ug/L	5.0 (A)	200 (X)	41	ID	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
Vinyl chloride	ug/L	2.0 (A)	13 (X)	42	33,000	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
cis-1,2-Dichloroethene	ug/L	70 (A)	620	350	5.30E+05	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
cis-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
m,p-Xylene	ug/L	NA	NA	NA	NA	8,200	8,800	3,500	3,400	5,500	5,500	<1		<1		<1		<2		<1		<1		<50		<50		<100	<100	<100	<50	<50	<50	<50	
o-Xylene	ug/L	NA	NA	NA	NA	3,600	3,800	7,700	7,600	2,700	2,700	<2		<2		<2		<1		<2		<2		<100		<100		<300	<50	<50	<100	<100	<100	<100	
Xylenes, Total	ug/L	280 (E)	41	1.00E+04	70,000	**11,800**	**12,600**	**11,200**	**11,000**	**8,200**	**8,200**	<3		<3		<3		<3		<3		<3		<150		<150		<400	<150	<150	<150	<150	<150	<150	
trans-1,2-Dichloroethene	ug/L	100 (A)	1,500 (X)	NA	2.3E+05 (S)	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
trans-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	<200	<200	<200	<200	<200	<200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
1,2-Dichloroethene (total)	ug/L	NA	NA	210	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA		NA		NA		NA		NA		NA		NA	NA	NA	NA	NA	NA	NA	
1,2,3-Trimethylbenzene	ug/L	NA	NA	1.00E+04	NA	300	300	200	200	200	200	<1		<1		<1		<1		<1		<1		<50		<50		<100	<50	<50	<50	<50	<50	<50	
Other Target VOCs	ug/L	various	various	various	various	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	
MTBE (EPA Method 8021B)	ug/L	40 (E)	7,100 (X)	1.00E+06	ID	<1,000	<1,000	<1000	<1000	<1,000	<1,000	<5		<5		<5		<5		<5		<5		<300		<300		<500	<300	<300	<300	<300	<300	<300	
Dissolved Metals (Method 6020)																																	
Lead	mg/L	0.004 (L)	(G,X)	NA	ID	<0.003	<0.003	NA	NA	NA	NA	<0.003		<0.003		<0.003		<0.003		NA		NA		<0.003		<0.003		<0.003	<0.003	<0.003	NA	NA	NA	NA	

See Notes on last page.

Table 2
Groundwater Analytical Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:		MDEQ Part 201 Non-Residential Cleanup Criteria				MW-27	MW-27	MW-27	MW-27	MW-27	MW-27	MW-28	MW-28	MW-28	MW-28	MW-28	MW-28	MW-29	MW-29	MW-29	MW-29	MW-29	MW-29	MW-30	MW-30	MW-30
						Off-site - Right-of-Way of Mill Street	Off-site - Right-of-Way of Mill Street	Off-site - Right-of-Way of Mill Street	Off-site - Right-of-Way of Mill Street	Off-site - Right-of-Way of Mill Street	Off-site - Right-of-Way of Mill Street	North of Building, within Excavation Area	North of Building, within Excavation Area	North of Building, within Excavation Area	North of Building, within Excavation Area	North of Building, within Excavation Area	North of Building, within Excavation Area	Northeast of Building, Along Augusta Relief Drain	Northeast of Building, Along Augusta Relief Drain	Northeast of Building, Along Augusta Relief Drain	Northeast of Building, Along Augusta Relief Drain	Northeast of Building, Along Augusta Relief Drain	Northeast of Building, Along Augusta Relief Drain	East of Building, Along Augusta Relief Drain	East of Building, Along Augusta Relief Drain	East of Building, Along Augusta Relief Drain
Date Collected:						1/30/2013	6/24/2013	9/19/2013	5/23/2014	10/27/2014	4/15/2015	1/28/2013	6/27/2013	9/19/2013	5/21/2014	10/28/2014	4/16/2015	1/29/2013	6/26/2013	9/17/2013	5/21/2014	10/28/2014	4/16/2015	1/31/2013	6/25/2013	9/20/2013
Screened Interval (feet bgl):						6.5-16.5'	6.5-16.5'	6.5-16.5'	6.5-16.5'	6.5-16.5'	6.5-16.5'	4-9'	4-9'	4-9'	4-9'	4-9'	4-9'	4.5-9.5'	4.5-9.5'	4.5-9.5'	4.5-9.5'	4.5-9.5'	4.5-9.5'	3-13'	3-13'	3-13'
Analytical Parameter	**Units**	**Non-Residential Drinking Water Protection Criteria**	**Groundwater Surface Water Interface Criteria**	**Vapor Intrusion Groundwater Screening Level**	**Flammability and Explosivity Screening Level**																					
TPH (EPA Method 418.1)	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Hydrocarbons (EPA Method 8015B)																										
Gasoline Range Organics	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diesel Range Organics	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fuel Oil	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydraulic Fluid	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kerosene	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mineral Spirits	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Motor Oil	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAH (EPA Method 8310)																										
1-Methylnaphthalene	ug/L	NA	NA	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5
2-Methylnaphthalene	ug/L	750	19	3.90E+03	ID	<5	<5	<5	<5	<5**	<5**	<5	<5	<5	<5	<5**	<5**	<5	<5	<5	<5	<5**	<5**	<5	<5	<5
Acenaphthene	ug/L	3,800	38	2.30E+05	ID	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5
Acenapthylene	ug/L	150	ID	6.20E+04	ID	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5
Anthracene	ug/L	43 (S)	ID	3.70E+06	ID	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5
Benz(a)anthracene	ug/L	8.5	ID	NA	ID	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<1	<1	<1
Benzo(a)pyrene	ug/L	5.0 (A)	ID	NA	ID	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<1	<1	<1
Benzo(b)fluoranthene	ug/L	1.5 (S, AA)	ID	NA	ID	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<1	<1	<1
Benzo(g,h,i)perylene	ug/L	1.0 (M); 0.26 (S)	NA	NA	ID	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<1	<1	<1
Benzo(k)fluoranthene	ug/L	1.0 (M); 0.8 (S)	NA	NA	ID	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<1	<1	<1
Chrysene	ug/L	1.6 (S)	ID	NA	ID	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<1	<1	<1
Dibenzo(a,h)anthracene	ug/L	2.0 (M); 0.85	ID	NA	ID	<2	<2	<2	<2	NA	NA	<2	<2	<2	<2	NA	NA	<2	<2	<2	<2	NA	NA	<2	<2	<2
Fluoranthene	ug/L	210 (S)	1.6	NA	ID	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<1	<1	<1	<1	NA	NA	<1	<1	<1
Fluorene	ug/L	2,000 (S)	12	3.00E+05	ID	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5
Indeno(1,2,3-cd)pyrene	ug/L	2.0 (M); 0.022 (S)	ID	NA	ID	<2	<2	<2	<2	NA	NA	<2	<2	<2	<2	NA	NA	<2	<2	<2	<2	NA	NA	<2	<2	<2
Naphthalene	ug/L	1,500	11	1,200	NA	<5	<5	<5	<5	<5**	<5**	<5	<5	<5	<5	<5**	<5**	<5	<5	<5	<5	<5**	<5**	<5	<5	<5
Phenanthrene	ug/L	150	2.0 (M); 1.4	480	ID	<2	<2	<2	<2	NA	NA	<2	<2	<2	<2	NA	NA	<2	<2	<2	<2	NA	NA	<2	<2	<2
Pyrene	ug/L	140 (S)	ID	1.70R+06	ID	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5	NA	NA	<5	<5	<5
Other Target PAHs	ug/L	various	various	various	various	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA	ND	ND	ND
VOCs (EPA Method 8260)																										
1,1,1-Trichloroethane	ug/L	200 (A)	89	7.10E+04	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	35	78 (X)	300	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	ug/L	5.0 (A)	330 (X)	480	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	2,500	740	1.80E+04	3.80E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	7.0 (A)	130	1,600	97,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	63 (E)	17	7,300	56,000 (S)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	5.0 (A)	360 (X)	210	2.50E+06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	ug/L	5.0 (A)	230 (X)	290	5.50E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	72 (E)	45	5,100	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Butanone	ug/L	38,000	2,200	1.80E+07	ID	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
2-Hexanone	ug/L	2,900	ID	6.70E+04	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
4-Methyl-2-pentanone	ug/L	5,200	ID	4.40E+06	ID	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Acetone	ug/L	2,100	1,700	3.40E+07	1.50E+07	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	ug/L	5.0 (A)	200 (X)	140	68,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	80 (A,W)	ID	1.10E+04	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	29	35	140	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Butylbenzene	ug/L	230	ID	380	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene	ug/L	230	ID	68	ID	ND	ND	ND	ND	<1	<1	ND	ND	ND	ND	<1	<1	ND	ND	ND	ND	<1	<1	ND	ND	ND
Carbon disulfide	ug/L	2,300	ID	9,900	13,000	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	ug/L	5.0 (A)	45 (X)	38	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	100 (A)	25	NA	1.60E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	1,700	1,100 (X)	1.80E+05	1.10E+05	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	ug/L	80 (A, W)	350	720	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	1,100	ID	1,100	36,000	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dibromochloromethane	ug/L	80 (A, W)	ID	330	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	ug/L	74 (E)	18	2,600	43,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Isopropylbenzene	ug/L	2,300	28	5	29,000	ND	ND	ND	ND	<5	<5	ND	ND	ND	ND	<5	<5	ND	ND	ND	ND	<5	<5	ND	ND	ND
Methylene chloride	ug/L	5.0 (A)	1,500 (X)	4,200	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	ug/L	230	ID	390	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	100 (A)	80 (X)	4,100	1.40E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	5.0 (A)	60 (X)	460	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	ug/L	790 (E)	270	1.50E+05	61,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	5.0 (A)	200 (X)	41	ID	<1	4	**6**	4	5	3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	2.0 (A)	13 (X)	42	33,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	70 (A)	620	350	5.30E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	NA	NA	NA	NA	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1
o-Xylene	ug/L	NA	NA	NA	NA	<2	<2	<2	<1	<2	<2	<2	<2	<2	<2	<1	<2	<2	<2	<2	<2	<1	<2	<2	<2	<2
Xylenes, Total	ug/L	280 (E)	41	1.00E+04	70,000	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
trans-1,2-Dichloroethene	ug/L	100 (A)	1,500 (X)	NA	2.3E+05 (S)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethene (total)	ug/L	NA	NA	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trimethylbenzene	ug/L	NA	NA	1.00E+04	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Other Target VOCs	ug/L	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE (EPA Method 8021B)	ug/L	40 (E)	7,100 (X)	1.00E+06	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dissolved Metals (Method 6020)																										
Lead	mg/L	0.004 (L)	(G,X)	NA	ID	<0.003	0.003	<0.003	<0.003	NA	NA	<0.003	<0.003	<0.003	<0.003	NA	NA	<0.003	<0.003	<0.003	<0.003	NA	NA	<0.003	<0.003	<0.003

See Notes on last page.

Table 2
Groundwater Analytical Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID:		MDEQ Part 201 Non-Residential Cleanup Criteria				MW-30	MW-30	MW-30	MW-31	MW-31	MW-31	MW-31	MW-31	MW-31	MW-32S	MW-32S	MW-32D	MW-32D	MW-33	MW-33	B-58	B-59	B-60	B-62	B-63	B-64
						East of Building, Along Augusta Relief Drain	East of Building, Along Augusta Relief Drain	East of Building, Along Augusta Relief Drain	South of Building - Adjacent to Storm Sewer	South of Building - Adjacent to Storm Sewer	South of Building - Adjacent to Storm Sewer	South of Building - Adjacent to Storm Sewer	South of Building - Adjacent to Storm Sewer	South of Building - Adjacent to Storm Sewer	Southwest Corner of Property (Shallow)	Southwest Corner of Property (Shallow)	Southwest Corner of Property (Deep)	Southwest Corner of Property (Deep)	Southwest Portion of Former Garage Area North of Basement Wall	Southwest Portion of Former Garage Area North of Basement Wall	Appr 25-30 ft SE of MW-24S/D	Appr 25-30 ft S-SW of MW-24S/D	Appr 25 ft E of MW-24S/D	Appr 60 ft SW of MW-24S/D	Appr 60 ft W-NW of MW-24S/D	Appr 75 ft S of MW-24S/D in Basement Area
Date Collected:		Non-Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Criteria	Vapor Intrusion Groundwater Screening Level	Flammability and Explosivity Screening Level	5/22/2014	10/28/2014	4/15/2015	2/1/2013	6/25/2013	9/20/2013	5/22/2014	10/27/2014	4/16/2015	10/27/2014	4/15/2015	10/27/2014	4/15/2015	10/28/2014	4/15/2015	9/23/2014	9/24/2014	9/23/2014	9/24/2014	9/24/2014	9/24/2014
Screened Interval (feet bgl):						3-13'	3-13'	3-13'	3-8'	3-8'	3-8'	3-8'	3-8'	3-8'	7-12'	7-12'	14-19'	14-19'	13-18'	13-18'	15-20' Temp Well	11-16' Temp Well	10.5-15.5' Temp Well	13-18' Temp Well	8-18' Temp Well	8-13' Temp Well
Analytical Parameter	**Units**																									
TPH (EPA Method 418.1)	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Hydrocarbons (EPA Method 8015B)																										
Gasoline Range Organics	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diesel Range Organics	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fuel Oil	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydraulic Fluid	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kerosene	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mineral Spirits	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Motor Oil	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAH (EPA Method 8310)																										
1-Methylnaphthalene	ug/L	NA	NA	NA	NA	<5	NA	NA	<5	<5	<5	<5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	ug/L	750	19	3.90E+03	ID	<5	<5**	<5**	<5	<5	<5	<5	<5**	<5**	<5**	<5**	<5**	<5**	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	ug/L	3,800	38	2.30E+05	ID	<5	NA	NA	<5	<5	<5	<5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenapthylene	ug/L	150	ID	6.20E+04	ID	<5	NA	NA	<5	<5	<5	<5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	ug/L	43 (S)	ID	3.70E+06	ID	<5	NA	NA	<5	<5	<5	<5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benz(a)anthracene	ug/L	8.5	ID	NA	ID	<1	NA	NA	<1	<1	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	ug/L	5.0 (A)	ID	NA	ID	<1	NA	NA	<1	<1	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	ug/L	1.5 (S, AA)	ID	NA	ID	<1	NA	NA	<1	<1	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	ug/L	1.0 (M); 0.26 (S)	NA	NA	ID	<1	NA	NA	<1	<1	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	ug/L	1.0 (M); 0.8 (S)	NA	NA	ID	<1	NA	NA	<1	<1	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	ug/L	1.6 (S)	ID	NA	ID	<1	NA	NA	<1	<1	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	ug/L	2.0 (M); 0.85	ID	NA	ID	<2	NA	NA	<2	<2	<2	<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	ug/L	210 (S)	1.6	NA	ID	<1	NA	NA	<1	<1	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	ug/L	2,000 (S)	12	3.00E+05	ID	<5	NA	NA	<5	<5	<5	<5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	ug/L	2.0 (M); 0.022 (S)	ID	NA	ID	<2	NA	NA	<2	<2	<2	<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	ug/L	1,500	11	1,200	NA	<5	<5**	<5**	<5	<5	<5	<5	<5**	<5**	<5**	<5**	<5**	<5**	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	ug/L	150	2.0 (M); 1.4	480	ID	<2	NA	NA	<2	<2	<2	<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	ug/L	140 (S)	ID	1.70R+06	ID	<5	NA	NA	<5	<5	<5	<5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other Target PAHs	ug/L	various	various	various	various	ND	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOCs (EPA Method 8260)																										
1,1,1-Trichloroethane	ug/L	200 (A)	89	7.10E+04	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<50	<2	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	35	78 (X)	300	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<50	<2	<1	<1
1,1,2-Trichloroethane	ug/L	5.0 (A)	330 (X)	480	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<50	<2	<1	<1
1,1-Dichloroethane	ug/L	2,500	740	1.80E+04	3.80E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<50	<2	<1	<1
1,1-Dichloroethene	ug/L	7.0 (A)	130	1,600	97,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<50	<2	<1	<1
1,2,4-Trimethylbenzene	ug/L	63 (E)	17	7,300	56,000 (S)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	3	**540**	3	<1	<1
1,2-Dichloroethane	ug/L	5.0 (A)	360 (X)	210	2.50E+06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<50	<2	<1	<1
1,2-Dichloropropane	ug/L	5.0 (A)	230 (X)	290	5.50E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<50	<2	<1	<1
1,3,5-Trimethylbenzene	ug/L	72 (E)	45	5,100	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**150**	<2	<1	<1
2-Butanone	ug/L	38,000	2,200	1.80E+07	ID	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<1300	<50	<25	<25
2-Hexanone	ug/L	2,900	ID	6.70E+04	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<2500	<100	<50	<50
4-Methyl-2-pentanone	ug/L	5,200	ID	4.40E+06	ID	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<2500	<100	<50	<50
Acetone	ug/L	2,100	1,700	3.40E+07	1.50E+07	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<2500	<100	<50	<50
Benzene	ug/L	5.0 (A)	200 (X)	140	68,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**40**	**65**	1	**99**	**3,600**	**153**	<1	<1
Bromochloromethane	ug/L	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<50	<2	<1	<1
Bromoform	ug/L	80 (A,W)	ID	1.10E+04	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<50	<2	<1	<1
Bromomethane	ug/L	29	35	140	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<300	<10	<5	<5
n-Butylbenzene	ug/L	230	ID	380	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<50	<2	<1	<1
sec-Butylbenzene	ug/L	230	ID	68	ID	ND	<1	<1	ND	ND	ND	ND	<1	<1	<1	<1	<1	<1	<1	<1	<1	3	<50	<2	<1	<1
Carbon disulfide	ug/L	2,300	ID	9,900	13,000	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<300	<10	<5	<5
Carbon tetrachloride	ug/L	5.0 (A)	45 (X)	38	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<50	<2	<1	<1
Chlorobenzene	ug/L	100 (A)	25	NA	1.60E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<50	<2	<1	<1
Chloroethane	ug/L	1,700	1,100 (X)	1.80E+05	1.10E+05	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<300	<10	<5	<5
Chloroform	ug/L	80 (A, W)	350	720	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<50	<2	<1	<1
Chloromethane	ug/L	1,100	ID	1,100	36,000	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<300	<10	<5	<5
Dibromochloromethane	ug/L	80 (A, W)	ID	330	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<300	<10	<5	<5
Ethylbenzene	ug/L	74 (E)	18	2,600	43,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	5	4	<1	**38**	**1,460**	**101**	<1	<1
Isopropylbenzene	ug/L	2,300	28	5	29,000	ND	<5	<5	ND	ND	ND	ND	<5	<5	<5	<5	<5	<5	<5	<5	<5	7	<300	<10	<5	<5
Methylene chloride	ug/L	5.0 (A)	1,500 (X)	4,200	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<300	<10	<5	<5
n-Propylbenzene	ug/L	230	ID	390	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	9	90	11	<1	<1
Styrene	ug/L	100 (A)	80 (X)	4,100	1.40E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<50	<2	<1	<1
Tetrachloroethylene	ug/L	5.0 (A)	60 (X)	460	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<50	<2	<1	<1
Toluene	ug/L	790 (E)	270	1.50E+05	61,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	<1	**890**	<2	<1	<1
Trichloroethene	ug/L	5.0 (A)	200 (X)	41	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	3	<1	<50	<2	<1	<1
Vinyl chloride	ug/L	2.0 (A)	13 (X)	42	33,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<50	<2	<1	<1
cis-1,2-Dichloroethene	ug/L	70 (A)	620	350	5.30E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<50	<2	<1	<1
cis-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<50	<2	<1	<1
m,p-Xylene	ug/L	NA	NA	NA	NA	<2	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	3	<2	8	4,600	61	<2	<2
o-Xylene	ug/L	NA	NA	NA	NA	<1	<2	<2	<2	<2	<2	<1	<2	<2	<2	<2	<2	<2	<2	<2	<1	10	1,340	2	<1	<1
Xylenes, Total	ug/L	280 (E)	41	1.00E+04	70,000	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	3	<3	18	**5,940**	**63**	<3	<3
trans-1,2-Dichloroethene	ug/L	100 (A)	1,500 (X)	NA	2.3E+05 (S)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<50	<2	<1	<1
trans-1,3-Dichloropropene	ug/L	NA	NA	NA	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<50	<2	<1	<1
1,2-Dichloroethene (total)	ug/L	NA	NA	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trimethylbenzene	ug/L	NA	NA	1.00E+04	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	170	<2	<1	<1
Other Target VOCs	ug/L	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE (EPA Method 8021B)	ug/L	40 (E)	7,100 (X)	1.00E+06	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<300	<10	<5	<5
Dissolved Metals (Method 6020)																										
Lead	mg/L	0.004 (L)	(G,X)	NA	ID	<0.003	NA	NA	<0.003	<0.003	<0.003	<0.003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 2
Groundwater Analytical Data
RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

General Notes:
1. Cleanup criteria exceedances are bolded.
2. Shaded column indicates monitoring well was properly abandoned prior to the June 2012 excavation activities.
3. < denotes less than noted detection limit.
4. Cleanup Criteria: Part 201 (Environmental Remediation) of the Michigan Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451 (Revised December 30, 2013). Referenced are Non-Residential Cleanup Criteria. No TPH criteria exist; however, additional PAH constituents tested if detected TPH exceeded 1 mg/L.

Footnote:

**	Analyzed via USEPA Method 8260B

Acronyms and Abbreviations:

ID	Insufficient data to develop criterion
NA	Not analyzed
ND	Not detected
NS	Not sampled.
(A)	Criterion is the State of Michigan Drinking Water Standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
(D)	Calculated criterion exceeds 100%, hence it is reduced to 100% or 1.0E+9 parts per billion (ppb).
(E)	Criterion is the aesthetic drinking water value, as required by section 20120a(5) of the act.
(L)	Criteria for lead are derived using a biologically based model, as allowed for under section 20120a(10) of the act, and are not calculated using the algorithms and assumptions specified in pathway-specific rules. The generic residential drinking water criterion of 4 µg/L is linked to the generic soil direct contact criterion of 400 mg/kg. A higher concentrations in the drinking water, up t to the state action level or 15 µg/L, may be allowed as a site-specific remedy, and still allow for drinking water use, under section 20120a(2) of the act if soil concentration are appropriately lower than 400 mg/kg. If a site specific criterion is approved based on this subdivision, a notice shall be filed on the deed for all property where the groundwater concentrations will exceed 4 µg/L to provide notice of the potential for unacceptable risk if soil or groundwater concentrations increase.
(M)	Calculated criterion is below the analytical Target Detection Limit (TDL), therefore, the criterion defaults to the TDL.
(S)	Criterion defaults to the hazardous substance-specific water solubility limit.
(G)	Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water. The final chronic value (FCV) for the protection of aquatic life shall be calculated based on the pH or hardness of the receiving surface water. Where water hardness exceeds 400 mg CaCO3/L, use 400 mg CaCO3/L for the FCV calculation. The FCV formula provides values in units of ug/L or ppb. The generic GSI criterion is the lesser of the calculated FCV, the wildlife value (WV), and the surface water human non-drinking water value (HNDV).
(X)	The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source. For a groundwater discharge to the Great Lakes and their connecting waters or discharge in close proximity to a water supply intake in inland surface waters, the generic GSI criterion shall be the surface water human drinking water value (HDV) listed in the table in this footnote, except for those HDV indicated with an asterisk. For HDV with an asterisk, the generic GSI criterion shall be the lowest of the HDV, the WV, and the calculated FCV. see formulas in footnote (G). Soil protection criteria based on the HDV shall be as listed in the table in this footnote, except for those values with an asterisk. Soil GSI protection criteria based on the HDV shall be as listed in the table in this footnote, except for those values with an asterisk. Soil GSI protection criteria for compounds with an asterisk shall be the greater of 20 times the GSI criterion or the GSI soil-water partition values using the GSI criteria developed with the procedure.
(Y)	Elevated Reporting Limit due to high target concentration
(W)	Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking water standard of 80 ug/L. Concentrations of trihalomethanes in soil shall be added together to determine compliance with the drinking water protection criterion of 1,600 ug/kg.
(AA)	Comparison to these criteria may take into account an evaluation of whether the hazardous substances are adsorbed to particulates rather than dissolved in water and whether filtered groundwater samples were used to evaluate groundwater.

Table 3
Groundwater Level and Elevation Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Monitoring/Extraction Well ID	Top of Casing Elevation	Date	Depth to Product (feet bgs)	Depth to Groundwater (feet bgs)	Product Thickness (feet)	Groundwater Elevation (feet bgs)*
EW-1 (3-13')	916.91	12/11/2006	NP	3.76	NP	913.15
	916.91	1/5/2007	NP	3.21	NP	913.70
	916.91	9/25/2007	NP	4.02	NP	912.89
	916.91	7/28/2008	NP	3.37	NP	913.54
	916.91	10/20/2008	NP	3.63	NP	913.28
	916.91	11/1/2010	Well was destroyed during building demolition activities			
EW-2 (4-14')	916.63	9/25/2007	NP	4.77	NP	911.86
	916.63	7/28/2008	3.92	4.22	0.30	912.94
	916.63	9/18/2008	4.62	4.82	0.20	912.16
	916.63	10/20/2008	4.31	4.54	0.23	912.49
	916.63	11/19/2008	4.31	4.34	0.03	912.34
	916.63	12/4/2008	4.40	4.43	0.03	912.25
	916.63	12/17/2008	NP	4.03	NP	912.60
	916.63	11/1/2010	3.86	3.90	0.04	912.80
	916.63	2/28/2011	NP	2.28	NP	914.35
	916.63	1/28/2013	Well was abandoned prior to the June 2012 excavation activities			
MW-2 (3-13')	917.46	12/11/2006	NP	6.07	NP	911.39
	917.46	1/5/2007	NP	5.36	NP	912.10
	917.46	9/25/2007	NP	7.20	NP	910.26
	917.46	2/8/2008	NM	NM	NM	NM
	917.46	7/28/2008	NP	6.66	NP	910.80
	917.46	11/1/2010	NP	7.73	NP	909.73
	917.46	12/2/2010	NP	7.35	NP	910.11
	917.46	1/28/2013	NP	7.22	NP	910.24
	917.46	6/24/2013	NP	5.95	NP	911.51
	917.46	9/17/2013	NP	7.34	NP	910.12
	917.46	5/21/2014	NP	5.39	NP	912.07
	917.46	10/27/2014	NP	6.25	NP	911.21
	917.46	4/15/2015	NP	7.25	NP	910.21
MW-3 (5-15')	916.90	12/11/2006	NP	5.01	NP	911.89
	916.90	1/5/2007	NP	4.96	NP	911.94
	916.90	9/25/2007	NP	5.48	NP	911.42
	916.90	2/8/2008	NP	4.32	NP	912.58
	916.90	7/28/2008	NP	4.95	NP	911.95
	916.90	11/1/2010	NP	4.89	NP	912.01
	916.90	12/2/2010	NP	4.35	NP	912.55
	916.90	1/28/2013	Well was abandoned prior to the June 2012 excavation activities			
MW-4 (3-13')	912.78	12/11/2006	NP	2.57	NP	910.21
	912.78	1/5/2007	NP	1.95	NP	910.83
	912.78	9/25/2007	NP	3.64	NP	909.14
	912.78	2/8/2008	NP	1.75	NP	911.03
	912.78	7/28/2008	NP	2.71	NP	910.07
	912.78	11/1/2010	NP	4.35	NP	908.43
	912.78	12/2/2010	NP	2.85	NP	909.93
	912.78	1/28/2013	NP	3.35	NP	909.43
	912.78	6/24/2013	NP	2.65	NP	910.13
	912.78	9/17/2013	NP	3.92	NP	908.86
	912.78	5/21/2014	NP	2.75	NP	910.03
	912.78	10/27/2014	NP	3.52	NP	909.26
	912.78	4/15/2015	NP	3.98	NP	908.80

See Notes on last page.

Table 3
Groundwater Level and Elevation Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Monitoring/Extraction Well ID	Top of Casing Elevation	Date	Depth to Product (feet bgs)	Depth to Groundwater (feet bgs)	Product Thickness (feet)	Groundwater Elevation (feet bgs)*
MW-5 (7-17')	916.14	12/11/2006	NP	10.35	NP	905.79
	916.14	1/5/2007	NP	10.23	NP	905.91
	916.14	9/25/2007	NP	9.51	NP	906.63
	916.14	2/8/2008	NP	8.84	NP	907.30
	916.14	7/28/2008	NP	9.83	NP	906.31
	916.14	11/1/2010	NP	6.83	NP	909.31
	916.14	12/2/2010	NP	5.40	NP	910.74
	916.14	1/28/2013	NP	5.12	NP	911.02
	916.14	6/24/2013	NP	4.01	NP	912.13
	916.14	9/17/2013	NP	4.68	NP	911.46
	916.14	5/21/2014	NP	3.71	NP	912.43
	916.14	10/27/2014	NP	4.52	NP	911.62
	916.14	4/15/2015	NP	4.93	NP	911.21
MW-6 (3-13')	916.66	9/25/2007	NP	2.76	NP	913.90
	916.66	2/8/2008	NP	2.46	NP	914.20
	916.66	7/28/2008	NP	2.29	NP	914.37
	916.66	11/1/2010	NP	2.62	NP	914.04
	916.66	12/2/2010	NP	2.45	NP	914.21
	916.66	1/28/2013	Well was abandoned prior to the June 2012 excavation activities			
MW-7 (5-15')	916.48	9/25/2007	NP	5.80	NP	910.68
	916.48	2/8/2008	NP	5.36	NP	911.12
	916.48	7/28/2008	NP	4.83	NP	911.65
	916.48	11/1/2010	NP	4.11	NP	912.37
	916.48	12/2/2010	NP	4.00	NP	912.48
	916.48	1/28/2013	Well was abandoned prior to the June 2012 excavation activities			
MW-8 (8-18')	916.66	9/25/2007	NP	9.31	NP	907.35
	916.66	2/8/2008	NP	9.13	NP	907.53
	916.66	7/28/2008	NP	9.03	NP	907.63
	916.66	11/1/2010	NP	6.28	NP	910.38
	916.66	12/2/2010	NP	5.40	NP	911.26
	916.66	1/28/2013	NP	3.95	NP	912.71
	916.66	6/24/2013	NP	3.22	NP	913.44
	916.66	9/17/2013	NP	3.64	NP	913.02
	916.66	5/21/2014	NP	3.46	NP	913.20
	916.66	10/27/2014	NP	3.74	NP	912.92
	916.66	4/15/2015	NP	4.16	NP	912.50
MW-9 (3-13')	915.19	9/25/2007	NP	7.13	NP	908.06
	915.19	2/8/2008	NP	NM	NP	NM
	915.19	7/28/2008	NP	6.55	NP	908.64
	915.19	11/1/2010	NP	6.35	NP	908.84
	915.19	12/2/2010	NP	5.15	NP	910.04
	915.19	1/28/2013	NP	5.02	NP	910.17
	915.19	6/24/2013	NP	4.43	NP	910.76
	915.19	9/17/2013	NP	5.20	NP	909.99
	915.19	5/21/2014	NP	3.89	NP	911.30
	915.19	10/27/2014	NP	4.65	NP	910.54
	915.19	4/15/2015	NP	4.55	NP	910.64

See Notes on last page.

Table 3
Groundwater Level and Elevation Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Monitoring/Extraction Well ID	Top of Casing Elevation	Date	Depth to Product (feet bgs)	Depth to Groundwater (feet bgs)	Product Thickness (feet)	Groundwater Elevation (feet bgs)*
MW-10 (6-16')	918.71	9/25/2007	NP	10.56	NP	908.15
	918.71	2/8/2008	NM	NM	NM	NM
	918.71	7/28/2008	NP	10.19	NP	908.52
	918.71	11/1/2010	NP	11.62	NP	907.09
	918.71	12/2/2010	NP	11.00	NP	907.71
	918.71	1/28/2013	NP	10.59	NP	908.12
	918.71	6/24/2013	NP	8.45	NP	910.26
	918.71	9/17/2013	NP	10.04	NP	908.67
	918.71	5/21/2014	NP	8.25	NP	910.46
	918.71	10/27/2014	NP	9.22	NP	909.49
	918.71	4/15/2015	NP	11.03	NP	907.68
MW-11 (9-19')	916.50	9/25/2007	NP	12.03	NP	904.47
	916.50	2/8/2008	NP	12.65	NP	903.85
	916.50	7/28/2008	NP	11.79	NP	904.71
	916.50	11/1/2010	NP	7.00	NP	909.50
	916.50	12/2/2010	NP	5.85	NP	910.65
	916.50	1/28/2013	NP	4.80	NP	911.70
	916.50	6/24/2013	NP	4.05	NP	912.45
	916.50	9/17/2013	NP	4.04	NP	912.46
	916.50	5/21/2014	NP	3.99	NP	912.51
	916.50	10/27/2014	NP	8.30	NP	908.20
	916.50	4/15/2015	NP	5.01	NP	911.49
MW-12 (9-19')	916.10	9/25/2007	10.02	10.03	0.01	906.09
	916.10	2/8/2008	NP	9.33	NP	906.77
	916.10	7/28/2008	NP	10.43	NP	905.67
	916.10	11/1/2010	NP	6.40	NP	909.70
	916.10	12/2/2010	NP	4.65	NP	911.45
	916.10	1/28/2013	NP	4.24	NP	911.86
	916.10	6/24/2013	NP	3.30	NP	912.80
	916.10	9/17/2013	NP	3.93	NP	912.17
	916.10	5/21/2014	NP	2.96	NP	913.14
	916.10	10/27/2014	NP	3.95	NP	912.15
	916.10	4/15/2015	NP	4.45	NP	911.65
MW-13 (8-18')	915.12	2/8/2008	NP	4.76	NP	910.36
	915.12	7/28/2008	NP	4.85	NP	910.27
	915.12	11/1/2010	NP	5.91	NP	909.21
	915.12	12/2/2010	NP	5.25	NP	909.87
	915.12	1/28/2013	NP	5.25	NP	909.87
	915.12	6/24/2013	NP	4.46	NP	910.66
	915.12	9/17/2013	NP	5.58	NP	909.54
	915.12	5/21/2014	NP	3.80	NP	911.32
	915.12	10/27/2014	NP	4.72	NP	910.40
	915.12	4/15/2015	NP	5.08	NP	910.04
MW-14 (5-15')	915.34	2/8/2008	NP	4.96	NP	910.38
	915.34	7/28/2008	NP	4.98	NP	910.36
	915.34	11/1/2010	NP	5.97	NP	909.37
	915.34	12/2/2010	NP	5.60	NP	909.74
	915.34	1/28/2013	NP	5.25	NP	910.09
	915.34	6/24/2013	NP	4.62	NP	910.72
	915.34	9/17/2013	NP	5.88	NP	909.46
	915.34	5/21/2014	NP	4.02	NP	911.32
	915.34	10/27/2014	NP	4.90	NP	910.44
	915.34	4/15/2015	NP	5.25	NP	910.09

See Notes on last page.

Table 3
Groundwater Level and Elevation Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Monitoring/Extraction Well ID	Top of Casing Elevation	Date	Depth to Product (feet bgs)	Depth to Groundwater (feet bgs)	Product Thickness (feet)	Groundwater Elevation (feet bgs)*
MW-15 (4-14')	916.78	2/8/2008	NP	2.47	NP	914.31
	916.78	7/28/2008	NP	1.52	NP	915.26
	916.78	11/1/2010	NP	3.26	NP	913.52
	916.78	12/2/2010	NP	1.45	NP	915.33
	916.78	1/28/2013	Well was abandoned prior to the June 2012 excavation activities			
MW-16 (4-9')	918.37	2/8/2008	NP	8.99	NP	909.38
	918.37	7/28/2008	NP	2.41	NP	915.96
	918.37	11/1/2010	NP	3.33	NP	915.04
	918.37	12/2/2010	NP	7.23	NP	911.14
	918.37	1/28/2013	NP	2.77	NP	915.60
	918.37	6/24/2013	NP	1.93	NP	916.44
	918.37	9/17/2013	NP	2.54	NP	915.83
	918.37	5/21/2014	NP	2.05	NP	916.32
	918.37	10/27/2014	NP	2.03	NP	916.34
	918.37	4/15/2015	NP	3.63	NP	914.74
MW-17 (2-7')	916.99	2/8/2008	NM	NM	NM	NM
	916.99	7/28/2008	NP	1.92	NP	915.07
	916.99	11/1/2010	NP	3.36	NP	913.63
	916.99	12/2/2010	NP	1.53	NP	915.46
	916.99	1/28/2013	NP	3.48	NP	913.51
	916.99	6/24/2013	NP	2.12	NP	914.87
	916.99	5/21/2014	NP	1.89	NP	915.10
	916.99	10/27/2014	NP	1.97	NP	915.02
	916.99	4/15/2015	NP	1.85	NP	915.14
MW-18 (4-14')	916.43	2/8/2008	NP	6.12	NP	910.31
	916.43	7/28/2008	NP	5.85	NP	910.58
	916.43	11/1/2010	NP	6.81	NP	909.62
	916.43	12/2/2010	NP	7.43	NP	909.00
	916.43	1/28/2013	NP	6.09	NP	910.34
	916.43	6/24/2013	NP	5.26	NP	911.17
	916.43	9/17/2013	NP	6.40	NP	910.03
	916.43	5/21/2014	NP	4.36	NP	912.07
	916.43	10/27/2014	NP	5.28	NP	911.15
	916.43	4/15/2015	NP	6.20	NP	910.23
MW-19 (3-13')	917.38	12/2/2010	NP	4.21	NP	913.17
	917.38	1/28/2013	NP	5.63	NP	911.75
	917.38	6/24/2013	NP	4.87	NP	912.51
	917.38	9/17/2013	NP	6.02	NP	911.36
	917.38	5/21/2014	NP	4.29	NP	913.09
	917.38	10/27/2014	NP	5.67	NP	911.71
	917.38	4/15/2015	NP	5.98	NP	911.40
MW-20 (3-13')	917.44	12/2/2010	NP	7.15	NP	910.29
	917.44	1/28/2013	NP	7.05	NP	910.39
	917.44	6/24/2013	NP	6.67	NP	910.77
	917.44	9/17/2013	NP	7.51	NP	909.93
	917.44	5/21/2014	NP	6.24	NP	911.20
	917.44	10/27/2014	NP	6.72	NP	910.72
	917.44	4/15/2015	NP	6.87	NP	910.57

See Notes on last page.

Table 3
Groundwater Level and Elevation Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Monitoring/Extraction Well ID	Top of Casing Elevation	Date	Depth to Product (feet bgs)	Depth to Groundwater (feet bgs)	Product Thickness (feet)	Groundwater Elevation (feet bgs)*
MW-21 (5.5-10.5')	917.42	1/28/2013	NP	3.77	NP	913.65
	917.42	6/24/2013	NP	2.75	NP	914.67
	917.42	9/17/2013	NP	3.81	NP	913.61
	917.42	5/21/2014	NP	1.21	NP	916.21
	917.42	10/27/2014	NP	2.63	NP	914.79
	917.42	4/15/2015	NP	3.06	NP	914.36
MW-22 (4-14')	917.44	1/28/2013	NP	4.12	NP	913.32
	917.44	6/24/2013	NP	2.71	NP	914.73
	917.44	9/17/2013	NP	3.97	NP	913.47
	917.44	5/21/2014	NP	1.22	NP	916.22
	917.44	10/27/2014	NP	2.61	NP	914.83
	917.44	4/15/2015	NP	3.05	NP	914.39
MW-23 (3-13')	916.7	1/28/2013	NP	2.78	NP	913.92
	916.7	6/24/2013	NP	2.10	NP	914.60
	916.7	9/17/2013	NP	3.14	NP	913.56
	916.7	5/21/2014	NP	1.60	NP	915.10
	916.7	10/27/2014	NP	2.22	NP	914.48
	916.7	4/15/2015	NP	2.60	NP	914.10
MW-24S (4-9')	916.56	1/28/2013	NP	3.67	NP	912.89
	916.56	6/24/2013	NP	2.82	NP	913.74
	916.56	9/17/2013	NP	3.50	NP	913.06
	916.56	5/21/2014	NP	3.23	NP	913.33
	916.56	10/27/2014	NP	3.40	NP	913.16
	916.56	4/15/2015	NP	3.68	NP	912.88
MW-24D (15-20')	917.37	1/28/2013	NP	4.25	NP	913.12
	917.37	6/24/2013	NP	3.44	NP	913.93
	917.37	9/17/2013	NP	3.95	NP	913.42
	917.37	5/21/2014	NP	2.93	NP	914.44
	917.37	10/27/2014	NP	4.05	NP	913.32
	917.37	4/15/2015	NP	5.58	NP	911.79
MW-25 (4-14')	915.68	1/28/2013	NP	5.25	NP	910.43
	915.68	6/24/2013	NP	4.71	NP	910.97
	915.68	9/17/2013	NP	5.91	NP	909.77
	915.68	5/21/2014	NP	4.11	NP	911.57
	915.68	10/27/2014	NP	4.91	NP	910.77
	915.68	4/15/2015	NP	5.30	NP	910.38
MW-26 (3-13')	916.67	1/28/2013	NP	3.49	NP	913.18
	916.67	6/24/2013	NP	3.43	NP	913.24
	916.67	9/17/2013	NP	3.64	NP	913.03
	916.67	5/21/2014	NP	3.40	NP	913.27
	916.67	10/27/2014	NP	3.19	NP	913.48
	916.67	4/15/2015	NP	4.46	NP	912.21
MW-27 (6.5-16.5')	916.75	1/28/2013	NP	8.11	NP	908.64
	916.75	6/24/2013	NP	6.83	NP	909.92
	916.75	9/17/2013	NP	6.67	NP	910.08
	916.75	5/21/2014	NP	6.79	NP	909.96
	916.75	10/27/2014	NP	8.00	NP	908.75
	916.75	4/15/2015	NP	8.47	NP	908.28
MW-28 (4-9')	917.01	1/28/2013	NP	3.19	NP	913.82
	917.01	6/24/2013	NP	2.65	NP	914.36
	917.01	9/17/2013	NP	3.40	NP	913.61
	917.01	5/21/2014	NP	2.89	NP	914.12
	917.01	10/27/2014	NP	2.78	NP	914.23
	917.01	4/15/2015	NP	3.01	NP	914.00

See Notes on last page.

Table 3
Groundwater Level and Elevation Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Monitoring/Extraction Well ID	Top of Casing Elevation	Date	Depth to Product (feet bgs)	Depth to Groundwater (feet bgs)	Product Thickness (feet)	Groundwater Elevation (feet bgs)*
MW-29 (4.5-9.5')	918.48	1/28/2013	NP	6.67	NP	911.81
	918.48	6/24/2013	NP	5.11	NP	913.37
	918.48	9/17/2013	NP	6.56	NP	911.92
	918.48	5/21/2014	NP	4.50	NP	913.98
	918.48	10/27/2014	NP	5.41	NP	913.07
	918.48	4/15/2015	NP	6.80	NP	911.68
MW-30 (3-13')	917.38	1/28/2013	NP	5.15	NP	912.23
	917.38	6/24/2013	NP	3.35	NP	914.03
	917.38	9/17/2013	NP	4.28	NP	913.10
	917.38	5/21/2014	NP	2.53	NP	914.85
	917.38	10/27/2014	NP	3.58	NP	913.80
		4/15/2015	NP	3.50	NP	-3.50
MW-31 (3-8')	915.11	1/28/2013	NP	6.11	NP	909.00
	915.11	6/24/2013	NP	5.47	NP	909.64
	915.11	9/17/2013	NP	5.97	NP	909.14
	915.11	5/21/2014	NP	5.06	NP	910.05
	915.11	10/27/2014	NP	6.07	NP	909.04
	915.11	4/15/2015	NP	6.20	NP	908.91
MW-32S (7-12')	916.84	10/27/2014	NP	6.42	NP	910.42
	916.84	4/15/2015	NP	6.41	NP	910.43
MW-32D (14-19')	916.75	10/27/2014	NP	6.52	NP	910.23
	916.75	4/15/2015	NP	6.47	NP	910.28
MW-33 (13-18')	916.87	10/27/2014	NP	4.55	NP	912.32
	916.87	4/15/2015	NP	5.07	NP	911.80

General Notes:
1. Elevations are based on feet above the North American Vertical Datum of 1988 (NAVD88).
2. Coordinates are on the Michigan State Plane Coordinate System.
3. Elevations and coordinates were determined during surveys completed on December 11, 2006, February 12, 2008, November 1, 2010, January 30, 2013 and October 24, 2014.

Footnote:
* Groundwater elevation was corrected for the presence of free product where applicable.

Acronyms and Abbreviations:
NM = Well was not measured
NP = No product

Table 4
Storm Sewer Sample Analytical Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID: / Date Collected: / Analytical Parameter	Units	Michigan Groundwater Cleanup Criteria				SS-1 5/21/2014	SS-1 10/27/2014	SS-1 4/16/2015	SS-2 5/21/2014	SS-2 10/27/2014	SS-2 4/16/2015	SS-3 5/23/2014	SS-3 10/27/2014	SS-3 4/16/2015	SS-4 5/23/2014	SS-4 10/27/2014	SS-4 4/16/2015	SS-5 5/23/2014	SS-5 10/27/2014	SS-5 4/16/2015
		Non-Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Criteria	Vapor Intrusion Groundwater Screening Level	Flammability and Explosivity Screening Level															
PAH (EPA Method 8310)																				
1-Methylnaphthalene	ug/L	none	none	NA	none	<5	NS*	NA	<5	NA	NA	<5	NA	NA	<5	NA	NA	<5	NA	NA
2-Methylnaphthalene	ug/L	750	19	3.90E+03	ID	<5	NS*	<5**	<5	<5**	<5**	<5	<5**	<5**	<5	<5**	<5**	<5	<5**	<5**
Acenaphthene	ug/L	3,800	38	2.30E+05	ID	<5	NS*	NA	<5	NA	NA	<5	NA	NA	<5	NA	NA	<5	NA	NA
Acenapthylene	ug/L	150	ID	6.20E+04	ID	<5	NS*	NA	<5	NA	NA	<5	NA	NA	<5	NA	NA	<5	NA	NA
Anthracene	ug/L	43 (S)	ID	3.70E+06	ID	<5	NS*	NA	<5	NA	NA	<5	NA	NA	<5	NA	NA	<5	NA	NA
Benz(a)anthracene	ug/L	8.5	ID	NA	ID	<1	NS*	NA	<1	NA	NA	<1	NA	NA	<1	NA	NA	<1	NA	NA
Benzo(a)pyrene	ug/L	5.0 (A)	ID	NA	ID	<1	NS*	NA	<1	NA	NA	<1	NA	NA	<1	NA	NA	<1	NA	NA
Benzo(b)fluoranthene	ug/L	1.5 (S, AA)	ID	NA	ID	<1	NS*	NA	<1	NA	NA	<1	NA	NA	<1	NA	NA	<1	NA	NA
Benzo(g,h,i)perylene	ug/L	1.0 (M); 0.26 (S)	NA	NA	ID	<1	NS*	NA	<1	NA	NA	<1	NA	NA	<1	NA	NA	<1	NA	NA
Benzo(k)fluoranthene	ug/L	1.0 (M); 0.8 (S)	NA	NA	ID	<1	NS*	NA	<1	NA	NA	<1	NA	NA	<1	NA	NA	<1	NA	NA
Chrysene	ug/L	1.6 (S)	ID	NA	ID	<1	NS*	NA	<1	NA	NA	<1	NA	NA	<1	NA	NA	<1	NA	NA
Dibenzo(a,h)anthracene	ug/L	2.0 (M); 0.85	ID	NA	ID	<2	NS*	NA	<2	NA	NA	<2	NA	NA	<2	NA	NA	<2	NA	NA
Fluoranthene	ug/L	210 (S)	1.6	NA	ID	<1	NS*	NA	<1	NA	NA	<1	NA	NA	<1	NA	NA	<1	NA	NA
Fluorene	ug/L	2,000 (S)	12	3.00E+05	ID	<5	NS*	NA	<5	NA	NA	<5	NA	NA	<5	NA	NA	<5	NA	NA
Indeno(1,2,3-cd)pyrene	ug/L	2.0 (M); 0.022 (S)	ID	NA	ID	<2	NS*	NA	<2	NA	NA	<2	NA	NA	<2	NA	NA	<2	NA	NA
Naphthalene	ug/L	1,500	11	1,200	NA	<5	NS*	<5**	<5	<5**	<5**	<5	<5**	<5**	<5	<5**	<5**	<5	<5**	<5**
Phenanthrene	ug/L	150	2.0 (M); 1.4	480	ID	<2	NS*	NA	<2	NA	NA	<2	NA	NA	<2	NA	NA	<2	NA	NA
Pyrene	ug/L	140 (S)	ID	1.70R+06	ID	<5	NS*	NA	<5	NA	NA	<5	NA	NA	<5	NA	NA	<5	NA	NA
Other Target PAHs	ug/L	various	various	various	various	ND	NS*	NA	ND	NA	NA	ND	NA	NA	ND	NA	NA	ND	NA	NA
VOCs (EPA Method 8260)																				
1,1,1-Trichloroethane	ug/L	200 (A)	89	7.10E+04	ID	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	35	78 (X)	300	ID	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	ug/L	5.0 (A)	330 (X)	480	NA	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	2,500	740	1.80E+04	3.80E+05	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	7.0 (A)	130	1,600	97,000	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	63 (E)	17	7,300	56,000 (S)	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	5.0 (A)	360 (X)	210	2.50E+06	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	ug/L	5.0 (A)	230 (X)	290	5.50E+05	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	72 (E)	45	5,100	ID	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Butanone	ug/L	38,000	2,200	1.80E+07	ID	<25	NS*	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
2-Hexanone	ug/L	2,900	ID	6.70E+04	NA	<50	NS*	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
4-Methyl-2-pentanone	ug/L	5,200	ID	4.40E+06	ID	<50	NS*	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Acetone	ug/L	2,100	1,700	3.40E+07	1.50E+07	<50	NS*	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Benzene	ug/L	5.0 (A)	200 (X)	140	68,000	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	none	none	NA	none	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	80 (A,W)	ID	1.10E+04	ID	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

See Notes on last page.

Table 4
Storm Sewer Sample Analytical Data

RACER Trust
Employee Development Center
65 E. University Drive
Pontiac, MI 48342

Sample ID: / Date Collected: / Analytical Parameter	Units	Michigan Groundwater Cleanup Criteria				SS-1 5/21/2014	SS-1 10/27/2014	SS-1 4/16/2015	SS-2 5/21/2014	SS-2 10/27/2014	SS-2 4/16/2015	SS-3 5/23/2014	SS-3 10/27/2014	SS-3 4/16/2015	SS-4 5/23/2014	SS-4 10/27/2014	SS-4 4/16/2015	SS-5 5/23/2014	SS-5 10/27/2014	SS-5 4/16/2015
		Non-Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Criteria	Vapor Intrusion Groundwater Screening Level	Flammability and Explosivity Screening Level															
Bromomethane	ug/L	29	35	140	ID	<5	NS*	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Butylbenzene	ug/L	230	ID	380	ID	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon disulfide	ug/L	2,300	ID	9,900	13,000	<5	NS*	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	ug/L	5.0 (A)	45 (X)	38	ID	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	100 (A)	25	NA	1.60E+05	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	1,700	1,100 (X)	1.80E+05	1.10E+05	<5	NS*	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	ug/L	80 (A, W)	350	720	ID	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	1,100	ID	1,100	36,000	<5	NS*	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dibromochloromethane	ug/L	80 (A, W)	ID	330	ID	<5	NS*	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	ug/L	74 (E)	18	2,600	43,000	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	5.0 (A)	1,500 (X)	4,200	ID	<5	NS*	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	ug/L	230	ID	390	ID	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	ug/L	100 (A)	80 (X)	4,100	1.40E+05	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	5.0 (A)	60 (X)	460	ID	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	ug/L	790 (E)	270	1.50E+05	61,000	5	NS*	5	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	ug/L	5.0 (A)	200 (X)	41	ID	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2	2	2
Vinyl chloride	ug/L	2.0 (A)	13 (X)	42	33,000	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	70 (A)	620	350	5.30E+05	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	ug/L	none	none	NA	none	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	none	none	NA	none	<2	NS*	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
o-Xylene	ug/L	none	none	NA	none	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, Total	ug/L	280 (E)	41	1.00E+04	70,000	<3	NS*	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
trans-1,2-Dichloroethene	ug/L	100 (A)	1,500 (X)	NA	2.3E+05 (S)	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	none	none	NA	none	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethene (total)	ug/L	none	none	210	none	NA	NS*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trimethylbenzene	ug/L	none	none	1.00E+04	none	<1	NS*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Other Target VOCs	ug/L	various	various	various	various	ND	NS*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE (EPA Method 8021B)	ug/L	40 (E)	7,100 (X)	1.00E+06	ID	<5	NS*	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

See Notes on last page.

Table 4
Storm Sewer Sample Analytical Data

Former Employee Development Center
65 East University
Pontiac, Michigan

General Notes:
1. Cleanup criteria exceedances are bolded.
2. Cleanup Criteria: Part 201 (Environmental Remediation) of the Michigan Natural Resources and Environmental Protection 1994 PA 451 (Revised December 30, 2013). Referenced are Non-Residential Cleanup Criteria and Screening Act (NREPA), Levels. No TPH criteria exist; however, additional PAH constituents tested if detected TPH exceeded 1 mg/L.
3. < indicates less than noted detection limit.

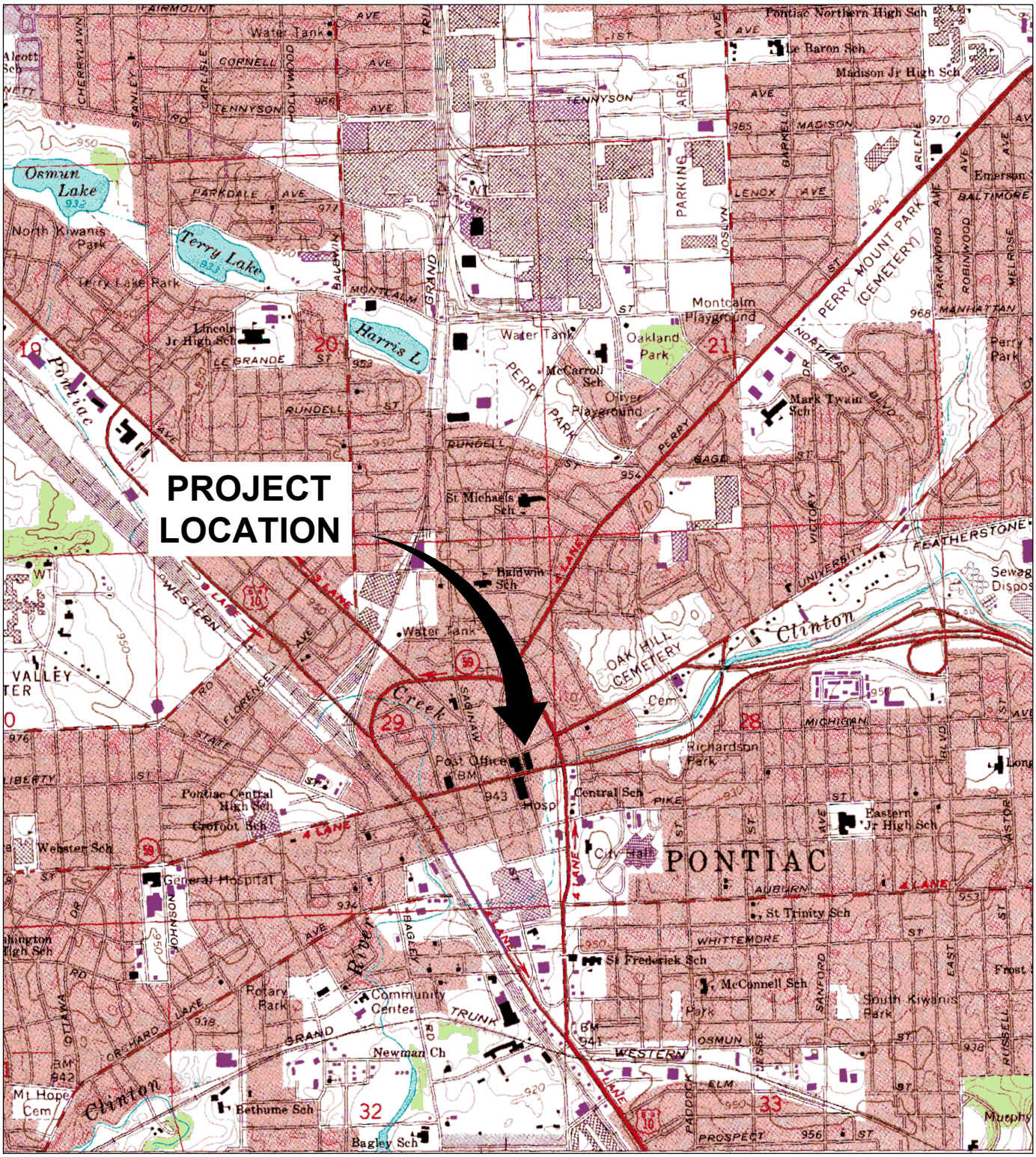
Footnote:

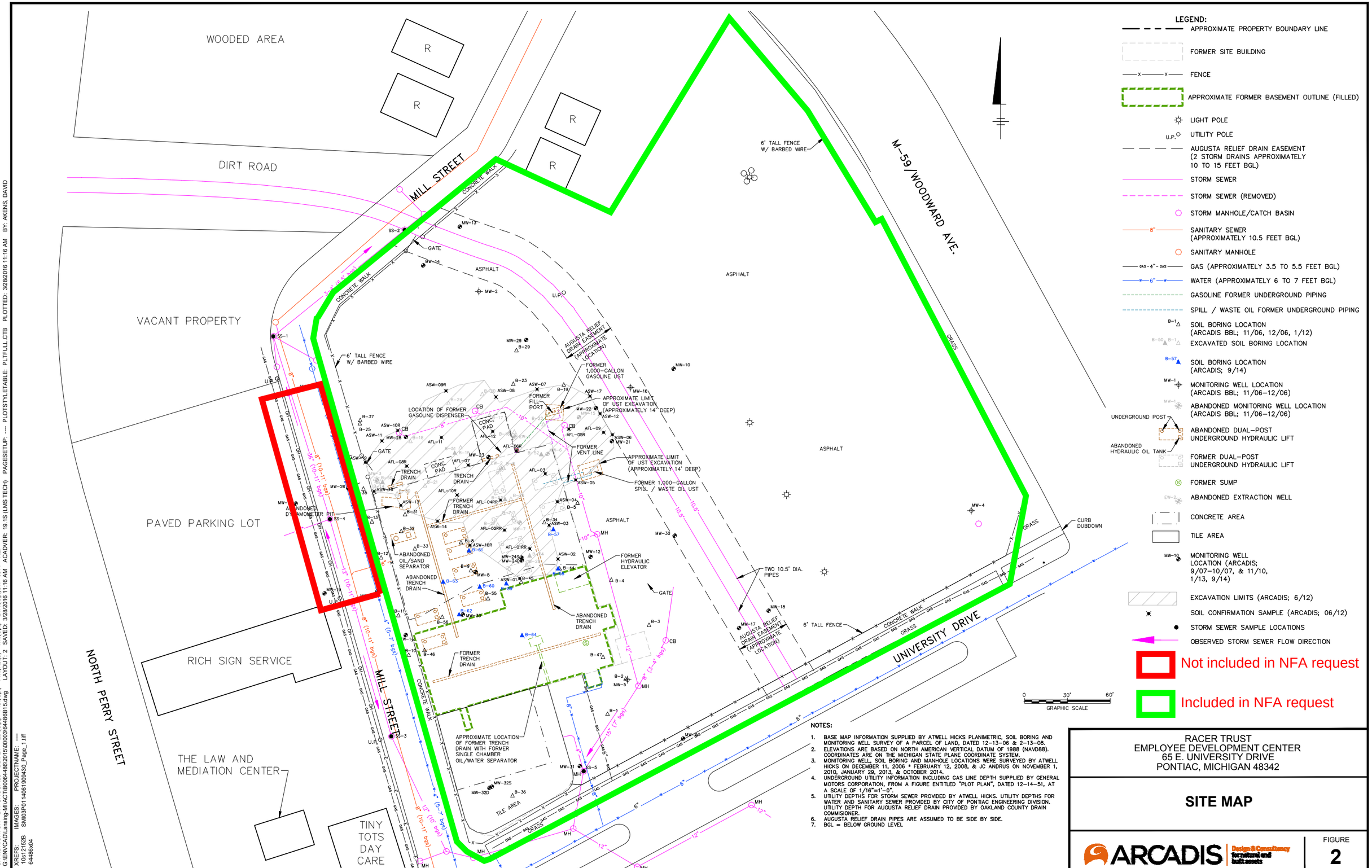
**	Analyzed via USEPA Method 8260B

Acronyms and Abbreviations:

NA	Not analyzed
ND	Not detected
NS*	Not sampled. No water was observed in the storm sewer during the sampling event.
(A)	Criterion is the State of Michigan Drinking Water Standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.
(D)	Calculated criterion exceeds 100%, hence it is reduced to 100% or 1.0E+9 parts per billion (ppb).
(E)	Criterion is the aesthetic drinking water value, as required by section 20120a(5) of the act.
(L)	Criteria for lead are derived using a biologically based model, as allowed for under section 20120a(10) of the act, and are not calculated using the algorithms and assumptions specified in pathway-specific rules. The generic residential drinking water criterion of 4 µg/L is linked to the generic soil direct contact criterion of 400 mg/kg. A higher concentrations in the drinking water, up t to the state action level or 15 µg/L, may be allowed as a site-specific remedy, and still allow for drinking water use, under section 20120a(2) of the act if soil concentration are appropriately lower than 400 mg/kg. If a site specific criterion is approved based on this subdivision, a notice shall be filed on the deed for all property where the groundwater concentrations will exceed 4 µg/L to provide notice of the potential for unacceptable risk if soil or groundwater concentrations increase.
(M)	Calculated criterion is below the analytical Target Detection Limit (TDL), therefore, the criterion defaults to the TDL.
(S)	Criterion defaults to the hazardous substance-specific water solubility limit.
ID	means insufficient data to develop criterion
(G)	Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water. The final chronic value (FCV) for the protection of aquatic life shall be calculated based on the pH or hardness of the receiving surface water. Where water hardness exceeds 400 mg CaCO3/L, use 400 mg CaCO3/L for the FCV calculation. The FCV formula provides values in units of ug/L or ppb. The generic GSI criterion is the lesser of the calculated FCV, the wildlife value (WV), and the surface water human non-drinking water value (HNDV).
(X)	The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source. For a groundwater discharge to the Great Lakes and their connecting waters or discharge in close proximity to a water supply intake in inland surface waters, the generic GSI criterion shall be the surface water human drinking water value (HDV) listed in the table in this footnote, except for those HDV indicated with an asterisk. For HDV with an asterisk, the generic GSI criterion shall be the lowest of the HDV, the WV, and the calculated FCV. see formulas in footnote (G). Soil protection criteria based on the HDV shall be as listed in the table in this footnote, except for those values with an asterisk. Soil GSI protection criteria based on the HDV shall be as listed in the table in this footnote, except for those values with an asterisk. Soil GSI protection criteria for compounds with an asterisk shall be the greater of 20 times the GSI criterion or the GSI soil-water partition values using the GSI criteria developed with the procedure.
(Y)	Elevated Reporting Limit due to high target concentration
(W)	Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking water standard of 80 ug/L. Concentrations of trihalomethanes in soil shall be added together to determine compliance with the drinking water protection criterion of 1,600 ug/kg.
(AA)	Comparison to these criteria may take into account an evaluation of whether the hazardous substances are adsorbed to particulates rather than dissolved in water and whether filtered groundwater samples were used to evaluate groundwater.

FIGURES


PROJECT LOCATION
Osmun Lake
Terry Lake
Harris L
Water Tank
Pontiac Northern High Sch
Madison Jr High Sch
Lincoln Jr High Sch
Oakland Park
Montcalm Playground
Mark Twain Sch
McCarroll Sch
Oliver Playground
St Michaels Sch
Baldwin Sch
Richardson Park
Post Office
Central Sch
Eastern Jr High Sch
City Hall
PONTIAC
Pontiac Central High Sch
Crofoot Sch
Webster Sch
General Hospital
St Trinity Sch
St Frederick Sch
McConnell Sch
South Kiwanis Park
Rotary Park
Community Center
Newman Ch
Bethune Sch
Bagley Sch
Mt Hope Cem
Oak Hill Cemetery
Perry Mount Park (Cemetery)
Clinton
Creek
River
Pontiac
Auburn Hills
Sewage Disposal
Water Tank
Water Tank
Water Tank



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY LINE
- FORMER SITE BUILDING
- FENCE
- APPROXIMATE FORMER BASEMENT OUTLINE (FILLED)
- LIGHT POLE
- UTILITY POLE
- AUGUSTA RELIEF DRAIN EASEMENT (2 STORM DRAINS APPROXIMATELY 10 TO 15 FEET BGL)
- STORM SEWER
- STORM SEWER (REMOVED)
- STORM MANHOLE/CATCH BASIN
- SANITARY SEWER (APPROXIMATELY 10.5 FEET BGL)
- SANITARY MANHOLE
- GAS (APPROXIMATELY 3.5 TO 5.5 FEET BGL)
- WATER (APPROXIMATELY 6 TO 7 FEET BGL)
- GASOLINE FORMER UNDERGROUND PIPING
- SPILL / WASTE OIL FORMER UNDERGROUND PIPING
- SOIL BORING LOCATION (ARCADIS BBL; 11/06, 12/06, 1/12)
- EXCAVATED SOIL BORING LOCATION
- SOIL BORING LOCATION (ARCADIS; 9/14)
- MONITORING WELL LOCATION (ARCADIS BBL; 11/06-12/06)
- ABANDONED MONITORING WELL LOCATION (ARCADIS BBL; 11/06-12/06)
- ABANDONED DUAL-POST UNDERGROUND HYDRAULIC LIFT
- FORMER DUAL-POST UNDERGROUND HYDRAULIC LIFT
- FORMER SUMP
- ABANDONED EXTRACTION WELL
- CONCRETE AREA
- TILE AREA
- MONITORING WELL LOCATION (ARCADIS; 9/07-10/07, & 11/10, 1/13, 9/14)
- EXCAVATION LIMITS (ARCADIS; 6/12)
- SOIL CONFIRMATION SAMPLE (ARCADIS; 06/12)
- STORM SEWER SAMPLE LOCATIONS
- OBSERVED STORM SEWER FLOW DIRECTION
- Not included in NFA request
- Included in NFA request

NOTES:

1. BASE MAP INFORMATION SUPPLIED BY ATWELL HICKS PLANIMETRIC, SOIL BORING AND MONITORING WELL SURVEY OF A PARCEL OF LAND, DATED 12-13-06 & 2-13-08.
2. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). COORDINATES ARE ON THE MICHIGAN STATE PLANE COORDINATE SYSTEM.
3. MONITORING WELL, SOIL BORING AND MANHOLE LOCATIONS WERE SURVEYED BY ATWELL HICKS ON DECEMBER 11, 2006 * FEBRUARY 12, 2008, & JC ANDRUS ON NOVEMBER 1, 2010, JANUARY 29, 2013, & OCTOBER 2014.
4. UNDERGROUND UTILITY INFORMATION INCLUDING GAS LINE DEPTH SUPPLIED BY GENERAL MOTORS CORPORATION, FROM A FIGURE ENTITLED "PLOT PLAN", DATED 12-14-51, AT A SCALE OF 1/16"=1'-0".
5. UTILITY DEPTHS FOR STORM SEWER PROVIDED BY ATWELL HICKS. UTILITY DEPTHS FOR WATER AND SANITARY SEWER PROVIDED BY CITY OF PONTIAC ENGINEERING DIVISION. UTILITY DEPTH FOR AUGUSTA RELIEF DRAIN PROVIDED BY OAKLAND COUNTY DRAIN COMMISIONER.
6. AUGUSTA RELIEF DRAIN PIPES ARE ASSUMED TO BE SIDE BY SIDE.
7. BGL = BELOW GROUND LEVEL

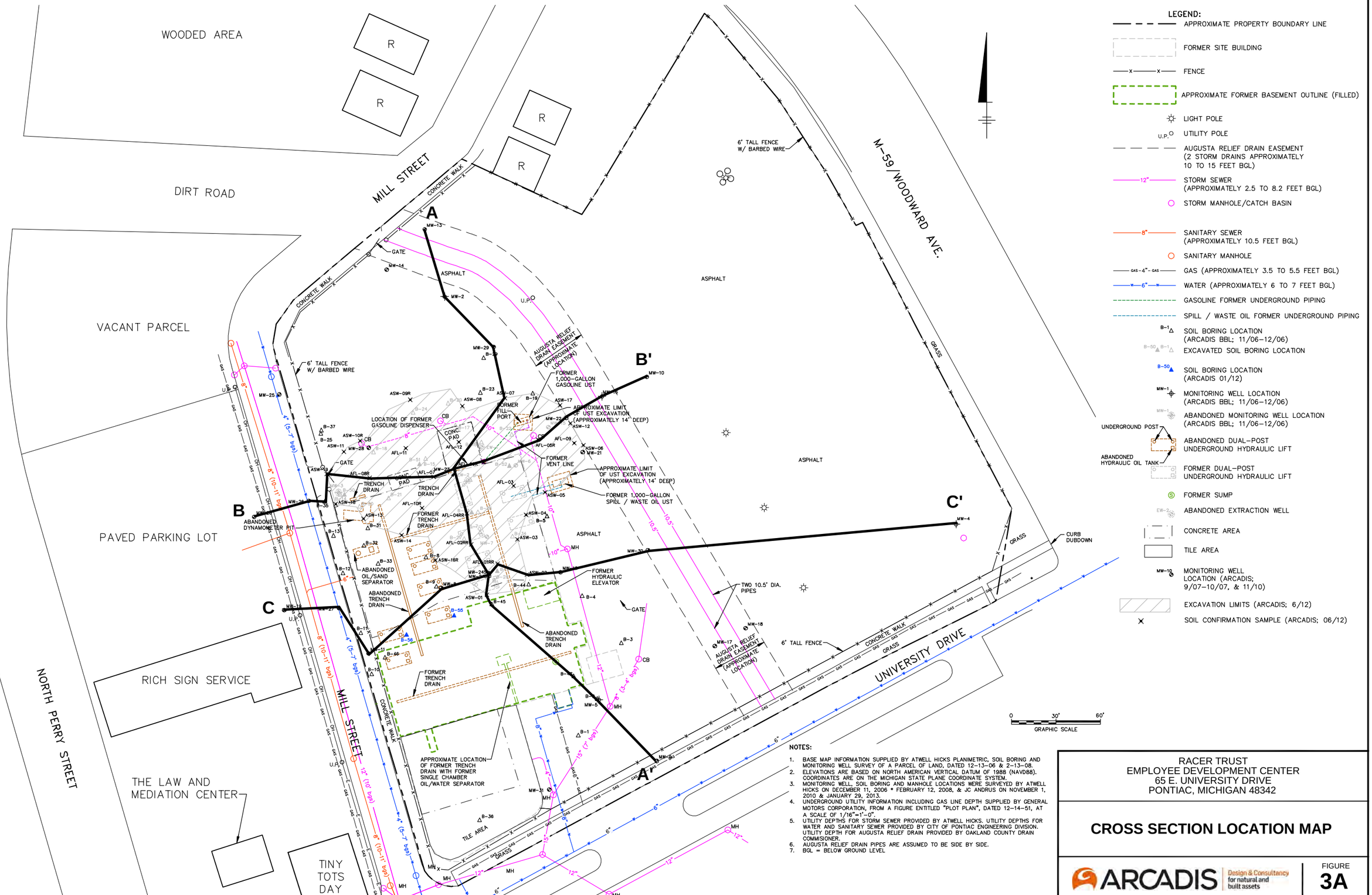
RACER TRUST
EMPLOYEE DEVELOPMENT CENTER
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

SITE MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 2

CITY:BRIGHTON DIV/GROUP:85 DB:ADF LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF* G:\ENVCAD\Lansing-MI\ACTIVE\00644862015\000\03\64486B15.dwg LAYOUT: 2 SAVED: 3/28/2016 11:16 AM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 3/28/2016 11:16 AM BY: AKENS, DAVID
XREFS: IMAGES: PROJECTNAME: ----
10s12152B SMI03P01140619094 30_Page_1.tiff
64486x04



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY LINE
- FORMER SITE BUILDING
- FENCE
- APPROXIMATE FORMER BASEMENT OUTLINE (FILLED)
- LIGHT POLE
- UTILITY POLE
- AUGUSTA RELIEF DRAIN EASEMENT (2 STORM DRAINS APPROXIMATELY 10 TO 15 FEET BGL)
- STORM SEWER (APPROXIMATELY 2.5 TO 8.2 FEET BGL)
- STORM MANHOLE/CATCH BASIN
- SANITARY SEWER (APPROXIMATELY 10.5 FEET BGL)
- SANITARY MANHOLE
- GAS (APPROXIMATELY 3.5 TO 5.5 FEET BGL)
- WATER (APPROXIMATELY 6 TO 7 FEET BGL)
- GASOLINE FORMER UNDERGROUND PIPING
- SPILL / WASTE OIL FORMER UNDERGROUND PIPING
- SOIL BORING LOCATION (ARCADIS BBL; 11/06-12/06)
- EXCAVATED SOIL BORING LOCATION
- SOIL BORING LOCATION (ARCADIS 01/12)
- MONITORING WELL LOCATION (ARCADIS BBL; 11/06-12/06)
- ABANDONED MONITORING WELL LOCATION (ARCADIS BBL; 11/06-12/06)
- ABANDONED DUAL-POST UNDERGROUND HYDRAULIC LIFT
- FORMER DUAL-POST UNDERGROUND HYDRAULIC LIFT
- FORMER SUMP
- ABANDONED EXTRACTION WELL
- CONCRETE AREA
- TILE AREA
- MONITORING WELL LOCATION (ARCADIS; 9/07-10/07, & 11/10)
- EXCAVATION LIMITS (ARCADIS; 6/12)
- SOIL CONFIRMATION SAMPLE (ARCADIS; 06/12)

NOTES:

1. BASE MAP INFORMATION SUPPLIED BY ATWELL HICKS PLANIMETRIC, SOIL BORING AND MONITORING WELL SURVEY OF A PARCEL OF LAND, DATED 12-13-06 & 2-13-08.
2. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). COORDINATES ARE ON THE MICHIGAN STATE PLANE COORDINATE SYSTEM.
3. MONITORING WELL, SOIL BORING AND MANHOLE LOCATIONS WERE SURVEYED BY ATWELL HICKS ON DECEMBER 11, 2006 * FEBRUARY 12, 2008, & JC ANDRUS ON NOVEMBER 1, 2010 & JANUARY 29, 2013.
4. UNDERGROUND UTILITY INFORMATION INCLUDING GAS LINE DEPTH SUPPLIED BY GENERAL MOTORS CORPORATION, FROM A FIGURE ENTITLED "PLOT PLAN", DATED 12-14-51, AT A SCALE OF 1/16"=1'-0".
5. UTILITY DEPTHS FOR STORM SEWER PROVIDED BY ATWELL HICKS. UTILITY DEPTHS FOR WATER AND SANITARY SEWER PROVIDED BY CITY OF PONTIAC ENGINEERING DIVISION. UTILITY DEPTH FOR AUGUSTA RELIEF DRAIN PROVIDED BY OAKLAND COUNTY DRAIN COMMISIONER.
6. AUGUSTA RELIEF DRAIN PIPES ARE ASSUMED TO BE SIDE BY SIDE.
7. BGL = BELOW GROUND LEVEL

RACER TRUST
EMPLOYEE DEVELOPMENT CENTER
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

CROSS SECTION LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE
3A

CITY:BRIGHTON DIV/GROUP:85 DB:ADF LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\BRIGHTON\ACTIVE\00644866\2013\000030\dwg\64486815.dwg LAYOUT: 2SAVED: 8/12/2013 1:27 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: ----PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 8/12/2013 1:28 PM BY: FOX, AARON
XREFS: IMAGES: PROJECTNAME: ----
10s12152B
64486x04

◄ NORTH

SOUTH ►

A

A'

ELEVATION (feet above mean sea level)

AUGUSTA RELIEF DRAIN EASEMENT

EXCAVATION AREA

10" STORM

10.5" STORM

15" STORM

MW-13 MW-2 MW-29 ASW-07 MW-23 AFL-04RR AFL-02RR MW-24S MW-24D ASW-01 B-45 B-47 B-2 MW-5 MW-9

920 915 910 905 900 895 890

MW-13 0 - 2 10/02/2007 NA	
B	<60
E	<60
T	<100
X	<160
M	<200
2-MN	<400
N	<400
1,2,4	<100
1,3,5	<100
TCE	<60
TPH	NA

MW-13 8 - 10 10/02/2007 NA	
B	<80
E	<80
T	<200
X	<280
M	<300
2-MN	<500
N	<500
1,2,4	<200
1,3,5	<200
TCE	<80
TPH	NA

MW-2 0 - 2 12/01/2006 NA	
B	<6.1
E	<6.1
T	<6.1
X	<12.2
M	<1.2
2-MN	NA
N	NA
1,2,4	<6.1
1,3,5	<6.1
TCE	<6.1
TPH	18

MW-2 3 - 5 12/01/2006 NA	
B	<5.6
E	<5.6
T	<5.6
X	<11.2
M	<1.1
2-MN	NA
N	NA
1,2,4	<5.6
1,3,5	<5.6
TCE	<5.6
TPH	17

ASW-07 7 - 8 06/06/2012 N	
B	<60
E	<60
T	<100
X	<160
M	NA
2-MN	<400
N	<400
1,2,4	<100
1,3,5	<100
TCE	<60
TPH	NA

AFL-04RR 16 - 17 06/12/2012 N	
B	<60
E	<60
T	<100
X	<160
M	NA
2-MN	<380
N	<380
1,2,4	<100
1,3,5	<100
TCE	<60
TPH	NA

AFL-02RR 16 - 17 06/12/2012 N	
B	570
E	<60
T	<100
X	<160
M	NA
2-MN	<400
N	<400
1,2,4	<100
1,3,5	<100
TCE	<60
TPH	NA

MW-24D 13 - 14 01/07/2013 NA	
B	12,400
E	16,200
T	63,000
X	82,600
M	<3,000
2-MN	<4,200
N	<4,200
1,2,4	20,000
1,3,5	7,000
TCE	<60
TPH	NA

MW-24D 24 - 25 01/07/2013 NA	
B	390
E	<60
T	<100
X	<160
M	<200
2-MN	<390
N	<390
1,2,4	<100
1,3,5	<100
TCE	<60
TPH	NA

ASW-01 5 - 6 05/30/2012 N	
B	770
E	770
T	<200
X	800
M	NA
2-MN	<500
N	<500
1,2,4	500
1,3,5	<200
TCE	<80
TPH	NA

B-45 0 - 2 09/24/2007 NA	
B	<50
E	<50
T	<100
X	<150
M	<200
2-MN	<400
N	<400
1,2,4	<100
1,3,5	<100
TCE	<50
TPH	NA

B-45 10 - 12 09/24/2007 NA	
B	60
E	60
T	200
X	290
M	<200
2-MN	<400
N	<400
1,2,4	<100
1,3,5	<100
TCE	<50
TPH	NA

B-2 8 - 10 11/06/2006 NA	
B	< 5.5
E	< 5.5
T	< 5.5
X	< 5.5
M	NA
2-MN	<11
N	NA
1,2,4	NA
1,3,5	NA
TCE	18
TPH	55

MW-9 0 - 2 09/19/2007 NA	
B	<60
E	<60
T	<100
X	<160
M	<200
2-MN	<400
N	<400
1,2,4	<100
1,3,5	<100
TCE	<60
TPH	NA

MW-9 3 - 5 09/19/2007 NA	
B	<50
E	<50
T	<100
X	<150
M	<200
2-MN	<300
N	<300
1,2,4	<100
1,3,5	<100
TCE	<50
TPH	NA

Soil Sample ID
Sample Depth (feet below ground surface)
Sample Date
Shake Test Result

B Benzene (µg/kg)
E Ethylbenzene (µg/kg)
T Toluene (µg/kg)
X Total Xylenes (µg/kg)
M Methyl tert-butyl ether (µg/kg)
2-MN 2-Methylnaphthalene (µg/kg)
N Naphthalene (µg/kg)
1,2,4 1,2,4-Trimethylbenzene (µg/kg)
1,3,5 1,3,5-Trimethylbenzene (µg/kg)
TCE Trichloroethene (µg/kg)
TPH (mg/kg)
N Negative Shake Test
SP Slightly Positive Shake Test
P Positive Shake Test
NA Not Analyzed

LEGEND

- Asphalt
- Silty Sand
- Concrete
- Clayey Sand
- Gravel
- Sand
- Clay
- Silty Clay
- Silt
- Gravelly Sand

NOTES:
1. Groundwater elevations include data collected between 2006 and 2013.
2. Ground surface elevations are estimated based on monitoring well ground surface elevations.
3. All elevations are referenced to a mean sea level site datum and are in units of feet above mean sea level.
4. Underground utility size and depth are approximate.

- Soil sample does not exceed most restrictive RBSLs
- Soil sample exceeds Drinking Water Protection RBSLs
- Soil sample exceeds Drinking Water Protection, Groundwater Surface Water Interface Protection, and Volatilization to Indoor Air Inhalation RBSLs

Soil Boring
Sample Interval
PID Measurment (ppm) 0.3
Measured Water Level (High and Low)
Screened Interval

- Underground Piping
- Approximate Geologic Contact
- Approximate Extent of Former Excavation
- Approximate Depth Explored
- Approximate Extent of Groundwater Impacts
- Approximate Extent of Soil Impact

RBSLs Risk Based Screening Levels

Vertical Scale (Feet): 10
Horizontal Scale (Feet): 45
Vertical Exaggeration: 4.5x

RACER Trust
Employee Development Center
65 E. University Drive, Pontiac, Michigan

**GEOLOGIC CROSS SECTION A-A'
(NORTH - SOUTH)**

ARCADIS Design & Consultancy for natural and built assets

FIGURE
3B

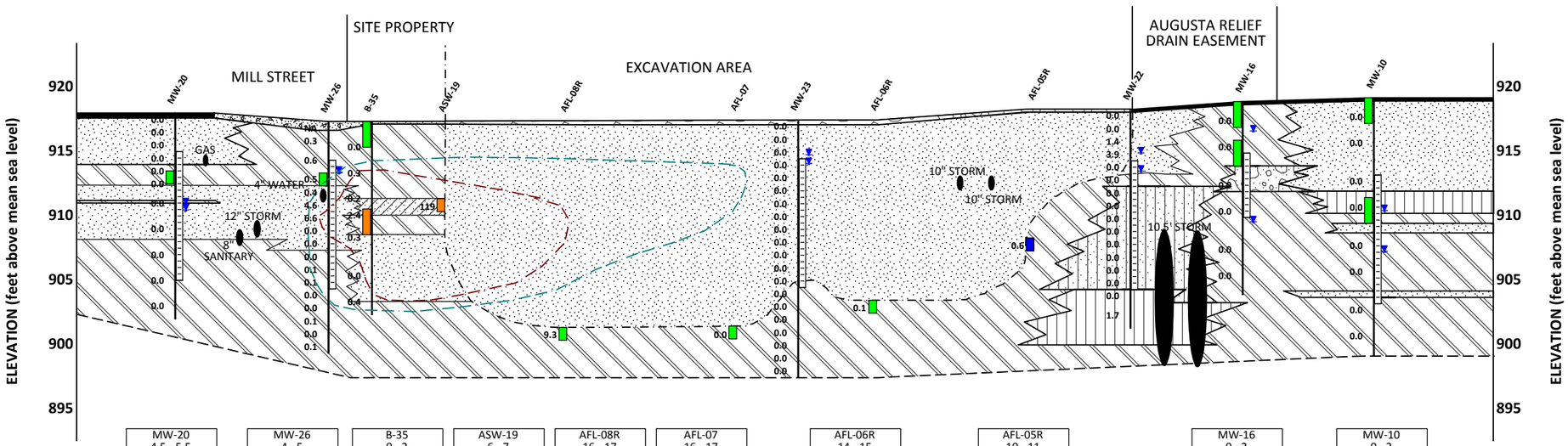
PIC:C. Peters PM: B. Saunders TM: A. Begnoche PROJECT NUMBER: B0064486.2013.00003
ARCADIS_CROSS SECTIONS (NO LITHOLOGY) I:\USERS\DROST\DESKTOP\CROSS SECTIONS\RACER PNC\RACER PNC BORING LOGS.GPJ FNC AB NWNL01 ODT 9/23/13

◄ WEST

EAST ►

B

B'



MW-20 4.5 - 5.5 11/17/2010 NA	MW-26 4 - 5 01/08/2013 NA	B-35 0 - 2 09/14/2007 NA	ASW-19 6 - 7 06/07/2012 P	AFL-08R 16 - 17 06/12/2012 N	AFL-07 16 - 17 06/12/2012 N	AFL-06R 14 - 15 06/15/2012 NA	AFL-05R 10 - 11 06/08/2012 N	MW-16 0 - 2 10/03/2007 NA	MW-10 0 - 2 09/20/2007 NA
B <70	B <70	B <60	B <700	B <60	B <60	B <60	B <70	B <50	B <50
E <70	E <70	E <60	E 25,200	E <60	E <60	E <60	E <70	E <50	E <50
T <100	T <100	T <100	T <1,000	T <100	T <100	T <100	T <100	T <100	T <100
X <170	X <170	X <160	X 91,800	X <160	X <160	X <160	X <170	X <150	X <150
M <300	M <300	M <200	M NA	M NA	M NA	M NA	M NA	M <200	M <200
2-MN <500	2-MN <460	2-MN <400	2-MN <4,300	2-MN <400	2-MN <400	2-MN <400	2-MN <430	2-MN <400	2-MN <300
N <500	N <460	N <400	N 4,400	N <400	N <400	N <400	N <430	N <400	N <300
1,2,4 <100	1,2,4 <100	1,2,4 <100	1,2,4 39,000	1,2,4 <100	1,2,4 <100	1,2,4 <100	1,2,4 <100	1,2,4 <100	1,2,4 <100
1,3,5 <100	1,3,5 <100	1,3,5 <100	1,3,5 13,000	1,3,5 <100	1,3,5 <100	1,3,5 <100	1,3,5 <100	1,3,5 <100	1,3,5 <100
TCE <70	TCE <70	TCE <60	TCE <700	TCE <60	TCE <60	TCE <60	TCE <70	TCE <50	TCE <50
TPH NA	TPH NA	TPH NA	TPH NA	TPH NA	TPH NA	TPH NA	TPH NA	TPH NA	TPH NA

B-35 6.8 - 8.8 09/14/2007 NA
B 960
E 1,960
T 6,100
X 8,010
M <200
2-MN <400
N <400
1,2,4 <100
1,3,5 <100
TCE <50
TPH NA

MW-16 3 - 5 10/03/2007 NA
B <50
E <50
T <100
X <150
M <200
2-MN <400
N <400
1,2,4 <100
1,3,5 <100
TCE <50
TPH NA

MW-10 7.75 - 9.75 09/20/2007 NA
B <50
E <50
T <100
X <150
M <200
2-MN <400
N <400
1,2,4 <100
1,3,5 <100
TCE <50
TPH NA

Soil Sample ID
Sample Depth (feet below ground surface)
Sample Date
Shake Test Result

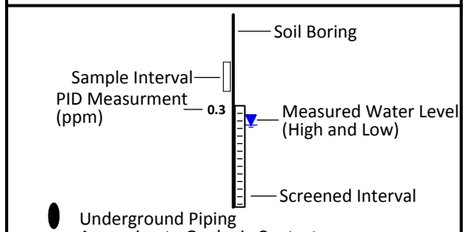
B Benzene (µg/kg)
E Ethylbenzene (µg/kg)
T Toluene (µg/kg)
X Total Xylenes (µg/kg)
M Methyl tert-butyl ether (µg/kg)
2-MN 2-Methylnaphthalene (µg/kg)
N Naphthalene (µg/kg)
1,2,4 1,2,4-Trimethylbenzene (µg/kg)
1,3,5 1,3,5-Trimethylbenzene (µg/kg)
TCE Trichloroethene (µg/kg)
TPH (mg/kg)
N Negative Shake Test
SP Slightly Positive Shake Test
P Positive Shake Test
NA Not Analyzed

LEGEND

- Concrete
- Clay
- Clayey Sand
- Sand
- Asphalt
- Silt
- Gravelly Sand
- Silty Sand
- Gravel

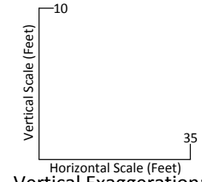
NOTES:
1. Groundwater elevations include data collected between 2006 and 2013.
2. Ground surface elevations are estimated based on monitoring well ground surface elevations.
3. All elevations are referenced to a mean sea level site datum and are in units of feet above mean sea level.
4. Underground utility size and depth are approximate.

- Soil sample does not exceed most restrictive RBSLs
- Soil sample exceeds Drinking Water Protection RBSLs
- Soil sample exceeds Drinking Water Protection and/or Groundwater Surface Water Interface Protection RBSLs



- Underground Piping
- Approximate Geologic Contact
- Approximate Extent of Former Excavation
- Approximate Extent of Groundwater Impacts
- Approximate Extent of Soil Impacts
- Approximate Depth Explored

RBSLs Risk Based Screening Levels



Vertical Exaggeration: 3.5x

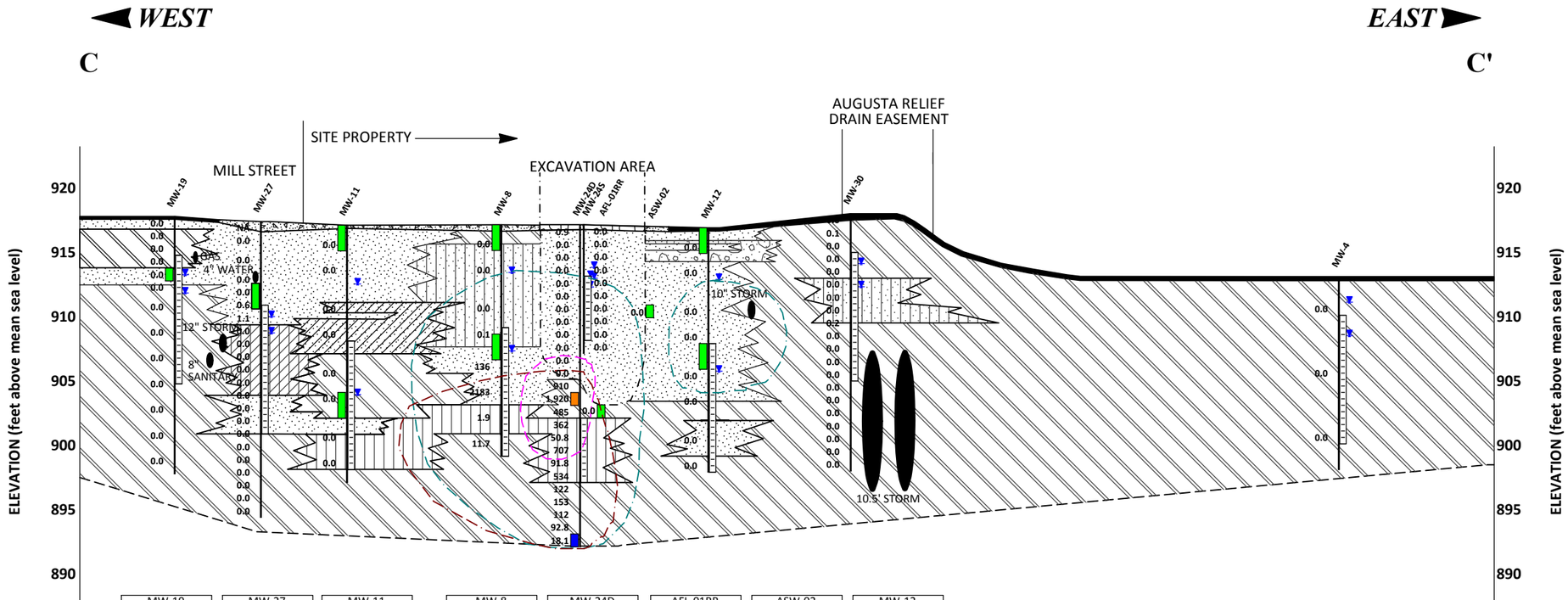
RACER Trust
Employee Development Center
65 E. University Drive, Pontiac, Michigan

GEOLOGIC CROSS SECTION B-B'
(WEST - EAST)

ARCADIS Design & Consultancy for natural and built assets

FIGURE
3C

PIC:C. Peters PM: B. Saunders TM: A. Begnoche PROJECT NUMBER: B0064486.2013.00003
ARCADIS_CROSS SECTIONS (NO LITHOLOGY) C:\USERS\DROSTI\DESKTOP\CROSS SECTIONS\RACER PNC\RACER PNC BORING LOGS.GPJ FNC AB NWNL01.GDT 9/23/13



MW-19 4 - 5 11/17/2010 NA	
B	<70
E	<70
T	<100
X	<170
M	<300
2-MN	<500
N	<500
1,2,4	<100
1,3,5	<100
TCE	<70
TPH	NA

MW-27 6 - 8 01/08/2013 NA	
B	<60
E	<60
T	<100
X	<160
M	<300
2-MN	<410
N	<410
1,2,4	<100
1,3,5	<100
TCE	<60
TPH	NA

MW-11 0 - 2 09/21/2007 NA	
B	<50
E	<50
T	<100
X	<150
M	<200
2-MN	<400
N	<400
1,2,4	<100
1,3,5	<100
TCE	<50
TPH	NA

MW-11 13 - 15 09/21/2007 NA	
B	<50
E	<50
T	<100
X	<150
M	<200
2-MN	<400
N	<400
1,2,4	<100
1,3,5	<100
TCE	<50
TPH	NA

MW-8 0 - 2 09/17/2007 NA	
B	<60
E	<60
T	<100
X	<160
M	<200
2-MN	<400
N	<400
1,2,4	<100
1,3,5	<100
TCE	<60
TPH	NA

MW-8 8.5 - 10.5 09/17/2007 NA	
B	<50
E	<50
T	<100
X	<150
M	<200
2-MN	<300
N	<300
1,2,4	<100
1,3,5	<100
TCE	<50
TPH	NA

MW-24D 13 - 14 01/07/2013 NA	
B	12,400
E	16,200
T	63,000
X	82,600
M	<3,000
2-MN	<4,200
N	<4,200
1,2,4	20,000
1,3,5	7,000
TCE	<60
TPH	NA

MW-24D 24 - 25 01/07/2013 NA	
B	390
E	<60
T	<100
X	<160
M	<200
2-MN	<390
N	<390
1,2,4	<100
1,3,5	<100
TCE	<60
TPH	NA

AFL-01RR 14 - 15 06/08/2012 N	
B	<60
E	<60
T	<100
X	<160
M	NA
2-MN	<380
N	<380
1,2,4	<100
1,3,5	<100
TCE	<60
TPH	NA

ASW-02 6 - 7 05/30/2012 N	
B	<60
E	<60
T	<100
X	<160
M	NA
2-MN	<390
N	<390
1,2,4	<100
1,3,5	<100
TCE	<60
TPH	NA

MW-12 0 - 2 09/21/2007 NA	
B	<50
E	<50
T	<100
X	<150
M	<200
2-MN	<400
N	<400
1,2,4	<100
1,3,5	<100
TCE	<50
TPH	NA

MW-12 9 - 11 09/21/2007 NA	
B	<50
E	<50
T	<100
X	<150
M	<200
2-MN	<400
N	<400
1,2,4	<100
1,3,5	<100
TCE	<50
TPH	NA

Soil Sample ID
Sample Depth (feet below ground surface)
Sample Date
Shake Test Result

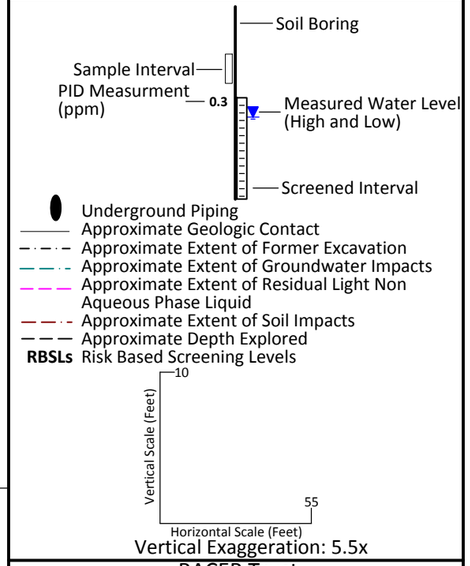
B Benzene (µg/kg)
E Ethylbenzene (µg/kg)
T Toluene (µg/kg)
X Total Xylenes (µg/kg)
M Methyl tert-butyl ether (µg/kg)
2-MN 2-Methylnaphthalene (µg/kg)
N Naphthalene (µg/kg)
1,2,4 1,2,4-Trimethylbenzene (µg/kg)
1,3,5 1,3,5-Trimethylbenzene (µg/kg)
TCE Trichloroethene (µg/kg)
TPH (mg/kg)
N Negative Shake Test
SP Slightly Positive Shake Test
P Positive Shake Test
NA Not Analyzed

LEGEND

Concrete
Sand
Clayey Sand
Asphalt
Gravelly Sand
Silty Sand
Silty Clay
Clay
Silt
Gravel

NOTES:
1. Groundwater elevations include data collected between 2006 and 2013.
2. Ground surface elevations are estimated based on monitoring well ground surface elevations.
3. All elevations are referenced to a mean sea level site datum and are in units of feet above mean sea level.
4. Underground utility size and depth are approximate.

Soil sample does not exceed most restrictive RBSLs
Soil sample exceeds Drinking Water Protection RBSLs
Soil sample exceeds Drinking Water Protection, Groundwater Surface Water Interface Protection RBSLs



Vertical Exaggeration: 5.5x

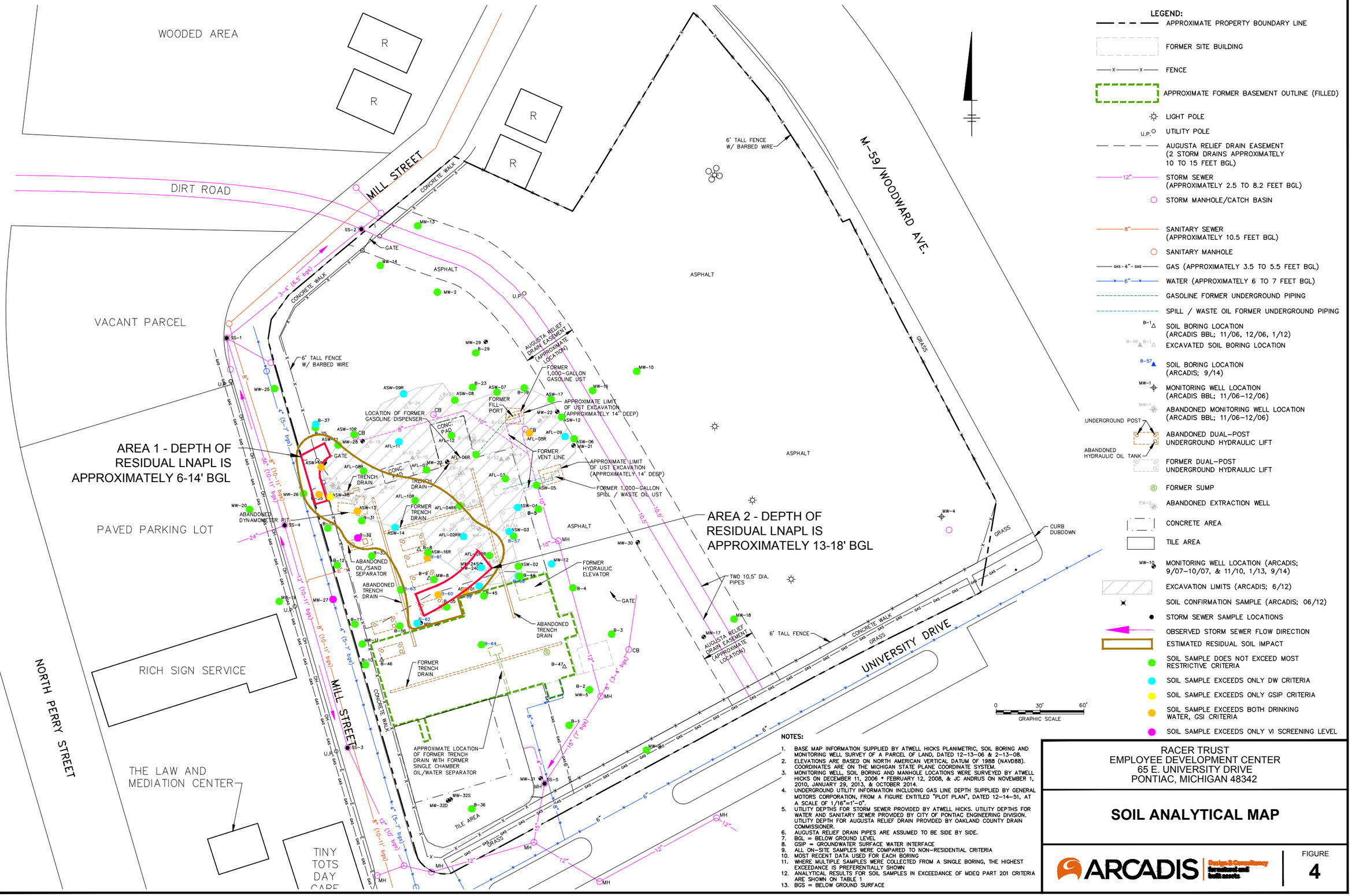
RACER Trust
Employee Development Center
65 E. University Drive, Pontiac, Michigan

GEOLOGIC CROSS SECTION C-C'
(WEST - EST)

ARCADIS Design & Consultancy for natural and built assets

FIGURE
3D

PIC:C. Peters PM: B. Saunders TM: A. Begnoche PROJECT NUMBER: B0064486.2013.00003
ARCADIS_CROSS SECTIONS (NO LITHOLOGY) C:\USERS\DROSTD\DESKTOP\CROSS SECTIONS\RACER PNG\RACER PNC BORING LOGS.GPJ FNC AB NYNL01 CDT 9/23/13



NOTES:

1. BASE MAP INFORMATION SUPPLIED BY ATWELL HICKS PLANIMETRIC, SOIL BORING AND MONITORING WELL SURVEY OF A PARCEL OF LAND, DATED 12-13-06 & 2-13-08.
2. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). COORDINATES ARE ON THE MICHIGAN STATE PLANE COORDINATE SYSTEM.
3. MONITORING WELL, SOIL BORING AND MANHOLE LOCATIONS WERE SURVEYED BY ATWELL HICKS ON DECEMBER 11, 2006 * FEBRUARY 12, 2008, & JC ANDRUS ON NOVEMBER 1, 2010, JANUARY 29, 2013, & OCTOBER 2014.
4. UNDERGROUND UTILITY INFORMATION INCLUDING GAS LINE DEPTH SUPPLIED BY GENERAL MOTORS CORPORATION, FROM A FIGURE ENTITLED "PLOT PLAN", DATED 12-14-51, AT A SCALE OF 1/16"=1'-0".
5. UTILITY DEPTHS FOR STORM SEWER PROVIDED BY ATWELL HICKS. UTILITY DEPTHS FOR WATER AND SANITARY SEWER PROVIDED BY CITY OF PONTIAC ENGINEERING DIVISION. UTILITY DEPTH FOR AUGUSTA RELIEF DRAIN PROVIDED BY OAKLAND COUNTY DRAIN COMMISSIONER.
6. AUGUSTA RELIEF DRAIN PIPES ARE ASSUMED TO BE SIDE BY SIDE.
7. BGL = BELOW GROUND LEVEL
8. GSIP = GROUNDWATER SURFACE WATER INTERFACE
9. ALL ON-SITE SAMPLES WERE COMPARED TO NON-RESIDENTIAL CRITERIA
10. MOST RECENT DATA USED FOR EACH BORING
11. WHERE MULTIPLE SAMPLES WERE COLLECTED FROM A SINGLE BORING, THE HIGHEST EXCEEDANCE IS PREFERENTIALLY SHOWN
12. ANALYTICAL RESULTS FOR SOIL SAMPLES IN EXCEEDANCE OF MDEQ PART 201 CRITERIA ARE SHOWN ON TABLE 1
13. BGS = BELOW GROUND SURFACE

RACER TRUST
EMPLOYEE DEVELOPMENT CENTER
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

SOIL ANALYTICAL MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 4

CITY:BRIGHTON DIV/GROUP:65 DB:ADF LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\Lansing-MI\ACTIVE\64486815\(SOIL).dwg LAYOUT: 4 SAVED: 6/14/2016 1:57 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 6/14/2016 1:57 PM BY: AKENS, DAVID
XREFS: IMAGES: PROJECTNAME: ---
10s12152B Figure 4 - Soil Analytical _boundary edit.jpg
64486x04 Figure 4 - Soil Analytical Map.jpg
SMI03P01140610094302_Page_1.tiff
SMI03P01140610094302_Page_1.tiff

CITY:BRIGHTON DIV/GROUP:85 DB:ADF LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\Lansing-MI\ACTIB0064486\64486B15 (WATER).dwg LAYOUT: 5 SAVED: 6/14/2016 2:04 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 6/14/2016 2:04 PM BY: AKENS, DAVID
XREFS: IMAGES: PROJECTNAME: ----
10s12152B Figure 5 - Groundwater Analytical Map.jpg
64486x04 soil_Gw impacts Pozniak_Page_1.jpg
SMI03P01140619090430_Page_1.tiff

WOODED AREA

DIRT ROAD

VACANT PROPERTY

PAVED PARKING LOT

RICH SIGN SERVICE

THE LAW AND MEDIATION CENTER

TINY TOTS DAY CARE

NORTH PERRY STREET

MILL STREET

M-59 / WOODWARD AVE.

UNIVERSITY DRIVE

ASPHALT

GRASS

CONCRETE WALK

CURB DUBDOWN

6' TALL FENCE W/ BARBED WIRE

GATE

R

CB

MH

U.P.

GAS

OHE

AUGUSTA RELIEF DRAIN EASEMENT (APPROXIMATE LOCATION)

FORMER 1,000-GALLON GASOLINE UST

APPROXIMATE LIMIT OF UST EXCAVATION (APPROXIMATELY 14' DEEP)

LOCATION OF FORMER GASOLINE DISPENSER

CONC. PAD

TRENCH DRAIN

FORMER FILL PORT

FORMER VENT LINE

FORMER 1,000-GALLON SPILL / WASTE OIL UST

ABANDONED DYNAMOMETER PIT

ABANDONED OIL/SAND SEPARATOR

ABANDONED TRENCH DRAIN

FORMER TRENCH DRAIN

FORMER HYDRAULIC ELEVATOR

TWO 10.5' DIA. PIPES

APPROXIMATE LOCATION OF FORMER TRENCH DRAIN WITH FORMER SINGLE CHAMBER OIL/WATER SEPARATOR

TILE AREA

3-4' (6.5" bgs)

4" (5-7' bgs)

6" (10-11' bgs)

8" (10-11' bgs)

12" (10-11' bgs)

24"

8" (3-4' bgs)

15" (7' bgs)

10.5'

6"

8"

10"

12"

15"

0 30' 60'
GRAPHIC SCALE

LEGEND:

- APPROXIMATE PROPERTY BOUNDARY LINE
- FORMER SITE BUILDING
- FENCE
- APPROXIMATE FORMER BASEMENT OUTLINE (FILLED)
- LIGHT POLE
- U.P. UTILITY POLE
- AUGUSTA RELIEF DRAIN EASEMENT (2 STORM DRAINS APPROXIMATELY 10 TO 15 FEET BGL)
- STORM SEWER
- STORM SEWER (REMOVED)
- STORM MANHOLE/CATCH BASIN
- 8" SANITARY SEWER (APPROXIMATELY 10.5 FEET BGL)
- SANITARY MANHOLE
- GAS - 4" - GAS GAS (APPROXIMATELY 3.5 TO 5.5 FEET BGL)
- W - 6" - W WATER (APPROXIMATELY 6 TO 7 FEET BGL)
- GASOLINE FORMER UNDERGROUND PIPING
- SPILL / WASTE OIL FORMER UNDERGROUND PIPING
- B-1 SOIL BORING LOCATION (ARCADIS BBL; 11/06, 12/06, 1/12)
- B-50 B-1 EXCAVATED SOIL BORING LOCATION
- B-57 SOIL BORING LOCATION (ARCADIS; 9/14)
- MW-1 MONITORING WELL LOCATION (ARCADIS BBL; 11/06-12/06)
- MW-1 ABANDONED MONITORING WELL LOCATION (ARCADIS BBL; 11/06-12/06)
- UNDERGROUND POST ABANDONED DUAL-POST UNDERGROUND HYDRAULIC LIFT
- ABANDONED HYDRAULIC OIL TANK FORMER DUAL-POST UNDERGROUND HYDRAULIC LIFT
- FORMER SUMP
- EW-2 ABANDONED EXTRACTION WELL
- CONCRETE AREA
- TILE AREA
- MW-10 MONITORING WELL LOCATION (ARCADIS; 9/07-10/07, & 11/10, 1/13, 9/14)
- EXCAVATION LIMITS (ARCADIS; 6/12)
- SOIL CONFIRMATION SAMPLE (ARCADIS; 06/12)
- STORM SEWER SAMPLE LOCATIONS
- OBSERVED STORM SEWER FLOW DIRECTION
- ESTIMATED GROUNDWATER IMPACT
- GROUNDWATER SAMPLE DOES NOT EXCEED MOST RESTRICTIVE CRITERIA
- GROUNDWATER SAMPLE EXCEEDS ONLY DW CRITERIA
- GROUNDWATER SAMPLE EXCEEDS BOTH DW AND GSI CRITERIA
- GROUNDWATER SAMPLE EXCEEDS ONLY VI SCREENING LEVEL
- HISTORICAL GROUNDWATER SAMPLE

NOTES:

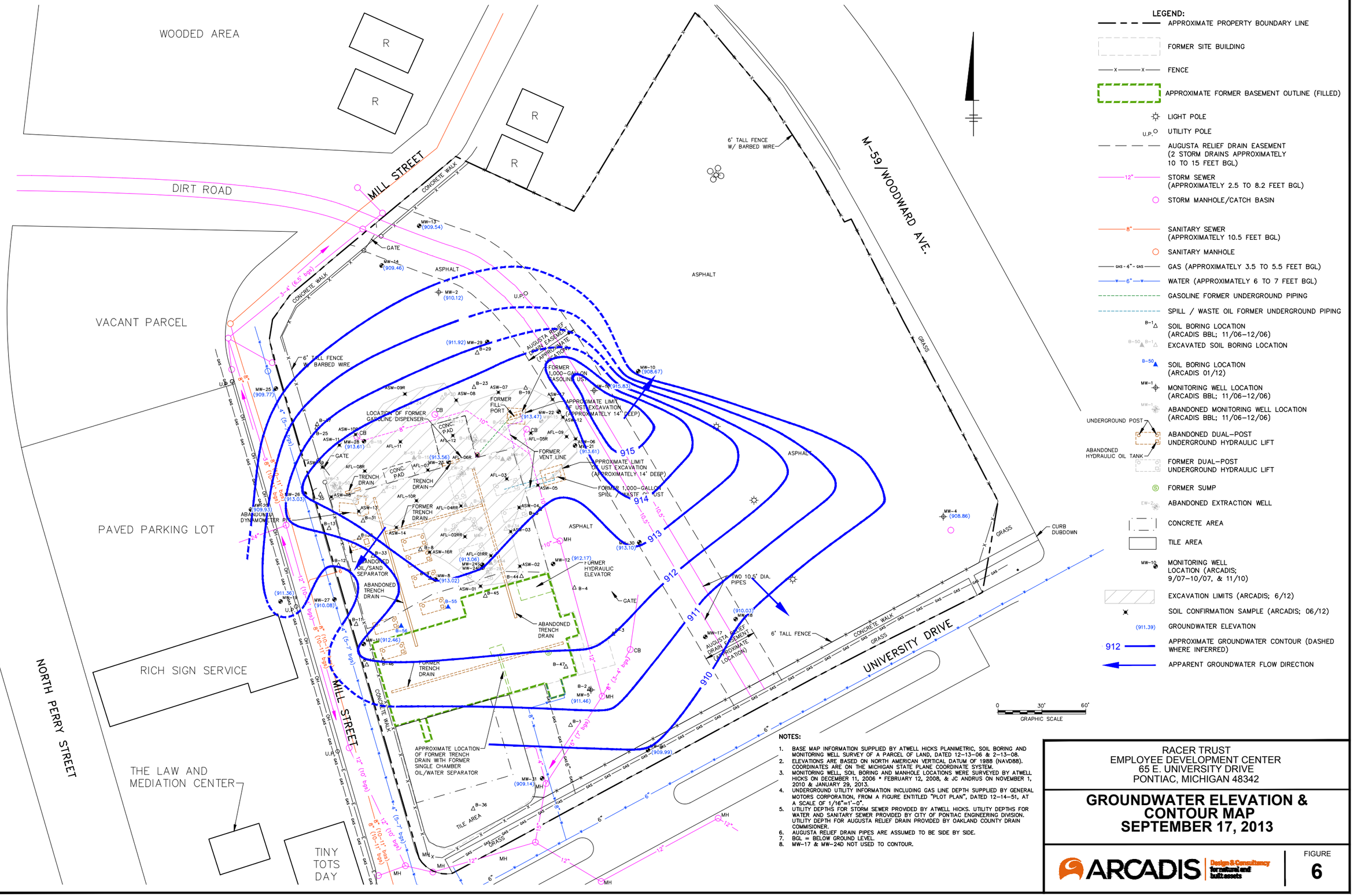
1. BASE MAP INFORMATION SUPPLIED BY ATWELL HICKS PLANIMETRIC, SOIL BORING AND MONITORING WELL SURVEY OF A PARCEL OF LAND, DATED 12-13-06 & 2-13-08.
2. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). COORDINATES ARE ON THE MICHIGAN STATE PLANE COORDINATE SYSTEM.
3. MONITORING WELL, SOIL BORING AND MANHOLE LOCATIONS WERE SURVEYED BY ATWELL HICKS ON DECEMBER 11, 2006 * FEBRUARY 12, 2008, & JC ANDRUS ON NOVEMBER 1, 2010, JANUARY 29, 2013, & OCTOBER 2014.
4. UNDERGROUND UTILITY INFORMATION INCLUDING GAS LINE DEPTH SUPPLIED BY GENERAL MOTORS CORPORATION, FROM A FIGURE ENTITLED "PLOT PLAN", DATED 12-14-51, AT A SCALE OF 1/16"=1'-0".
5. UTILITY DEPTHS FOR STORM SEWER PROVIDED BY ATWELL HICKS. UTILITY DEPTHS FOR WATER AND SANITARY SEWER PROVIDED BY CITY OF PONTIAC ENGINEERING DIVISION. UTILITY DEPTH FOR AUGUSTA RELIEF DRAIN PROVIDED BY OAKLAND COUNTY DRAIN COMMISSIONER.
6. AUGUSTA RELIEF DRAIN PIPES ARE ASSUMED TO BE SIDE BY SIDE.
7. BGL = BELOW GROUND LEVEL.
8. GSI = GROUNDWATER SURFACE WATER INTERFACE.
9. MOST RECENT DATA USED FOR EACH WELL.
10. ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES ARE SHOWN ON TABLE 2.

RACER TRUST
EMPLOYEE DEVELOPMENT CENTER
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

GROUNDWATER ANALYTICAL MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 5



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY LINE
- FORMER SITE BUILDING
- FENCE
- APPROXIMATE FORMER BASEMENT OUTLINE (FILLED)
- LIGHT POLE
- U.P. UTILITY POLE
- AUGUSTA RELIEF DRAIN EASEMENT (2 STORM DRAINS APPROXIMATELY 10 TO 15 FEET BGL)
- 12" STORM SEWER (APPROXIMATELY 2.5 TO 8.2 FEET BGL)
- STORM MANHOLE/CATCH BASIN
- 8" SANITARY SEWER (APPROXIMATELY 10.5 FEET BGL)
- SANITARY MANHOLE
- GAS - 4" - GAS GAS (APPROXIMATELY 3.5 TO 5.5 FEET BGL)
- W - 6" - W WATER (APPROXIMATELY 6 TO 7 FEET BGL)
- GASOLINE FORMER UNDERGROUND PIPING
- SPILL / WASTE OIL FORMER UNDERGROUND PIPING
- B-1 SOIL BORING LOCATION (ARCADIS BBL; 11/06–12/06)
- B-50 B-1 EXCAVATED SOIL BORING LOCATION
- B-50 SOIL BORING LOCATION (ARCADIS 01/12)
- MW-1 MONITORING WELL LOCATION (ARCADIS BBL; 11/06–12/06)
- MW-1 ABANDONED MONITORING WELL LOCATION (ARCADIS BBL; 11/06–12/06)
- UNDERGROUND POST / ABANDONED HYDRAULIC OIL TANK ABANDONED DUAL–POST UNDERGROUND HYDRAULIC LIFT
- FORMER DUAL–POST UNDERGROUND HYDRAULIC LIFT
- S FORMER SUMP
- EW-2 ABANDONED EXTRACTION WELL
- CONCRETE AREA
- TILE AREA
- MW-10 MONITORING WELL LOCATION (ARCADIS; 9/07–10/07, & 11/10)
- EXCAVATION LIMITS (ARCADIS; 6/12)
- SOIL CONFIRMATION SAMPLE (ARCADIS; 06/12)
- (911.39) GROUNDWATER ELEVATION
- 912 APPROXIMATE GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
- APPARENT GROUNDWATER FLOW DIRECTION

NOTES:

1. BASE MAP INFORMATION SUPPLIED BY ATWELL HICKS PLANIMETRIC, SOIL BORING AND MONITORING WELL SURVEY OF A PARCEL OF LAND, DATED 12–13–06 & 2–13–08.
2. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). COORDINATES ARE ON THE MICHIGAN STATE PLANE COORDINATE SYSTEM.
3. MONITORING WELL, SOIL BORING AND MANHOLE LOCATIONS WERE SURVEYED BY ATWELL HICKS ON DECEMBER 11, 2006 * FEBRUARY 12, 2008, & JC ANDRUS ON NOVEMBER 1, 2010 & JANUARY 29, 2013.
4. UNDERGROUND UTILITY INFORMATION INCLUDING GAS LINE DEPTH SUPPLIED BY GENERAL MOTORS CORPORATION, FROM A FIGURE ENTITLED "PLOT PLAN", DATED 12–14–51, AT A SCALE OF 1/16"=1'–0".
5. UTILITY DEPTHS FOR STORM SEWER PROVIDED BY ATWELL HICKS. UTILITY DEPTHS FOR WATER AND SANITARY SEWER PROVIDED BY CITY OF PONTIAC ENGINEERING DIVISION. UTILITY DEPTH FOR AUGUSTA RELIEF DRAIN PROVIDED BY OAKLAND COUNTY DRAIN COMMISIONER.
6. AUGUSTA RELIEF DRAIN PIPES ARE ASSUMED TO BE SIDE BY SIDE.
7. BGL = BELOW GROUND LEVEL.
8. MW-17 & MW-24D NOT USED TO CONTOUR.

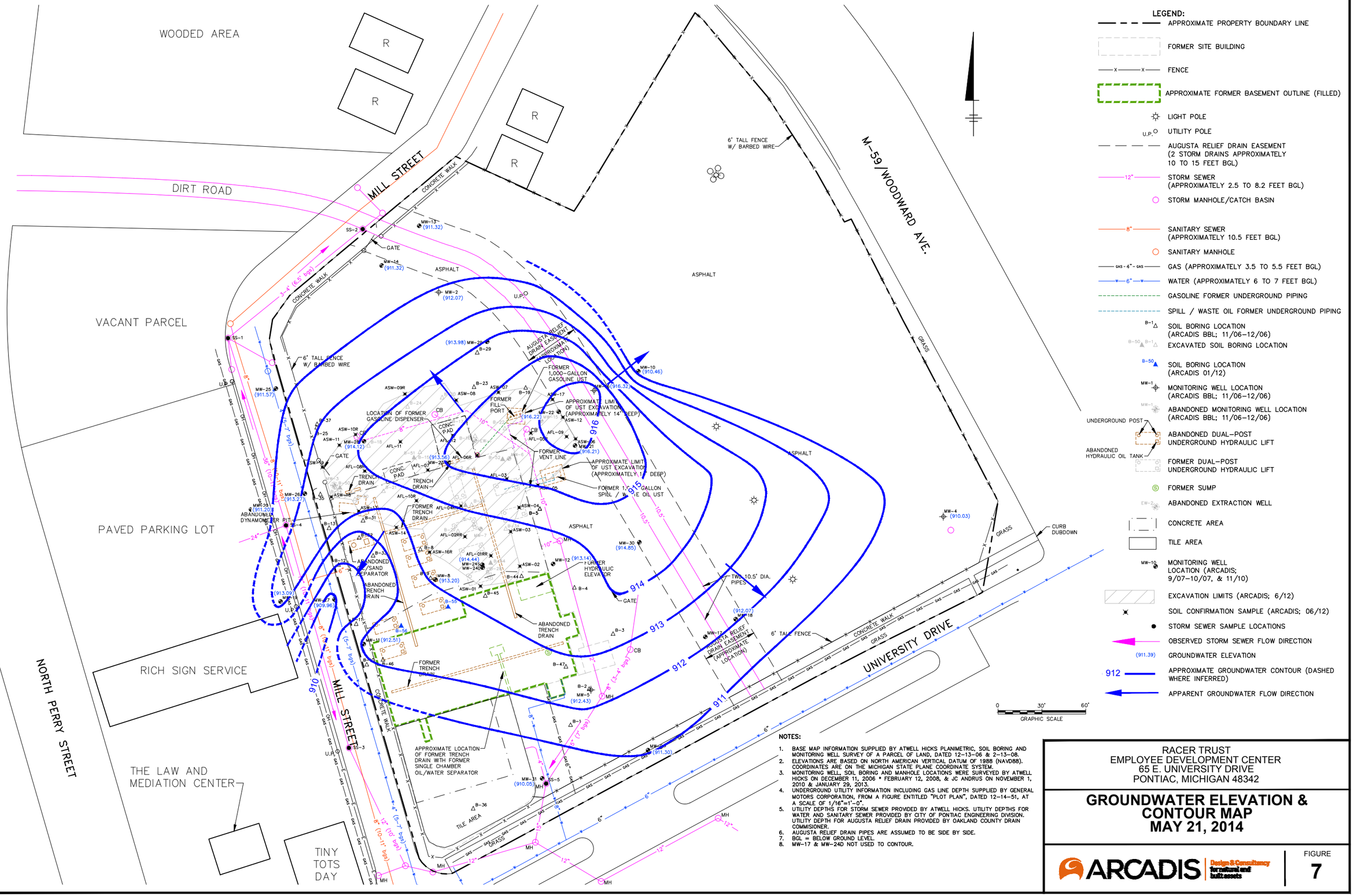
RACER TRUST
EMPLOYEE DEVELOPMENT CENTER
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

GROUNDWATER ELEVATION & CONTOUR MAP SEPTEMBER 17, 2013

ARCADIS Design & Consultancy for natural and built assets

FIGURE 6

CITY:BRIGHTON DIV/GROUP:85 DB:ADF LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\ACTIB0064486\64486W06.dwg LAYOUT: 4 SAVED: 3/16/2016 3:52 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 3/16/2016 3:55 PM BY: AKENS, DAVID
XREFS: IMAGES: PROJECTNAME: ----
10s12152B SMI03P01140619094 30_Page_1.tiff
64486x04



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY LINE
- FORMER SITE BUILDING
- FENCE
- APPROXIMATE FORMER BASEMENT OUTLINE (FILLED)
- LIGHT POLE
- UTILITY POLE
- AUGUSTA RELIEF DRAIN EASEMENT (2 STORM DRAINS APPROXIMATELY 10 TO 15 FEET BGL)
- STORM SEWER (APPROXIMATELY 2.5 TO 8.2 FEET BGL)
- STORM MANHOLE/CATCH BASIN
- SANITARY SEWER (APPROXIMATELY 10.5 FEET BGL)
- SANITARY MANHOLE
- GAS (APPROXIMATELY 3.5 TO 5.5 FEET BGL)
- WATER (APPROXIMATELY 6 TO 7 FEET BGL)
- GASOLINE FORMER UNDERGROUND PIPING
- SPILL / WASTE OIL FORMER UNDERGROUND PIPING
- SOIL BORING LOCATION (ARCADIS BBL; 11/06–12/06)
- EXCAVATED SOIL BORING LOCATION
- SOIL BORING LOCATION (ARCADIS 01/12)
- MONITORING WELL LOCATION (ARCADIS BBL; 11/06–12/06)
- ABANDONED MONITORING WELL LOCATION (ARCADIS BBL; 11/06–12/06)
- ABANDONED DUAL–POST UNDERGROUND HYDRAULIC LIFT
- FORMER DUAL–POST UNDERGROUND HYDRAULIC LIFT
- FORMER SUMP
- ABANDONED EXTRACTION WELL
- CONCRETE AREA
- TILE AREA
- MONITORING WELL LOCATION (ARCADIS; 9/07–10/07, & 11/10)
- EXCAVATION LIMITS (ARCADIS; 6/12)
- SOIL CONFIRMATION SAMPLE (ARCADIS; 06/12)
- STORM SEWER SAMPLE LOCATIONS
- OBSERVED STORM SEWER FLOW DIRECTION
- (911.39) GROUNDWATER ELEVATION
- 912 APPROXIMATE GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
- APPARENT GROUNDWATER FLOW DIRECTION

NOTES:

1. BASE MAP INFORMATION SUPPLIED BY ATWELL HICKS PLANIMETRIC, SOIL BORING AND MONITORING WELL SURVEY OF A PARCEL OF LAND, DATED 12–13–06 & 2–13–08.
2. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). COORDINATES ARE ON THE MICHIGAN STATE PLANE COORDINATE SYSTEM.
3. MONITORING WELL, SOIL BORING AND MANHOLE LOCATIONS WERE SURVEYED BY ATWELL HICKS ON DECEMBER 11, 2006 * FEBRUARY 12, 2008, & JC ANDRUS ON NOVEMBER 1, 2010 & JANUARY 29, 2013.
4. UNDERGROUND UTILITY INFORMATION INCLUDING GAS LINE DEPTH SUPPLIED BY GENERAL MOTORS CORPORATION, FROM A FIGURE ENTITLED "PLOT PLAN", DATED 12–14–51, AT A SCALE OF 1/16"=1'–0".
5. UTILITY DEPTHS FOR STORM SEWER PROVIDED BY ATWELL HICKS. UTILITY DEPTHS FOR WATER AND SANITARY SEWER PROVIDED BY CITY OF PONTIAC ENGINEERING DIVISION. UTILITY DEPTH FOR AUGUSTA RELIEF DRAIN PROVIDED BY OAKLAND COUNTY DRAIN COMMISIONER.
6. AUGUSTA RELIEF DRAIN PIPES ARE ASSUMED TO BE SIDE BY SIDE.
7. BGL = BELOW GROUND LEVEL.
8. MW–17 & MW–24D NOT USED TO CONTOUR.

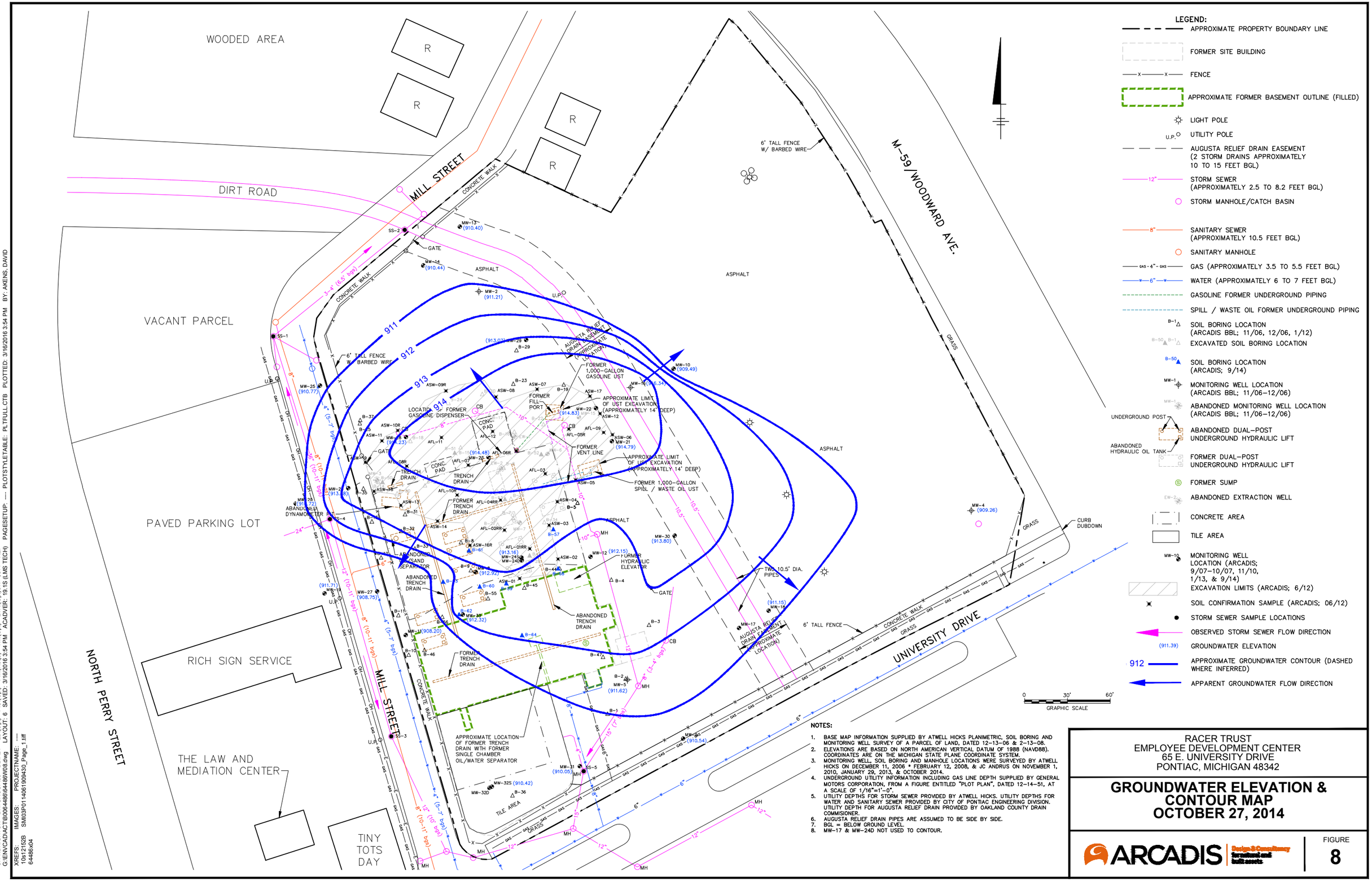
RACER TRUST
EMPLOYEE DEVELOPMENT CENTER
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

GROUNDWATER ELEVATION & CONTOUR MAP MAY 21, 2014

ARCADIS Design & Consultancy for natural and built assets

FIGURE 7

CITY:BRIGHTON DIV/GROUP:85 DB:ADF LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\ACTIB008\64486\64486W07.dwg LAYOUT: 5 SAVED: 3/16/2016 3:55 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 3/16/2016 3:55 PM BY: AKENS, DAVID
XREFS: IMAGES: PROJECTNAME: ---
10sr12152B SMI03P01140619094 30_Page_1.tiff
64486x04



NOTES:

1. BASE MAP INFORMATION SUPPLIED BY ATWELL HICKS PLANIMETRIC, SOIL BORING AND MONITORING WELL SURVEY OF A PARCEL OF LAND, DATED 12-13-06 & 2-13-08.
2. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). COORDINATES ARE ON THE MICHIGAN STATE PLANE COORDINATE SYSTEM.
3. MONITORING WELL, SOIL BORING AND MANHOLE LOCATIONS WERE SURVEYED BY ATWELL HICKS ON DECEMBER 11, 2006 * FEBRUARY 12, 2008, & JC ANDRUS ON NOVEMBER 1, 2010, JANUARY 29, 2013, & OCTOBER 2014.
4. UNDERGROUND UTILITY INFORMATION INCLUDING GAS LINE DEPTH SUPPLIED BY GENERAL MOTORS CORPORATION, FROM A FIGURE ENTITLED "PLOT PLAN", DATED 12-14-51, AT A SCALE OF 1/16"=1'-0".
5. UTILITY DEPTHS FOR STORM SEWER PROVIDED BY ATWELL HICKS. UTILITY DEPTHS FOR WATER AND SANITARY SEWER PROVIDED BY CITY OF PONTIAC ENGINEERING DIVISION. UTILITY DEPTH FOR AUGUSTA RELIEF DRAIN PROVIDED BY OAKLAND COUNTY DRAIN COMMISIONER.
6. AUGUSTA RELIEF DRAIN PIPES ARE ASSUMED TO BE SIDE BY SIDE.
7. BGL = BELOW GROUND LEVEL.
8. MW-17 & MW-24D NOT USED TO CONTOUR.

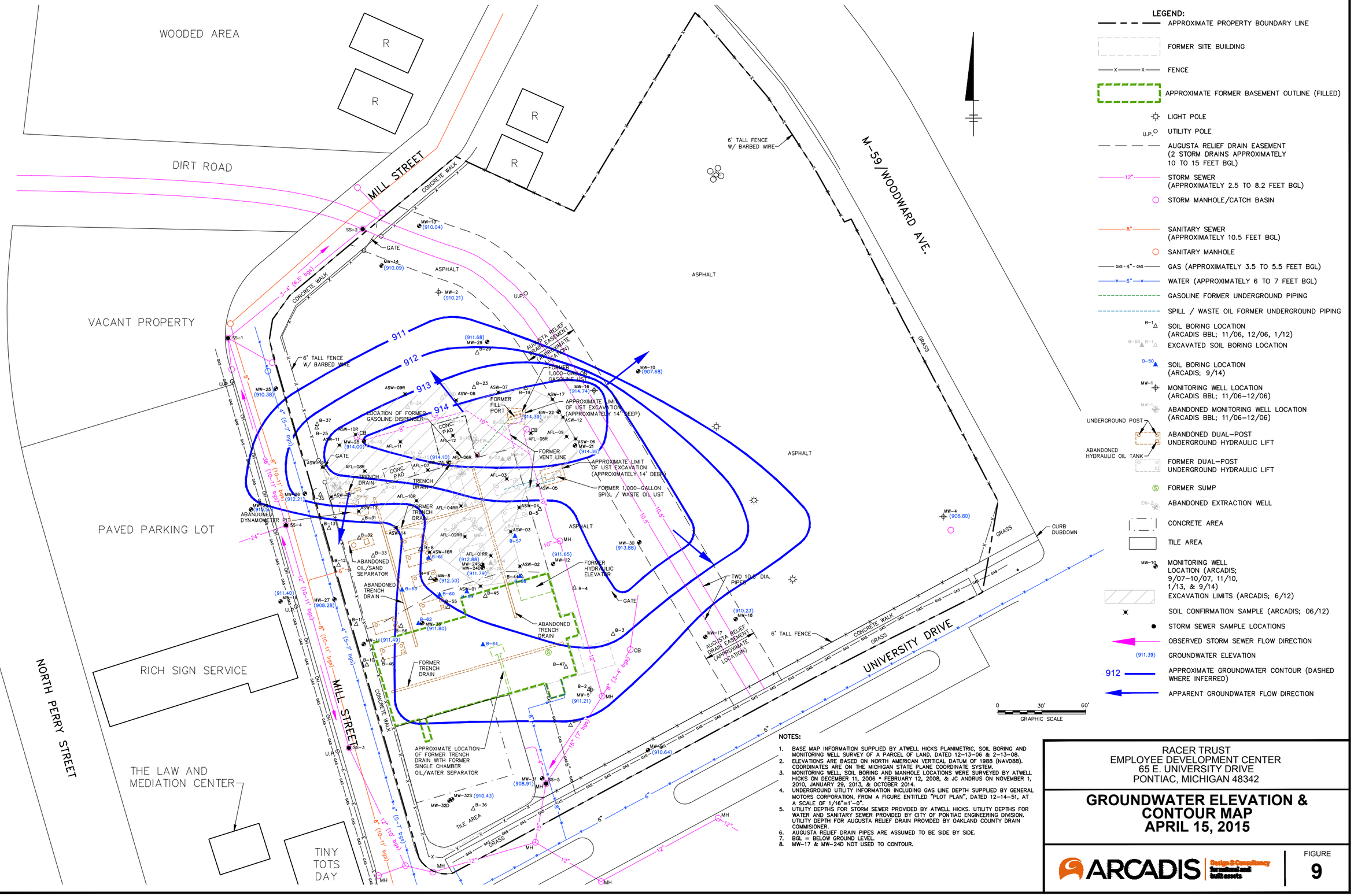
RACER TRUST
EMPLOYEE DEVELOPMENT CENTER
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

GROUNDWATER ELEVATION & CONTOUR MAP OCTOBER 27, 2014

ARCADIS Design & Consultancy for natural and built assets

FIGURE 8

CITY:BRIGHTON DIV/GROUP:85 DB:ADF LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF* PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 3/16/2016 3:54 PM BY: AKENS, DAVID
G:\ENVCAD\ACT\B0084486\64486W08.dwg LAYOUT: 6 SAVED: 3/16/2016 3:54 PM ACADVER: 19.1S (LMS TECH)
XREFS: IMAGES: PROJECTNAME: ---
10s12152B SMI03P01140619090430_Page_1.tiff
64486x04



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY LINE
- FORMER SITE BUILDING
- FENCE
- APPROXIMATE FORMER BASEMENT OUTLINE (FILLED)
- LIGHT POLE
- UTILITY POLE
- AUGUSTA RELIEF DRAIN EASEMENT (2 STORM DRAINS APPROXIMATELY 10 TO 15 FEET BGL)
- STORM SEWER (APPROXIMATELY 2.5 TO 8.2 FEET BGL)
- STORM MANHOLE/CATCH BASIN
- SANITARY SEWER (APPROXIMATELY 10.5 FEET BGL)
- SANITARY MANHOLE
- GAS (APPROXIMATELY 3.5 TO 5.5 FEET BGL)
- WATER (APPROXIMATELY 6 TO 7 FEET BGL)
- GASOLINE FORMER UNDERGROUND PIPING
- SPILL / WASTE OIL FORMER UNDERGROUND PIPING
- SOIL BORING LOCATION (ARCADIS BBL; 11/06, 12/06, 1/12)
- EXCAVATED SOIL BORING LOCATION
- SOIL BORING LOCATION (ARCADIS; 9/14)
- MONITORING WELL LOCATION (ARCADIS BBL; 11/06–12/06)
- ABANDONED MONITORING WELL LOCATION (ARCADIS BBL; 11/06–12/06)
- ABANDONED DUAL–POST UNDERGROUND HYDRAULIC LIFT
- FORMER DUAL–POST UNDERGROUND HYDRAULIC LIFT
- FORMER SUMP
- ABANDONED EXTRACTION WELL
- CONCRETE AREA
- TILE AREA
- MONITORING WELL LOCATION (ARCADIS; 9/07–10/07, 11/10, 1/13, & 9/14)
- EXCAVATION LIMITS (ARCADIS; 6/12)
- SOIL CONFIRMATION SAMPLE (ARCADIS; 06/12)
- STORM SEWER SAMPLE LOCATIONS
- OBSERVED STORM SEWER FLOW DIRECTION
- GROUNDWATER ELEVATION
- APPROXIMATE GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
- APPARENT GROUNDWATER FLOW DIRECTION

NOTES:

1. BASE MAP INFORMATION SUPPLIED BY ATWELL HICKS PLANIMETRIC, SOIL BORING AND MONITORING WELL SURVEY OF A PARCEL OF LAND, DATED 12–13–06 & 2–13–08.
2. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). COORDINATES ARE ON THE MICHIGAN STATE PLANE COORDINATE SYSTEM.
3. MONITORING WELL, SOIL BORING AND MANHOLE LOCATIONS WERE SURVEYED BY ATWELL HICKS ON DECEMBER 11, 2006 * FEBRUARY 12, 2008, & JC ANDRUS ON NOVEMBER 1, 2010, JANUARY 29, 2013, & OCTOBER 2014.
4. UNDERGROUND UTILITY INFORMATION INCLUDING GAS LINE DEPTH SUPPLIED BY GENERAL MOTORS CORPORATION, FROM A FIGURE ENTITLED "PLOT PLAN", DATED 12–14–51, AT A SCALE OF 1/16"=1'–0".
5. UTILITY DEPTHS FOR STORM SEWER PROVIDED BY ATWELL HICKS. UTILITY DEPTHS FOR WATER AND SANITARY SEWER PROVIDED BY CITY OF PONTIAC ENGINEERING DIVISION. UTILITY DEPTH FOR AUGUSTA RELIEF DRAIN PROVIDED BY OAKLAND COUNTY DRAIN COMMISIONER.
6. AUGUSTA RELIEF DRAIN PIPES ARE ASSUMED TO BE SIDE BY SIDE.
7. BGL = BELOW GROUND LEVEL.
8. MW–17 & MW–24D NOT USED TO CONTOUR.

RACER TRUST
EMPLOYEE DEVELOPMENT CENTER
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

GROUNDWATER ELEVATION & CONTOUR MAP APRIL 15, 2015

ARCADIS Design & Consultancy for natural and built assets

FIGURE 9

CITY:BRIGHTON DIV/GROUP:85 DB:ADF LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\ACTIB0064486\64486W09.dwg LAYOUT: 7 SAVED: 3/16/2016 3:46 PM BY: AKENS, DAVID
XREFS: IMAGES: PROJECTNAME: ----
10s12152B SMI02P02150514095901 (2).jpg
64486x04 SMI03P01140619094302_Page_1.tiff
FILE: PLTFULL.CTB PLOTTED: 3/16/2016 3:46 PM BY: AKENS, DAVID
PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB LYR:(Opt)ON=*;OFF=*REF*
ACADVER: 19.1S (LMS TECH)

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), Mapmyindia, © OpenStreetMap contributors, and the GIS User Community

Shalom Baptist Church
Type 2 Provisional
Wellhead Protection Area

MPD Welding
Type 2 Provisional
Wellhead Protection Area

Orion Lakes
Type 1 Provisional
Wellhead Protection Area

Southwest Oakland Township
Type 1 Provisional
Wellhead Protection Area

Waterford Twp.
Traditional
Wellhead Protection
Area Delineation

Pontiac - East Boulevard
Type 1 Provisional
Wellhead Protection Area

PONTIAC EAST BOULEVARD STANDBY WELL

Pontiac - Paddock
Type 1 Provisional
Wellhead Protection Area

PONTIAC PADDOCK STANDBY WELL

College Heights
Mobile Home Park
Type 1 Provisional
Wellhead
Protection Area

South Bloomfield Highlands
Type 1 Provisional
Wellhead Protection Area

Shorewood Hills Subdivision
Type 1 Provisional
Wellhead Protection Area

LEGEND

- WATER WELL LOCATION
- STANDBY WELL
- WELLHEAD PROTECTION AREA
- EMPLOYEE DEVELOPMENT CENTER
- CITY OF PONTIAC BOUNDARY

0 1,500 3,000
SCALE IN FEET

RACER TRUST
PONTIAC, MICHIGAN

RACER TRUST
EMPLOYEE DEVELOPMENT CENTER
65 E. UNIVERSITY DRIVE, PONTIAC, MICHIGAN

ARCADIS Design & Consultancy for natural and built assets

FIGURE
10

CITY: Novi DIV: ENV DB: TRY PIC: PM: TM: TR: PROJECT NUMBER: B0064607.2012.0002 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
D:\GIS\Project Files\MotorsLiquidationCompany\Pontiac\NorthCampus\Documents\WellheadProtectionArea_CityOfPontiac_EmployeeDevelopmentCenter.mxd PLOTTED: 6/22/2016 3:00:22 PM BY: TYarbrough

APPENDIX A

Soil Boring Logs and Monitoring Well Construction Logs

Date Start/Finish: 11/6/06
Drilling Company: Altech
Driller's Name: Nick Simmons
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417398.2
Easting: 13412917.0
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: 916.5

Descriptions By: Beth Reimer

Well/Boring ID: **B-1**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 915	1	0-5'	3'	0.0	CL		ASPHALT. Light reddish brown CLAY with SILT (CL), soft to hard, plastic, dry to moist, no odor detected and no staining observed.	
5 / 910	2	5-10'	5'	0.0			Few small layers of very fine to coarse SAND from 5.5-6' bgs.	Borehole backfilled with soil cuttings.
10 / 905							End of boring at 10' bgs.	
15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with soil cuttings.

Date Start/Finish: 11/6/06
Drilling Company: Altech
Driller's Name: Nick Simmons
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417422.9
Easting: 13412929.7
Casing Elevation: NA

Borehole Depth: 15' bgs
Surface Elevation: 916.9

Descriptions By: Beth Reimer

Well/Boring ID: **B-2**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 916.9							ASPHALT.	
915	1	0-5'	3'	0.0	SM		Dark brown grading into dark olive gray then light reddish brown, very fine to fine SAND and SILT (SM), moist to dry, no odor detected and no staining observed.	
5 / 910	2	5-10'	3'	0.0			Some black Silt with light reddish brown Silt, very soft, loose, wet.	
10 / 905	3	10-15'	1'	0.0				
15							End of boring at 15' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with soil cuttings.

Date Start/Finish: 11/6/06
Drilling Company: Altech
Driller's Name: Nick Simmons
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417460.7
Easting: 13412946.1
Casing Elevation: NA

Borehole Depth: 15' bgs
Surface Elevation: 916.9

Descriptions By: Beth Reimer

Well/Boring ID: B-3

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 916.9								
					SP		ASPHALT.	
					CL		Dark brown to black, very fine to medium SAND (SP), trace fine to medium Gravel, moist.	
							Light reddish brown CLAY (CL), soft.	
915	1	0-5'	3'	0.0			Light reddish brown, very fine to coarse SAND (SP), few fine Gravel, poorly sorted, loose, dry to moist.	
5					SP			
910	2	5-10'	3.5'	0.0				
10							Alternating layers of loose medium to coarse SAND (SM), and reddish brown SILT with some very fine to fine Sand, wet.	
905	3	10-15'	3.75'	0.0	SM			
15							End of boring at 15' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with soil cuttings.
No odors detected and no staining observed.

Date Start/Finish: 11/6/06 **Drilling Company:** Altech **Driller's Name:** Nick Simmons **Drilling Method:** Direct Push **Sampling Method:** Macrocore **Rig Type:** NA	**Northing:** 417492.4 **Easting:** 13412919.6 **Casing Elevation:** NA **Borehole Depth:** 10' bgs **Surface Elevation:** 917.0 **Descriptions By:** Beth Reimer	**Well/Boring ID:** **B-4** **Client:** General Motors Worldwide Real Estate **Location:** Employee Development Center Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 915	1	0-5'	1.5'	0.0	SM		ASPHALT. Light reddish brown to black, very fine to medium SAND and SILT (SM), little to trace Clay, very soft, wet.	
5 910	2	5-10'	2'	0.0	CL		Light reddish brown CLAY (CL), few fine to medium Gravel, hard, non-plastic, dry.	Borehole backfilled with soil cuttings.
10 905							End of boring at 10' bgs.	
15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with soil cuttings.
No odors detected and no staining observed.

Date Start/Finish: 11/6/06 **Drilling Company:** Altech **Driller's Name:** Nick Simmons **Drilling Method:** Direct Push **Sampling Method:** Macrocore **Rig Type:** NA	**Northing:** 417546.3 **Easting:** 13412895.9 **Casing Elevation:** NA **Borehole Depth:** 15' bgs **Surface Elevation:** 917.4 **Descriptions By:** Beth Reimer	**Well/Boring ID:** **B-5** **Client:** General Motors Worldwide Real Estate **Location:** Employee Development Center Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
920								
0							ASPHALT.	
							Brown to light reddish brown CLAY (CL), little fine to medium Gravel, very hard, plastic, dry.	
915	1	0-5'	4.25'	0.0	CL			
					SM		Light reddish brown SILTY SAND (SM), very fine to medium Sand, moist.	
5							Reddish brown CLAY (CL), mixed with dark brown to black Sand and Gravel, dry.	
					CL			
					SM		Light reddish brown SILTY SAND (SM), moist.	
910	2	5-10'	5'	0.0			Light reddish brown CLAY (CL) grading into gray to gray brown CLAY, few fine to medium Gravel, very hard, medium plasticity, dry.	Borehole backfilled with soil cuttings.
10					CL			
905	3	10-15'	5'	0.0				
15							End of boring at 15' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
Groundwater was not encountered. No temporary well installed.
No odors detected and no staining observed.

Date Start/Finish: 11/30/06
Drilling Company: Fibertec
Driller's Name: Nathan Keller
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417570.8
Easting: 13412844.1
Casing Elevation: NA

Borehole Depth: 12' bgs
Surface Elevation: 916.9

Descriptions By: Wayne Patterson

Well/Boring ID: **B-6**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 915	1	0-4'	3.5'	0.0	CL		Concrete. Brownish gray LEAN CLAY (CL), soft, moist, no odor.	
5 / 910	2	4-8'	3.5'	64	GP		Gray GRAVEL and SAND (GP), dry, dense, slight odor.	
					SM		Gray fine SILTY SAND (SM), dense, wet, strong odor, sheen.	Borehole backfilled with soil cuttings.
10 / 905	3	8-12'	NA	NA			Becoming fine to coarse grained, sheen observed, strong odor.	
15							End of boring at 12' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with soil cuttings.

Date Start/Finish: 11/30/06
Drilling Company: Fibertec
Driller's Name: Nathan Keller
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417535.5
Easting: 13412850.6
Casing Elevation: NA

Borehole Depth: 8' bgs
Surface Elevation: 916.8

Descriptions By: Wayne Patterson

Well/Boring ID: **B-7**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 915	1	0-4'	3.5'	0.0	CL		Concrete. Brown LEAN CLAY (CL), little mottling with gray color, stiff, dry to moist, no odor.	
5 / 910	2	4-8'	4'	15	ML		Grayish brown SILTY SAND (SM), wet, strong odor.	Borehole backfilled with soil cuttings.
10 / 905							End of boring at 8' bgs.	
15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with soil cuttings.

Date Start/Finish: 11/30/06
Drilling Company: Fibertec
Driller's Name: Nathan Keller
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417518.6
Easting: 13412814.1
Casing Elevation: NA

Borehole Depth: 12' bgs
Surface Elevation: 916.9

Descriptions By: Wayne Patterson

Well/Boring ID: **B-8**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 915	1	0-4'	3'	0.0	SM		Concrete. Brown fine SILTY SAND (SM), trace Gravel, trace coarse Sand, dense, dry, no odor.	
5 / 910	2	4-8'	4'	0.0	CL		Brown LEAN CLAY (CL), few fine to coarse Sand, trace Gravel, stiff, dry, no odor.	Borehole backfilled with soil cuttings.
					SM/CL		Brown SILTY SAND (SM) and CLAY (CL), moist, dense and stiff, no odor.	
10 / 905	3	8-12'	3.5'	0.0	SP		Gray fine SAND (SP), trace fine Gravel and coarse Sand, dense, wet, sheen, strong odor.	
15							End of boring at 12' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with soil cuttings.

Date Start/Finish: 11/30/06
Drilling Company: Fibertec
Driller's Name: Nathan Keller
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417498.9
Easting: 13412821.1
Casing Elevation: NA

Borehole Depth: 12' bgs
Surface Elevation: 916.9

Descriptions By: Wayne Patterson

Well/Boring ID: **B-9**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0							Concrete.	
915	1	0-4'	2'	0.0	SP		Brown fine to coarse SAND (SP), trace Silt, dry, dense, no odor.	
5	2	4-8'	4'	0.0	CL		Brown SANDY CLAY (CL), little fine to coarse Sand, trace Gravel, stiff, dry, no odor.	Borehole backfilled with soil cuttings.
910								
10	3	8-12'	3.5'	22	SP		Grayish brown fine SAND (SP), dry, strong odor. Wet.	
905							End of boring at 12' bgs.	
15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with soil cuttings.

Date Start/Finish: 11/6/06
Drilling Company: Altech
Driller's Name: Nick Simmons
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417439.6
Easting: 13412777.5
Casing Elevation: NA

Borehole Depth: 15' bgs
Surface Elevation: 917.0

Descriptions By: Beth Reimer

Well/Boring ID: **B-10**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	915	1	0-5'	2.5'	0.0	SM		CONCRETE. Black to very dark brown SILTY SAND (SM), very fine to fine Sand, loose, moist.	Borehole backfilled with soil cuttings.
5	910	2	5-10'	3.5'	0.0			Dry to moist.	
10	905	3	10-15'	5'	0.0	CL		Light reddish brown grading into gray brown CLAY (CL) with some Silt and few very fine Sand, some layers of loose Sandy Silt, stiff, plastic, moist. Few very thin layers of fine to medium Sand, hard, medium plasticity, moist.	
15								End of boring at 15' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
No groundwater was encountered. No temporary well installed.
No odors detected and no staining observed.

Date Start/Finish: 11/6/06
Drilling Company: Altech
Driller's Name: Nick Simmons
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417467.4
Easting: 13412770.2
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: 917.3

Descriptions By: Beth Reimer

Well/Boring ID: **B-11**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
920								
0							CONCRETE.	
					SP		Black to very dark brown, fine SAND (SP), moist to wet.	
					CL		Light reddish brown CLAY (CL), little fine to medium Gravel, few fine Sand, hard, plastic, dry to moist.	
915	1	0-5'	4'	0.0	SP		Reddish brown, very fine to medium SAND (SP), loose to medium dense, dry to moist.	
5					SM		Very dark brown to black SILTY SAND (SM), very fine to medium Sand, loose, moist.	Borehole backfilled with soil cuttings.
					SP		Gray brown to reddish brown, medium to coarse SAND (SP) with few medium Gravel, moist.	
910	2	5-10'	5'	0.0			Reddish brown, very fine to medium SAND (SP), wet.	
					CL		Gray brown CLAY (CL), few fine to medium Gravel, soft to stiff, plastic, wet.	
10							End of boring at 10' bgs.	
905								
15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with soil cuttings.
No odors detected and no staining observed.

Date Start/Finish: 11/7/06
Drilling Company: Altech
Driller's Name: Nick Simmons
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417507.9
Easting: 13412758.1
Casing Elevation: NA

Borehole Depth: 15' bgs
Surface Elevation: 917.5

Descriptions By: Beth Reimer

Well/Boring ID: **B-12**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
								CONCRETE.	
								Light reddish brown, fine to medium SAND (SP) with some Silt and Clay, loose, dry to moist.	
		1	0-5'	3'	0.0				
5	-5							Few thin (0.25') layers of Sandy Clay, moist.	
								Grades into gray brown to light reddish brown at 6' bgs.	
		2	5-10'	5'	0.0	SP			Borehole backfilled with soil cuttings.
10	-10							Wet, few fine to coarse Gravel, little pebbles.	
		3	10-15'	5'	0.0				
15	-15							End of boring at 15' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with soil cuttings.
No odors detected and no staining observed.

Date Start/Finish: 11/6/06
Drilling Company: Altech
Driller's Name: Nick Simmons
Drilling Method: Direct Push
Sampling Method: 2' x 5' sampler
Rig Type: NA

Northing: 417533.1
Easting: 13412751.7
Casing Elevation: NA

Borehole Depth: 20' bgs
Surface Elevation: 917.5

Descriptions By: Beth Reimer

Well/Boring ID: **B-13**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
920								
0							CONCRETE.	
							Gray brown CLAY (CL), few medium to coarse Gravel, some fine Gravel, hard, non-plastic to low plasticity, dry.	
915	1	0-5'	5'	0.0				
5							Stiff to hard, medium plasticity.	
910	2	5-10'	5'	0.0				
10					CL		Dry to moist, plastic.	Borehole backfilled with soil cuttings
905	3	10-15'	4.5'	0.0				
15								
900	4	15-20'	5'	0.0				
20							End of boring at 20' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
No groundwater was encountered. No temporary well installed.
No odors detected and no staining observed.

Date Start/Finish: 11/6/06
Drilling Company: Altech
Driller's Name: Nick Simmons
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417560.9
Easting: 13412756.2
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: 917.2

Descriptions By: Beth Reimer

Well/Boring ID: **B-14**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
920								
0							ASPHALT.	
					ML		Reddish brown SILT (ML) with some Clay, dry, no odor detected and no staining observed.	
							Reddish brown CLAY (CL), medium stiff to stiff, plastic, dry, no odor detected and no staining observed.	
915	1	0-5'	5'	0.0	CL		Grades into gray brown Clay at 2.5' bgs.	
5					SP		Reddish brown, medium SAND (SP) with Clay, moist, strong odor detected and no staining observed.	Borehole backfilled with soil cuttings.
							Black, medium SAND (SP), wet, strong odor detected no staining observed, slight sheen on water.	
910	2	5-10'	3.5'	70.5	CL		Gray brown CLAY (CL), few fine to medium Sand, very soft, plastic, wet, slight odor detected and no staining observed, slight sheen on water.	
10							End of boring at 10' bgs.	
905								
15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with soil cuttings.

Date Start/Finish: 11/6/06 **Drilling Company:** Altech **Driller's Name:** Nick Simmons **Drilling Method:** Direct Push **Sampling Method:** Macrocore **Rig Type:** NA	**Northing:** 417585.1 **Easting:** 13412813.8 **Casing Elevation:** NA **Borehole Depth:** 10' bgs **Surface Elevation:** 916.8 **Descriptions By:** Beth Reimer	**Well/Boring ID:** **B-15** **Client:** General Motors Worldwide Real Estate **Location:** Employee Development Center Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 916.8								
	1	0-5'	4.5'	0.0	CL		ASPHALT. Brown CLAY (CL), stiff, plastic, dry, no odor deteced and no staining observed.	
5 / 911.8	2	5-10'	5'	226	SM		Alternating layers of brown, very fine to medium SAND and Sandy SILT (SM) with some Clay, very soft, loose, wet, strong odor detected, no staining observed, sheen on water. Very dark brown at 6' bgs. Grading into a gray brown Clay at 3' bgs. Soft, plastic, moist to wet, slight odor at 5' bgs..	Borehole backfilled with soil cuttings.
					CL		Gray brown Sandy CLAY (CL), very soft to medium stiff, plastic, wet, slight odor detected, no staining observed.	
10 / 906.8							End of boring at 10' bgs.	
15 / 901.8								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with soil cuttings.

Date Start/Finish: 11/6/06
Drilling Company: Altech
Driller's Name: Nick Simmons
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417596.3
Easting: 13412851.5
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: 917.2

Descriptions By: Beth Reimer

Well/Boring ID: **B-16**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
920								
0							ASPHALT.	
							Brown to light reddish brown CLAY (CL), stiff to hard, plastic, dry to moist, slight odor detected, no staining observed.	
915	1	0-5'	5'	382	CL			
							Dark olive gray, very fine to fine SAND (SP) with some Clay and Silt, wet, strong odor detected, uniform staining observed, sheen on water.	
5					SP		Light reddish brown, very fine SAND (SP) with few Clay and Silt, little fine to medium Sand, wet, strong odor detected, no staining observed, sheen on water.	Borehole backfilled with soil cuttings.
							Dark gray to dark olive gray CLAY (CL) with some very fine Sand and Silt, wet, strong odor detected, uniform staining observed, dark sheen observed.	
910	2	5-10'	5'	173	CL		Light olive gray CLAY (CL), soft to medium stiff, plastic, wet, slight odor detected, uniform staining observed, slight sheen on water.	
10							End of boring at 10' bgs.	
905								
15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with soil cuttings.

Date Start/Finish: 11/7/06
Drilling Company: Altech
Driller's Name: Nick Simmons
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417589.5
Easting: 13412778.7
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: 916.8

Descriptions By: Beth Reimer

Well/Boring ID: **B-17**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0								
915							ASPHALT.	
					SP		Light reddish brown, medium SAND (SP), loose, moist, no odor detected, no staining observed.	
					CL		Brown to light reddish brown CLAY (CL), very soft, plastic, moist, no odor detected, no staining observed.	
	1	0-5'	3.5'	267	SP		Olive green to black, very fine to fine SAND (SP) with some Clay, wet, strong odor detected, uniform staining observed, sheen on water.	
5								Borehole backfilled with soil cuttings.
910	2	5-10'	5'	299	CL		Light reddish brown to gray brown CLAY (CL), medium stiff, plastic, wet, slight to no odor detected, no staining observed.	
10							End of boring at 10' bgs.	
905								
15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with soil cuttings.

Date Start/Finish: 11/7/06
Drilling Company: Altech
Driller's Name: Nick Simmons
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417607.6
Easting: 13412834.1
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: 916.7

Descriptions By: Beth Reimer

Well/Boring ID: **B-18**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 916.7							ASPHALT.	
	1	0-5'	3'	0.0	SM		Light reddish brown, very fine SAND and SILT (SM), loose, moist.	
915							Gray brown CLAY (CL), very soft, plastic, moist.	
5					CL		Wet at 6' bgs.	Borehole backfilled with soil cuttings.
910	2	5-10'	5'	0.0			Light reddish brown to gray brown CLAY (CL) with some Sand and Silt, very soft to soft, plastic, wet.	
10							End of boring at 10' bgs.	
905								
15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with soil cuttings.
No odors detected and no staining observed.

Date Start/Finish: 11/6/06 **Drilling Company:** Altech **Driller's Name:** Nick Simmons **Drilling Method:** Direct Push **Sampling Method:** Macrocore **Rig Type:** NA	**Northing:** 417629.2 **Easting:** 13412886.3 **Casing Elevation:** NA **Borehole Depth:** 10' bgs **Surface Elevation:** 917.7 **Descriptions By:** Beth Reimer	**Well/Boring ID:** **B-19** **Client:** General Motors Worldwide Real Estate **Location:** Employee Development Center Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
920								
0							ASPHALT.	
							Light reddish brown to black, very fine to medium SAND and SILT (SM), little to trace Clay, very soft, wet.	
915	1	0-5'	1.5'	0.0	SM			
5							Light reddish brown CLAY (CL), few fine to medium Gravel, hard, non-plastic, dry.	Borehole backfilled with soil cuttings.
910	2	5-10'	2'	0.0	CL			
10							End of boring at 10' bgs.	
905								
15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with soil cuttings.
No odors detected and no staining observed.

Date Start/Finish: 11/7/06
Drilling Company: Altech
Driller's Name: Nick Simmons
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417622.5
Easting: 13412829.0
Casing Elevation: NA

Borehole Depth: 15' bgs
Surface Elevation: 917.3

Descriptions By: Beth Reimer

Well/Boring ID: **B-20**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
920								
0							ASPHALT.	
							Light reddish brown CLAY with SILT (CL), hard, non-plastic to low plasticity, dry, no odors detected, no staining observed.	
915	1	0-5'	5'	0.6	CL			
							Gray brown CLAY (CL), hard to medium stiff, plastic, dry to moist, no odors detected, no staining observed.	
					SP		Gray to dark gray, very fine SAND (SP), moist to wet, slight odor detected, no staining observed.	
5					CL		Light reddish brown to gray CLAY (CL) as above.	
					SM		Light olive yellow and dark gray very fine to fine SAND and SILT (SM), moist to wet, no odor detected, no staining observed.	
910	2	5-10'	5'	0.0			Light olive yellow CLAY (CL), few very fine to fine Sand, stiff, medium plastic to plastic, moist to wet, no odor detected, no staining observed. Grading into gray brown Clay.	Borehole backfilled with soil cuttings.
10					CL			
905	3	10-15'	3.5'	0.0				
15							End of boring at 15' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with soil cuttings.

Date Start/Finish: 11/30/06
Drilling Company: Fibertec
Driller's Name: Nathan Keller
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417558.4
Easting: 13412788.8
Casing Elevation: NA

Borehole Depth: 12' bgs
Surface Elevation: 917.0

Descriptions By: Wayne Patterson

Well/Boring ID: **B-21**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 915	1	0-4'	3'	0.0	SM		Concrete. Brown fine SILTY SAND (SM), trace Gravel, trace coarse Sand, dense, dry, no odor.	
5 / 910	2	4-8'	4'	0.0	CL		Brown LEAN CLAY (CL), few fine to coarse Sand, trace Gravel, stiff, dry, no odor.	Borehole backfilled with soil cuttings.
					SM/CL		Brown SILTY SAND (SM) and CLAY (CL), moist, dense and stiff, no odor.	
10 / 905	3	8-12'	3.5'	0.0	SP		Gray fine SAND (SP), trace fine Gravel and coarse Sand, dense, wet, sheen, strong odor,	
15							End of boring at 12' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with soil cuttings.

Date Start/Finish: 11/30/06
Drilling Company: Fibertec
Driller's Name: Nathan Keller
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417601.4
Easting: 13412872.0
Casing Elevation: NA

Borehole Depth: 8' bgs
Surface Elevation: 917.4

Descriptions By: Wayne Patterson

Well/Boring ID: **B-22**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0								
915	1	0-4'	3.5'	2.8	GP		Asphalt. Black to dark gray SAND and GRAVEL (GP), fine to coarse angular Sand, fine angular Gravel, moist, strong odor, loose to medium dense. Wet.	Borehole backfilled with soil cuttings.
5	2	4-8'	4.0	38	ML		Brownish gray SANDY SILT (ML), wet, strong odor, sheen.	
910								
10							End of boring at 8' bgs.	
905								
15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 11/30/06
Drilling Company: Fibertec
Driller's Name: Nathan Keller
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417629.7
Easting: 13412850.9
Casing Elevation: NA

Borehole Depth: 8' bgs
Surface Elevation: 917.7

Descriptions By: Wayne Patterson

Well/Boring ID: **B-23**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
920								
0							Asphalt.	
							Brown LEAN CLAY (CL), medium stiff, dry, no odor.	
	1	0-4'	3.5	0.0	CL			
915								
5							Grayish brown SANDY SILT (SM), trace Gravel, wet, no odor.	Borehole backfilled with soil cuttings.
	2	4-8'	3.5'	0.0	ML			
910								
							End of boring at 8' bgs.	
10								
905								
15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 11/30/06
Drilling Company: Fibertec
Driller's Name: Nathan Keller
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417616.2
Easting: 13412805.5
Casing Elevation: NA

Borehole Depth: 8' bgs
Surface Elevation: 917.4

Descriptions By: Wayne Patterson

Well/Boring ID: **B-24**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
920								
0							Asphalt.	
							Brown fine SAND (SP), trace Gravel, moist, dense, no odor.	
915	1	0-4'	3.5	0.0	SP			Borehole backfilled with soil cuttings.
5								
	2	4-8'	4.0'	0.0	ML		Brownish gray SILT (ML), wet, no odor.	
910								
							End of boring at 8' bgs.	
10								
905								
15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
No odors detected and no staining observed.

Date Start/Finish: 11/30/06
Drilling Company: Fibertec
Driller's Name: Nathan Keller
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417602.0
Easting: 13412743.2
Casing Elevation: NA

Borehole Depth: 8' bgs
Surface Elevation: 917.5

Descriptions By: Wayne Patterson

Well/Boring ID: **B-25**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
920 / 0								
915 / 0	1	0-4'	3.5	0.0	SP		Asphalt. Brown fine SAND (SP), moist, dense, no odor.	
910 / 5	2	4-8'	4.0'	0.0	SM		Brown SILTY SAND (SM), wet, no odor.	Borehole backfilled with soil cuttings.
905 / 10							End of boring at 8' bgs.	
15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
No odors and no staining observed.

Date Start/Finish: 9/11/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417549.1
Easting: 13412849.2
Casing Elevation: NA

Borehole Depth: 15' bgs
Surface Elevation: 916.9

Descriptions By: Beth Lindblade

Well/Boring ID: **B-26**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 915	1	0-5'	4'	2.4	SP		10YR 6/2 light brownish gray SAND (SP), dry, (Fill under floor tiles).	
							10YR 2/1 black SAND (SP), dry, no odor.	
				12.1	CL		10YR 4/2 to 4/3 dark grayish brown to dark brown CLAY (CL), hard, non-plastic to low plasticity, dry, no odor.	
5 / 910	2	5-10'	5'	19.4	SP		10YR 5/2 grayish brown, fine SAND (SP) and medium GRAVEL, loose, dry.	
					CL		10YR 4/1 dark gray CLAY (CL), soft to medium stiff, plastic, dry to moist, no odor.	
				738	SP		10YR 5/2 grayish brown, fine SAND (SP) with few Silt, little Clay and very fine to medium Sand, loose, wet, strong odor.	Borehole backfilled with bentonite chip with a concrete surface completion.
10 / 905	3	10-15'	5'	27			10YR 4/1 dark gray.	
				24	CL		10YR 5/1 gray CLAY (CL), few fine Sand, soft to medium stiff, plastic, wet, slight odor.	
15							End of boring at 15' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with bentonite chip with a concrete surface completion.

Date Start/Finish: 9/11/07 **Drilling Company:** Boart Longyear **Driller's Name:** Andrew Roberts **Drilling Method:** Direct Push **Sampling Method:** Macrocore **Rig Type:** NA	**Northing:** 417531.0 **Easting:** 13412839.9 **Casing Elevation:** NA **Borehole Depth:** 15' bgs **Surface Elevation:** 917.0 **Descriptions By:** Beth Lindblade	**Well/Boring ID:** **B-27** **Client:** General Motors Workwide Real Estate **Location:** Employee Development Center Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	915	1	0-5'	2.5'	7.2	SP		10YR 7/2 light gray, fine to medium SAND (SP) and medium coarse GRAVEL, broken Concrete, loose, dry, no odor.	
						CL		10YR 4/2 dark grayish brown, fine to medium SAND (SP) and fine to coarse GRAVEL, rounded, loose, dry, very slight odor. 1-2" Sand seam: fine to medium, loose, dry to moist, strong odor. 10YR 4/3 to 4/2 dark brown to dark grayish brown CLAY (CL), soft to hard, plastic, dry, strong odor.	
					111	ML		2.5Y 5/3 light olive brown, fine to medium SAND (SP), loose, dry to moist, strong odor. 10YR 4/1 dark gray SANDY SILT (ML), very fine to fine Sand, little Clay, compact, moist to wet, strong odor.	
5	910	2	5-10'	3'	899			Wet at 5.5' bgs.	Borehole backfilled with bentonite chip with a concrete surface completion.
					75.1				
10	905	3	10-15'	5'	8.5	SP		10YR 4/3 brown, medium SAND (SP) with Clay, few Silt, loose, dry to moist.	
					195	ML		10YR 4/1 dark gray SANDY SILT (ML), very fine to fine Sand, little Clay, compact, moist to wet, strong odor.	
15								End of boring at 15' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 3.5-5.5' bgs.
NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with bentonite chip with a concrete surface completion.

Date Start/Finish: 9/11/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417502.8
Easting: 13412860.3
Casing Elevation: NA

Borehole Depth: 15' bgs
Surface Elevation: 916.8

Descriptions By: Beth Lindblade

Well/Boring ID: **B-28**

Client: General Motors Workwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0									
						SP		10YR 7/2 light gray, fine to coarse SAND (SP) and fine to medium GRAVEL, broken Concrete, loose, dry, no odor.	
	915	1	0-5'	2.5'	4.1	CL		10YR 4/3 brown SANDY CLAY (CL), hard, brittle, dry, no odor.	
					11				
5						SP		10YR 2/1 black to dark brown, fine to medium SAND (SP), little Silt, loose, dry, no odor.	
	910	2	5-10'	5'	38	ML		10YR 5/2 grayish brown SANDY SILT (ML), some very fine to fine Sand, little medium Sand and Clay, compact, dry to moist, strong odor.	Borehole backfilled with bentonite chip with a concrete surface completion.
					908				
10						SP		10YR 4/2 dark grayish brown, medium SAND (SP), poorly sorted, few fine to medium, rounded Gravel, loose, moist to wet.	
	905	3	10-15'	4'	56	CL		10YR 4/2 dark grayish brown SANDY CLAY (CL), some interbedded layers (1-3") of fine to medium Sand, little Silt, medium stiff, plastic, wet.	
					78			10YR 4/2 dark grayish brown CLAY (CL), stiff to hard, medium plasticity to plastic, wet.	
15								End of boring at 15' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 8-10' bgs.
NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with bentonite chip with a concrete surface completion.

Date Start/Finish: 9/11/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 15' bgs
Surface Elevation: NA

Descriptions By: Beth Lindblade

Well/Boring ID: **B-29**

Client: General Motors Workwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
								Black ASPHALT and Fill.	
		1	0-5'	4.5'	0.0	CL		10YR 5/4 yellowish brown CLAY (CL), stiff to hard, medium plasticity to plastic, dry, no odor.	
					0.0			1-2" layer of fine to medium Sand, loose, dry, no odor.	
								1-2" layer of fine to medium Sand, loose, dry, no odor.	
5	-5							10YR 5/4 yellowish brown SANDY CLAY (CL), soft to medium stiff, medium plasticity, moist.	
						SP		10YR 5/4 yellowish brown, very fine to medium SAND (SP), poorly sorted, few coarse Sand and fine Gravel, little Silt, loose, wet, no odor.	
		2	5-10'	5'	0.0	CL		10YR 5/4 yellowish brown CLAY (CL) grading into 10YR 4/2 dark grayish brown CLAY at 7.75' bgs, stiff to hard, low to medium plasticity, dry, no odor.	Borehole backfilled with bentonite chip with a concrete surface completion.
					0.0				
10	-10					SP		10YR 5/4 yellowish brown, fine to coarse SAND (SP), poorly sorted, come fine to coarse Gravel, few pebbles, some Silt and Clay, alternating layers of Sand with more Clay, loose, wet, no odor.	
		3	10-15'	5'	0.0				
						CL		10YR 4/2 dark grayish brown CLAY (CL) with fine to medium Sand, non-plastic, dry to moist, no odor.	
					0.0				
15	-15							End of boring at 15' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 3.5-5.5' bgs.
NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with bentonite chip with a concrete surface completion.

Date Start/Finish: 9/12/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417552.9
Easting: 13412769.3
Casing Elevation: NA

Borehole Depth: 12' bgs
Surface Elevation: 917.0

Descriptions By: Jim Kralik

Well/Boring ID: **B-30**

Client: General Motors Workwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 915	1	0-4'	3'	0.9	SP		CONCRETE. 10YR 5/6 yellowish brown, fine SAND (SP), little Clay, trace fine, subrounded Gravel, medium dense, moist, no odor.	Borehole backfilled with bentonite chip with a concrete surface completion.
				1.7			10YR 5/4 yellowish brown CLAY (CL), hard, plastic, dry, no odor.	
5 / 910	2	4-8'	4'	0.2	CL		10YR 5/2 grayish brown CLAY (CL), hard, plastic, dry to moist, no odor.	
				0.9			Moist at 7.2' bgs.	
							Wet at 8' bgs.	
10 / 905	3	8-12'	4'	0.2	SP		10YR 5/2 brownish gray, fine to medium SAND (SP), some Clay, little coarse Sand, trace fine, subrounded Gravel, loose to medium dense, moist, no odor. Minor isolated wet layers (<1") below 10' bgs.	
				0.2				
15							End of boring at 12' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 6-8' bgs.
NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with bentonite chip with a concrete surface completion.

Date Start/Finish: 9/12/07 **Drilling Company:** Boart Longyear **Driller's Name:** Andrew Roberts **Drilling Method:** Direct Push **Sampling Method:** Macrocore **Rig Type:** NA	**Northing:** 417538.3 **Easting:** 13412774.9 **Casing Elevation:** NA **Borehole Depth:** 11' bgs **Surface Elevation:** 917.0 **Descriptions By:** Jim Kralik	**Well/Boring ID:** **B-31** **Client:** General Motors Workwide Real Estate **Location:** Employee Development Center Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0								CONCRETE.	
	915	1	0-4'	4'	0.3 1.9	SP		10YR 5/6 yellowish brown, fine SAND (SP), some Clay, little medium to coarse Sand, trace fine, subrounded Gravel, medium dense to dense, moist, no odor.	
5		2	4-8'	4'	0.3			Grades into 10YR 5/4 yellowish brown. Wet at 5.3' bgs.	Borehole backfilled with bentonite chip with a concrete surface completion.
	910				0.3	ML		10YR 5/6 yellowish brown SILT (ML), very dense, dry, no odor.	
10		3	8-11'	3'	0.3 0.3	SP		10YR 5/4 yellowish brown, fine SAND (SP), some Clay, little medium to coarse Sand, trace fine, subrounded Gravel, medium dense to dense, wet from 8-10.5' bgs, no odor.	
	905							Refusal and end of boring at 11' bgs.	
15									

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 3.5-5.5' bgs.
NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with bentonite chip with a concrete surface completion.

Date Start/Finish: 9/12/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417526.5
Easting: 13412772.2
Casing Elevation: NA

Borehole Depth: 11' bgs
Surface Elevation: 916.9

Descriptions By: Jim Kralik

Well/Boring ID: **B-32**

Client: General Motors Workwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0								CONCRETE.	
					0.0			10YR 2/1 black, fine to very fine SAND (SP), loose, dry, no odor.	
	915	1	0-4'	2'	0.3			10YR 5/6 yellowish brown, fine SAND (SP), some Clay, little medium to coarse Sand, trace fine, subrounded Gravel, medium dense to dense, moist, no odor.	
5					0.3			10YR 2/1 black very fine to fine SAND (SP), loose, dry, no odor.	
	910	2	4-8'	3'	0.9	SP		10YR 5/2 grayish brown, fine SAND (SP), some Clay, little medium to coarse Sand, trace fine, subrounded Gravel, medium dense, moist, no odor.	Borehole backfilled with bentonite chip with a concrete surface completion.
		3	8-11'	3'	0.9			10YR 4/4 yellowish brown to dark yellowish brown, fine SAND (SP), some Clay, little medium to coarse Sand, trace fine, subrounded Gravel, medium dense to dense, dry, no odor.	
10					0.9			Wet at 10.8' bgs.	
	905							Refusal and end of boring at 11' bgs.	
15									

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 8.8-10.8' bgs.
NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with bentonite chip with a concrete surface completion.

Date Start/Finish: 9/12/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417514.2
Easting: 13412781.8
Casing Elevation: NA

Borehole Depth: 11' bgs
Surface Elevation: 917.0

Descriptions By: Jim Kralik

Well/Boring ID: **B-33**

Client: General Motors Workwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 915	1	0-4'	2'	0.0 0.1	SP		10YR 5/4 yellowish brown, fine SAND (SP), some Clay, little medium to coarse Sand, trace fine, subrounded Gravel, trace very fine to fine, black Sand, medium dense to dense, dry, no odor.	
5 / 910	2	4-8'	4'	0.0 0.1			No black Sand present, dry to moist. Trace red Brick. Trace red Brick.	Borehole backfilled with bentonite chip with a concrete surface completion.
10	3	8-11'	3'	0.0 0.0			Poorly sorted, trace Clay, dense, moist. Wet at 10.5' bgs.	
15 / 905							Refusal and end of boring at 11' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 8.8-10.8' bgs.
NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with bentonite chip with a concrete surface completion.

Date Start/Finish: 9/13/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417532.7
Easting: 13412872.6
Casing Elevation: NA

Borehole Depth: 11' bgs
Surface Elevation: 916.8

Descriptions By: Jim Kralik

Well/Boring ID: **B-34**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0							CONCRETE.	Borehole backfilled with bentonite chip with a concrete surface completion.
915	1	0-4'	3.5'	0.3	SP		10YR 5/6 yellowish brown, fine SAND (SP), some Clay, little medium to coarse Sand, trace fine, subrounded Gravel, medium dense, damp, no odor.	
				1.7	CL		10YR 4/3 to 4/2 dark brown to dark grayish brown SANDY CLAY (CL), fine to medium Sand, soft to hard, plastic, damp, slight odor form 3.5-4' bgs.	
				33.8				
5				1.7				
				1.9				
910	2	4-8'	4'	27.8			Grades into brownish gray CLAY (CL), trace fine, subrounded Gravel, stiff, plastic, damp, odor present.	
				33.8				
				69				
				119				
10	3	8-11'	3'	24.5	SP		Brownish gray, fine SAND (SP), poorly sorted, medium dense, wet, odor present, sheen present.	
				28.7	CL		Grades into brownish gray CLAY (CL), trace fine, subrounded Gravel, stiff, plastic, damp, odor present. Brownish gray, fine SAND in tip of sampler.	
905							End of boring at 11' bgs.	
15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 8-10' bgs.
NA = not applicable/ not available
gs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with bentonite chip with a concrete surface completion.

Date Start/Finish: 9/14/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 15' bgs
Surface Elevation: NA

Descriptions By: Jim Kralik

Well/Boring ID: **B-35**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0							CONCRETE.	
		1	0-5'	5'	0.0	CL		Yellowish brown CLAY (CL), some fine to coarse Sand, little fine, subrounded Gravel, soft to medium stiff, plastic, no odor.	
					0.3			Thin layer (<1") of fine yellowish brown Sand at 3.5' bgs.	
5	-5				0.2			Yellowish brown and black well sorted Fill material, fine to coarse SAND, CLAY, fine, subangular to subrounded GRAVEL, some Slag and Concrete debris, medium dense, moist.	
		2	5-10'	5'	2.4			Brownish gray CLAY (CL), some fine, subrounded to rounded Gravel, soft to medium stiff, plastic, moist, no odor.	Borehole backfilled with bentonite chip with a concrete surface completion.
					0.3	SP		Brownish gray, fine to medium SAND (SP), some coarse Sand, trace fine, subrounded Gravel, medium dense, wet.	
10	-10	3	10-15'	5'	0.0				
					0.4	CL		Grayish brown CLAY (CL), some coarse Sand, trace fine, subrounded Gravel, very stiff, plastic, moist, no odor.	
15	-15							End of boring at 15' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 6.8-8.8' bgs.
NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with bentonite chip with a concrete surface completion.

Date Start/Finish: 9/14/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417341.0
Easting: 13412850.3
Casing Elevation: NA

Borehole Depth: 25' bgs
Surface Elevation: 917.0

Descriptions By: Jim Kralik

Well/Boring ID: **B-36**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0							CONCRETE and Floor Tile.	
					SP		Black, very fine to fine SAND (SP), loose, damp, no odor.	
915	1	0-5'	5'	0.3	CL		Dark yellowish brown to yellowish brown CLAY (CL) Fill material, with thin (<1") layers of fine to coarse Sand, fine, subrounded Gravel, black slag-like material, stiff, plastic to very plastic, dry, no odor.	
				1.4	SM		10YR 2/2 dark brown SILTY SAND (SM), very fine to fine Sand, poorly sorted, trace to few fine Gravel, loose, dry, no odor.	
5							10YR 4/4 yellowish brown CLAY (CL), some fine to coarse Sand and fine, subrounded Gravel, stiff to very stiff, plastict to very plastic, dry, no odor.	
910	2	5-10'	5'	0.5			Thin (<2") layer of olive brown, fine Sand.	
				0.7				
10								
				0.3				

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 6-8' bgs.
NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 9/14/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417341.0
Easting: 13412850.3
Casing Elevation: NA

Borehole Depth: 25' bgs
Surface Elevation: 917.0

Descriptions By: Jim Kralik

Well/Boring ID: **B-36**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
		3	10-15'	5'	0.6				Borehole backfilled with bentonite chip with a concrete surface completion.
15						CL		10YR 4/1 dark gray CLAY (CL), some fine to coarse Sand, little fine, subangular to subrounded Gravel, soft, plastic, dry to moist, no odor.	
	900	4	15-20'	3.5'	0.3 0.6				
20									
	895	5	20-25'	5'	0.3 0.5			Thin (<1/2") layer of olive brown, fine Sand, dry. Thin (<1/2") layer of wet Silt.	
25								End of boring at 25' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 6-8' bgs.
NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 9/17/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 15' bgs
Surface Elevation: NA

Descriptions By: Beth Lindblade

Well/Boring ID: **B-37**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0							ASPHALT and Asphalt Fill bedding, black Sand, dry, loose.	
		1	0-5'	3.5'	0.0	SM		10YR 5/6 yellowish brown SILTY SAND (SM), very fine to medium Sand, some Silt, little coarse Sand, loose, no odor, dry to moist.	
					0.0			Wet at 3' bgs.	
5	-5	2	5-10'	5'	0.0	CL		10YR 4/1 dark gray CLAY (CL), soft to medium stiff, plastic, dry, no odor.	
					0.0			Grading into hard at 7.5' bgs.	Borehole backfilled with bentonite chip with a concrete surface completion.
10	-10	3	10-15'	3.5'	0.0			More Silt content, soft to medium stiff, moist to wet.	
					0.0				
15	-15							End of boring at 15' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 8-10' bgs.
NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with bentonite chip with a concrete surface completion.

Date Start/Finish: 9/17/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 15' bgs
Surface Elevation: NA

Descriptions By: Beth Lindblade

Well/Boring ID: **B-38**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
		1	0-5'	3.5'	0.1 0.4	CL		ASPHALT and Asphalt Fill, black, loose, dry, no odor. 2.5Y 5/4 light olive brown SILT and CLAY (CL), soft to stiff, low to medium plasticity, dry to moist, no odor. Wet at 1.5' bgs, some medium to coarse Sand and little fine Sand from 1.5-3.0' bgs.	
5	-5	2	5-10'	4'	0.0 0.0			2.5Y 4/4 olive brown SILT AND CLAY (CL), very hard, low plasticity, moist to 6' bgs, dry from 6-10' bgs.	Borehole backfilled with bentonite chip with a concrete surface completion.
10	-10	3	10-15'	4'	0.0 0.0			10YR 4/1 dark gray CLAY (CL), stiff to hard, medium plasticity, dry, no odor.	
15	-15							End of boring at 15' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 9/17/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 15' bgs
Surface Elevation: NA

Descriptions By: Beth Lindblade

Well/Boring ID: **B-39**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0							ASPHALT and Asphalt Fill, black, loose, dry, no odor.	
		1	0-5'	3.5'	0.1	CL		2.5Y 5/4 light olive brown SILT and CLAY (CL), soft to stiff, low to medium plasticity, dry to moist, no odor. Wet at 1.5' bgs, some medium to coarse Sand and little fine Sand from 1.5-3.0' bgs.	
					0.4				
5	-5	2	5-10'	4'	0.0			2.5Y 4/4 olive brown SILT AND CLAY (CL), very hard, low plasticity, moist to 6' bgs, dry from 6-10' bgs.	Borehole backfilled with bentonite chip with a concrete surface completion.
					0.0				
10	-10	3	10-15'	4'	0.0			10YR 4/1 dark gray CLAY (CL), stiff to hard, medium plasticity, dry, no odor. From 10.5-11.5' bgs - more Sand content, wet.	
					0.0				
15	-15							End of boring at 15' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 9/18/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 25' bgs
Surface Elevation: NA

Descriptions By: Beth Lindblade

Well/Boring ID: **B-40**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0							CONCRETE.	
								10YR 2/1 black Fill, SAND and CLAY (CL), few fine to coarse Gravel, dry, no odor.	
								10YR 5/4 yellowish brown CLAY (CL), medium stiff, plastic, dry, no odor.	
		1	0-5'	3.5'	0.1	CL			
					0.0				
5	-5					SM		10YR 5/4 to 4/4 yellowish brown to dark yellowish brown SILTY SAND (SM), compact, moist to wet.	
					0.0	ML		10YR 5/4 to 4/4 yellowish brown to dark yellowish brown SILT with CLAY (ML), few fine to medium Sand, compact, dry to moist, no odor.	
		2	5-10'	4'				10YR 5/4 to 4/4 yellowish brown to dark yellowish brown CLAY with SILT (CL), little fine to coarse Gravel, some Pebbles, dry.	
					0.0				
10	-10							10YR 5/1 gray CLAY (CL), few fine to coarse Gravel and Pebbles, stiff to hard, non-plastic to low plasticity, dry, no odor.	
					0.0				

Remarks: NA = not applicable/ not available
bgs = below ground surface

ARCADIS
Infrastructure · Water · Environment · Buildings

Date Start/Finish: 9/18/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 25' bgs
Surface Elevation: NA

Descriptions By: Beth Lindblade

Well/Boring ID: **B-40**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
	3	10-15'	5'	0.0				Borehole backfilled with bentonite chip with a concrete surface completion.
15 -15								
				0.0	CL		10YR 5/4 yellowish brown CLAY (CL), soft to medium stiff, dry to moist.	
	4	15-20'	5'				10YR 5/1 gray CLAY (CL), few fine to coarse Gravel and Pebbles, hard, non-plastic to low plasticity, dry, no odor.	
				0.0				
20 -20								
				0.0				
	5	20-25'	5'					
				0.0				
25 -25							End of boring at 25' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 9/18/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 25' bgs
Surface Elevation: NA

Descriptions By: Beth Lindblade

Well/Boring ID: **B-41**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0					SW		2.5Y 5/6 light olive brown, fine to medium SAND (SW), well sorted, loose, dry, no odor.	
						SM		10YR 2/1 black SILTY SAND (SM), poorly sorted, slightly compact, moist to wet, no odor.	
		1	0-5'	2.5'	0.0	CL		2.5Y 4/3 olive brown CLAY (CL), little Sand and Silt, trace coarse Gravel and Pebbles, soft to medium stiff, plastic, dry to moist, no odor.	
					0.0				
5	-5					ML		2.5Y 4/3 olive brown SILT (ML), dry, grading into hard Clay.	
		2	5-10'	3.5'	0.0			2.5Y 4/3 olive brown CLAY (CL), hard, dry, no odor.	
10	-10				0.0				

Remarks: Soil samples collected from 0-2' bgs, 6-8' bgs, and 12-14' bgs, but held for laboratory analysis.
NA = not applicable/ not available
bgs = below ground surface

ARCADIS
Infrastructure · Water · Environment · Buildings

Date Start/Finish: 9/18/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 25' bgs
Surface Elevation: NA

Descriptions By: Beth Lindblade

Well/Boring ID: **B-41**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
	3	10-15'	5'	0.0	CL		10YR 5/1 to 4/1 gray to dark gray CLAY (CL), hard, non-plastic to low plasticity, dry, no odor.	Borehole backfilled with bentonite chip with a concrete surface completion.
15 -15								
	4	15-20'	5'	0.0 0.0				
20 -20								
	5	20-25'	5'	0.0 0.0				
25 -25							End of boring at 25' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs, 6-8' bgs, and 12-14' bgs, but held for laboratory analysis.
NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 9/19/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: Na

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 15' bgs
Surface Elevation: NA

Descriptions By: Beth Lindblade

Well/Boring ID: **B-42**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0							CONCRETE.	
		1	0-5'	2.5'	0.0			10YR 5/4 dark yellowish brown SAND AND CLAY (CL) Fill, few fine to coarse Gravel and Pebbles, hard, non-plastic, dry, no odor.	
					0.0				
5	-5							Moist to wet, few 1-2" layers of wet CLAYEY SAND.	
		2	5-10'	4.25'	0.0	CL		Soft from 6-6.5' bgs.	Borehole backfilled with bentonite chip with a concrete surface completion.
					0.0				
10	-10							10YR 5/4 to 4/2 dark yellowish brown to gray CLAY (CL), few fine to medium subrounded Gravel, trace coarse Gravel and Pebbles, hard, non-plastic to low plasticity, moist to wet, no odor.	
		3	10-15'	5'	0.0				
					0.0				
15	-15							End of boring at 15' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 9/20/07 **Drilling Company:** Boart Longyear **Driller's Name:** Andrew Roberts **Drilling Method:** Direct Push **Sampling Method:** Macrocore **Rig Type:** NA	**Northing:** NA **Easting:** NA **Casing Elevation:** NA **Borehole Depth:** 12' bgs **Surface Elevation:** NA **Descriptions By:** Beth Lindblade	**Well/Boring ID:** **B-43** **Client:** General Motors Worldwide Real Estate **Location:** Employee Development Center Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
		1	0-5'	2.5'	0.0	CL		10YR 4/6 dark yellowish brown CLAY (CL) with some fine to medium Sand, little Gravel, soft to medium stiff, plastic, dry, no odor.	
						SM		10YR 4/6 dark yellowish brown SILTY SAND (SM), very fine to medium Sand, poorly sorted, loose to slightly compact, dry, no odor.	
					0.0	ML		10YR 4/6 dark yellowish brown SILT (ML) with little fine to medium Sand, compact, moist to wet, no odor.	
5	-5	2	5-10'	5'	0.0				
					0.0	CL		10YR 4/6 to 5/2 grayish brown CLAY (CL), some Silt, little Sand, few subrounded, fine to coarse Gravel, trace Pebbles, stiff, non-plastic, dry, no odor.	
10	-10	3	10-12'	2'	0.0				
					0.0				
15	-15							Refusal and end of boring at 12' bgs.	

Borehole backfilled with bentonite chip with a concrete surface completion.

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 9/24/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 16' bgs
Surface Elevation: NA

Descriptions By: Jim Kralik

Well/Boring ID: **B-44**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
		1	0-4'	3'	0.0 0.1	SP		CONCRETE. 10YR 5/6 yellowish brown, fine to coarse SAND (SP), fine, subrounded GRAVEL, and very stiff CLAY, some 10YR 2/2 very dark brown, very fine to fine SAND, trace Slag and red Brick, dry, no odor.	
5	-5	2	4-8'	4'	0.0 0.0	CL		Brownish gray CLAY (CL), trace fine, subrounded Gravel, stiff, plastic, dry to moist, no odor.	
						GP		Brownish gray, fine to medium, subangular to subrounded GRAVEL (GP), some fine to coarse Sand, trace Clay, dense, dry, no odor.	Borehole backfilled with bentonite cip with a concrete surface completion.
10	-10	3	8-12'	4'	0.0 0.0	CL		Brownish gray CLAY (CL), trace fine, subrounded Gravel, stiff, plastic, dry to moist, no odor.	
		4	12-16'	4'	0.0 0.1				
15	-15							End of boring at 16' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 8-10' bgs.
NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with bentonite chip with a concrete surface completion.

Date Start/Finish: 9/24/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 16' bgs
Surface Elevation: NA

Descriptions By: Jim Kralik

Well/Boring ID: **B-45**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0	1	0-4'	3'	0.1 0.3	CL		CONCRETE. 10YR 4/4 dark yellowish brown SANDY CLAY (CL), fine Sand, some medium to coarse Sand and fine Gravel, very stiff, plastic, dry, no odor.	Borehole backfilled with bentonite chip with a concrete surface completion.
5	-5	2	4-8'	4'	0.1 0.3	GP SP		10YR 6/3 pale brown, fine to coarse, subangular GRAVEL (GP), loose, dry, no odor. 10YR 5/3 brown, very fine to fine SAND (SP), some Silt, medium dense, dry, no odor. Cobble at 6' bgs. 10YR 2/2 very dark brown, fine, SAND (SP), poorly sorted, some Clay, trace fine, subrounded Gravel, medium dense, dry, no odor.	
10	-10	3	8-12'	4'	0.1 0.3			10YR 2/1 black, fine SAND (SP), poorly sorted, dry to moist, no odor. Wet at 12' bgs.	
15	-15	4	12-16'	4'	0.1 0.3			10YR 5/1 gray, fine SAND (SP), poorly sorted, medium dense, moist, no odor or sheen. Some Silt and very fine Sand, dense from 15.5-16' bgs.	
								End of boring at 16' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 10-12' bgs.
NA = not applicable/ not available
bgs = below ground surface
Temporary PVC well installed for groundwater sampling. After sampling, temp well was removed and borehole was backfilled with bentonite chip with a concrete surface completion.

Date Start/Finish: 2/14/08
Drilling Company: Boart Longyear
Driller's Name: Mike Ade
Drilling Method: Hand Auger
Sampling Method: Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 3.25' bgs
Surface Elevation: NA

Descriptions By: Beth Lindblade

Well/Boring ID: **B-46**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0								
	1	0-3.25'	3.25	0.0 0.0	CL		CONCRETE. 10YR 4/1 to 5/2 dark gray to grayish brown CLAY (CL), few medium to coarse Gravel and Pebbles, trace fine to coarse Sand, wet, no odor. Large rocks encountered.	Borehole backfilled with bentonite with a hydroplug concrete surface completion.
							End of boring at 3.25' bgs.	
5 / -5								
10 / -10								
15 / -15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 2/14/08
Drilling Company: Boart Longyear
Driller's Name: Mike Ade
Drilling Method: Hand Auger
Sampling Method: Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 4.5' bgs
Surface Elevation: NA

Descriptions By: Beth Lindblade

Well/Boring ID: **B-47**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0							CONCRETE.	
	1	0-4.5'	4.5'	0.0 0.0	CL		10YR 4/1 to 5/2 dark gray to grayish brown CLAY (CL), few Gravel, little dark gray to black Sand at surface of Clay under Concrete, decreasing moisture downhole, no odor.	Borehole backfilled with bentonite with a hydroplug concrete surface completion.
5 / -5							End of boring at 4.5' bgs.	
10 / -10								
15 / -15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 1-25-12
Drilling Company: Terra Probe Environmental
Driller's Name: S. Bishoff
Drilling Method: Hand Auger/Geoprobe
Sampling Method: Hand Auger/Macrocore
Rig Type: Enter Rig Type Here

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 12' bgs
Surface Elevation: NA

Descriptions By: Christine Snyder

Well/Boring ID: **B-50**

Client: RACER Trust

Location: Former GM Employee Development Center Site
65 E. University Drive
Pontiac, MI 48342

DEPTH	ELEVATION	Sample Run Number	Sample Interval (feet)	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
					0.1			(0-0.6) ASPHALT	
								(0.6-1.5) SAND; very fine to fine, trace small pebble, angular, poorly sorted; dry, very dark brown (10YR 2/2).	
					0.0			(1.5-2.5) SILT; little clay, low plasticity; dry, soft, light olive brown (2.5Y 5/4).	
		1	0-5	5.0	0.0			(2.5-6) CLAY; high plasticity; moist, medium stiff, dark grayish brown (2.5Y 4/2).	
					0.3				
					2.8				
5	-5				0.1				
		2	5-8	2.6	31.1			(6-8) SAND; very fine to fine, some silt, little clay, trace granule, subrounded to subangular, poorly sorted; wet, dark gray (10YR 4/1). NOTE: odor and staining, black (10YR 2/1), from 7-8' bgs.	Borehole backfilled with bentonite.
					54.8				
					0.2			(8-12) SAND; very fine to coarse, trace granule, subrounded to subangular, trace clay, poorly sorted; wet, dark gray (10YR 4/1).	
10	-10	3	8-12	2.6	0.0				
					0.0				
					0.6				
								End of boring at 12' bgs.	
15	-15								

Remarks: BGS = Below ground surface

Hand auger to 5' bgs
Groundwater encountered at 6' bgs
Soil samples collected at (5-6' bgs) and (6-8' bgs)

ARCADIS
Infrastructure · Water · Environment · Buildings

Date Start/Finish: 1-25-12
Drilling Company: Terra Probe Environmental
Driller's Name: S. Bishoff
Drilling Method: Hand Auger/Geoprobe
Sampling Method: Hand Auger/Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 12' bgs
Surface Elevation: NA

Descriptions By: Christine Snyder

Well/Boring ID: **B-51**

Client: RACER Trust

Location: Former GM Employee Development Center Site
65 E. University Drive
Pontiac, MI 48342

DEPTH	ELEVATION	Sample Run Number	Sample Interval (feet)	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
					1.1			(0-0.4) ASPHALT	
								(0.4-1) SILT; little clay, low plasticity; dry, soft, light olive brown (2.5Y 5/4).	
					0.8			(1-6) CLAY; high plasticity; moist, soft, dark grayish brown (2.5Y 4/2).	
		1	0-5	5.0	0.7				
					0.5				
					0.9				
5	-5							NOTE: wet at 5' bgs.	
					0.5				
		2	5-8	3.5	494			(6-7.5) SAND; very fine to fine, some silt, poorly sorted; wet, dark gray (10YR 4/1). NOTE: odor and staining, black (10YR 2/1), from 6-7' bgs.	Borehole backfilled with bentonite.
					44.4			(7.5-8) CLAY; some silt, high plasticity, rapid dilatancy; wet, soft, gray (2.5Y 5/1).	
								(8-12) SILT; some clay, rapid dilatancy, trace sand, very fine to fine; wet, gray (2.5Y 5/1).	
					15.4				
10	-10	3	8-12	2.5					
					7.4				
								End of boring at 12' bgs.	
15	-15								

Remarks: BGS = Below ground surface

Hand auger to 5' bgs
Groundwater encountered at 5' bgs
Soil samples collected at (6-7' bgs)

ARCADIS
Infrastructure · Water · Environment · Buildings

Date Start/Finish: 1-25-12
Drilling Company: Terra Probe Environmental
Driller's Name: S. Bishoff
Drilling Method: Hand Auger/Geoprobe
Sampling Method: Hand Auger/Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 12' bgs
Surface Elevation: NA

Descriptions By: Christine Snyder

Well/Boring ID: **B-52**

Client: RACER Trust

Location: Former GM Employee Development Center Site
65 E. University Drive
Pontiac, MI 48342

DEPTH	ELEVATION	Sample Run Number	Sample Interval (feet)	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
		1	0-5	5.0	0.4 0.2 0.8 4.1 148.1	X		(0-0.4) CONCRETE (0.4-4.5) CLAY; medium plasticity, trace granule, subrounded to subangular; dry, stiff, yellowish brown (10YR 5/4). NOTE: odor and color change to very dark gray (5Y 3/1) from 4-6' bgs.	
5	-5	2	5-8	3.5	10.0 11.4 29.6	X		(4.5-7) SILT; some clay, little sand, very fine to medium, trace granule to small pebble, subrounded to subangular; wet, olive gray (5Y 4/2). (7-12) CLAY; medium plasticity, trace small to large pebble, subrounded to subangular, trace silt; moist, dark gray (2.5Y 4/1). NOTE: sand layer from 7.5-8' bgs, very fine to coarse, little clay, trace silt, trace small to large pebbles, subrounded to subangular, poorly sorted; wet, dark gray (2.5Y 4/1)	Borehole backfilled with bentonite.
10	-10	3	8-12	2.5	9.1 2.7 0.5 0.3				
								End of boring at 12' bgs.	
15	-15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: BGS = Below ground surface

Hand auger to 5' bgs
Groundwater encountered at 4.5' bgs
Soil samples collected at 4-5' bgs and 7-8' bgs
No staining observed

Date Start/Finish: 1-25-12
Drilling Company: Terra Probe Environmental
Driller's Name: S. Bishoff
Drilling Method: Hand Auger/Geoprobe
Sampling Method: Hand Auger/Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 12' bgs
Surface Elevation: NA

Descriptions By: Christine Snyder

Well/Boring ID: **B-53**

Client: RACER Trust

Location: Former GM Employee Development Center Site
65 E. University Drive
Pontiac, MI 48342

DEPTH / ELEVATION	Sample Run Number	Sample Interval (feet)	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0								
				0.8			(0-0.8) CONCRETE	
				0.9			(0.8-1.5) CLAY; medium plasticity, little sand, fine to very coarse; moist, soft, dark grayish brown (2.5Y 4/2)	
	1	0-5	5.0	1.2			(1.5-2) SAND; very fine to medium, some clay, poorly sorted; wet, very dark brown (10YR 2/2).	
				0.7			(2-7.5) CLAY; high plasticity; moist, medium stiff, dark grayish brown (2.5Y 4/2).	
5 / -5				1.1				
				0.9				
	2	5-8	3.0	1.7				Borehole backfilled with bentonite.
				554.1			NOTE: odor from 7.5-10' bgs	
				277.9			(7.5-9) SAND; some silt, very fine to fine, poorly sorted; wet, gray (10YR 5/1). NOTE: staining, very dark gray (10YR 3/1), from 8-9' bgs.	
				51.5			(9-12) SILT; little clay, rapid dilatancy; wet, soft, grayish brown (10YR 5/2).	
10 / -10	3	8-12	3.3	113.0				
				13.0				
							End of boring at 12' bgs.	
15 / -15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: BGS = Below ground surface

Hand auger to 5' bgs
Groundwater encountered at 1.5' bgs
Soil sample collected at 7-8 bgs

Date Start/Finish: 1-26-12
Drilling Company: Terra Probe Environmental
Driller's Name: S. Bishoff
Drilling Method: Hand Auger/Geoprobe
Sampling Method: Hand Auger/Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 12' bgs
Surface Elevation: NA

Descriptions By: Christine Snyder

Well/Boring ID: **B-54**

Client: RACER Trust

Location: Former GM Employee Development Center Site
65 E. University Drive
Pontiac, MI 48342

DEPTH	ELEVATION	Sample Run Number	Sample Interval (feet)	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
		1	0-5	5.0	0.1 0.3 0.2 29.9 398.8	X		(0-0.7) CONCRETE (0.7-1) CLAY; low plasticity, little sand, medium; moist, medium stiff, yellowish brown (10YR 5/6). (1-5) CLAY; medium plasticity, trace sand, medium; dry to moist, medium stiff, dark yellowish brown (10YR 4/4). NOTE: odor from 3.5 to 10' bgs.	
5	-5	2	5-8	2.6	113.7 58.3 73.3			(5-8) SILT; little sand, very fine to medium, trace granule, subrounded to subangular, rapid dilatancy; wet, dark grayish brown (2.5Y 4/2).	Borehole backfilled with bentonite.
10	-10	3	8-12	2.3	104.9 20.0	X		(8-12) CLAY; some silt, low to medium plasticity, little small to large pebbles, subrounded; moist, stiff, dark gray (2.5Y 4/1).	
								End of boring at 12' bgs.	
15	-15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: BGS = Below ground surface

Hand auger to 5' bgs
Groundwater encountered at 5' bgs
Soil sample collected at 4-5 and 8-10 bgs
No staining observed

Date Start/Finish: 1-26-12
Drilling Company: Terra Probe Environmental
Driller's Name: S. Bishoff
Drilling Method: Hand Auger/Geoprobe
Sampling Method: Hand Auger/Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 12' bgs
Surface Elevation: NA

Descriptions By: Christine Snyder

Well/Boring ID: **B-55**

Client: RACER Trust

Location: Former GM Employee Development Center Site
65 E. University Drive
Pontiac, MI 48342

DEPTH	ELEVATION	Sample Run Number	Sample Interval (feet)	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
		1	0-5	5.0	3.4			(0-0.3) GRAVEL	
					2.9			(0.4-3) CLAY; high plasticity, little silt; dry to moist, soft, light olive brown (2.5Y 5/3).	
					2.5				
					0.3			(3-7.5) SAND; fine to medium, trace small pebble, subrounded to subangular, trace clay, poorly sorted; wet, very dark brown (10YR 2/2).	
					0.4			NOTE: wet at 4' bgs.	
5	-5	2	5-8	2.6	0.1				Borehole backfilled with bentonite.
					0.2			(7.5-11) CLAY; some silt, medium plasticity, trace sand, very fine to medium, rapid dilatancy; wet, yellowish brown (10YR 5/4).	
					0.1				
10	-10	3	8-12	2.3	1.9				
					2.0			(11-12) SAND; very fine to fine, well sorted; wet, light brownish gray (10YR 6/2).	
								End of boring at 12' bgs.	
15	-15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: BGS = Below ground surface

Hand auger to 5' bgs
Groundwater encountered at 4' bgs
Soil sample collected at 1-3' bgs
No odor or staining observed

Date Start/Finish: 1-26-12
Drilling Company: Terra Probe Environmental
Driller's Name: S. Bishoff
Drilling Method: Hand Auger/Geoprobe
Sampling Method: Hand Auger/Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 12' bgs
Surface Elevation: NA

Descriptions By: Christine Snyder

Well/Boring ID: **B-56**

Client: RACER Trust

Location: Former GM Employee Development Center Site
65 E. University Drive
Pontiac, MI 48342

DEPTH	ELEVATION	Sample Run Number	Sample Interval (feet)	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
		1	0-5	5.0	0.2 0.1 2.0 0.2			(0-0.4) CONCRETE; rebar. (0.4-4) CLAY; medium plasticity, little sand, very fine to fine, trace silt; moist, medium stiff to soft, dark grayish brown (10YR 4/2).	
					0.1	X		(4-5) SAND, fine to medium, well sorted; dry to moist, yellowish brown (10YR 5/4).	
5	-5	2	5-8	2.6	0.1 0.1			(5-10) SAND; very fine to medium, little silt, trace clay, poorly sorted; moist to wet, yellowish brown (10YR 5/4). NOTE: 3" silt and clay layers, medium plasticity, rapid dilatancy; wet, grayish brown (2.5Y 5/2)	Borehole backfilled with bentonite.
10	-10	3	8-12	2.3	0.0 0.3 0.2 0.3			(10-12) CLAY; some silt, medium plasticity, low to no dilatancy; moist, medium stiff, brown (7.5YR 5/3).	
								End of boring at 12' bgs.	
15	-15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: BGS = Below ground surface

Hand auger to 5' bgs
Groundwater encountered at 5' bgs
Soil sample collected at 4-5' bgs
No odor or staining observed

Date Start: 9/23/14
Date Finish: 9/23/14
Drilling Company: Fibertec
Driller's Name: Nick Wiseman
Drilling Method: Direct Push/ Hand Auger
Sampling Method: Macrocore/ Hand Auger
Rig Type: 6620 DT Geoprobe
Water Level Start (ft. bgs.): NA
Water Level Finish (ft. btoc.): NA

Northing: NA
Easting: NA
Casing Elevation:

Borehole Depth (ft. bgs.): 20.0
Surface Elevation: NA

Descriptions By: Megan Castles-Humphrey

Well/Boring ID: **B-57**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

Weather Conditions: Sunny, 75 F

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0 / 0							(0-0.5') CONCRETE.		
	1	0-5'	5.0	0.0 0.7 0.4			(0.5-4.5') FILL, gravel; wet. (4.5-20.0') CLAY, little silt, medium plasticity, no dilatancy; some small to large pebbles, subrounded to subangular; trace sand; dry; very stiff; very dark gray (10YR 3/1).		
5 / -5				0.0					
	2	5-10'	4.25	0.0 0.0 0.0 0.0					
10 / -10									Borehole backfilled with bentonite.
	3	10-15'	2.6	0.0 0.0 0.0	X		Note: Very large pebble at 14.0' bgs.		
15 / -15									
	4	15-20'	1.42	0.0 0.0					
20 / -20							End of boring at 20' bgs.		

Remarks: bgs = below ground surface

Hand auger from 0-5' bgs.
Groundwater encountered at 0.5' bgs.
No staining or odor observed.

ARCADIS
Infrastructure · Water · Environment · Buildings

Date Start: 9/23/14
Date Finish: 9/23/14
Drilling Company: Fibertec
Driller's Name: Nick and Richard
Drilling Method: Direct Push/ Hand Auger
Sampling Method: Macrocore/ Hand Auger
Rig Type: 6620 DT Geoprobe
Water Level Start (ft. bgs.): NA
Water Level Finish (ft. btoc.): NA

Northing: NA
Easting: NA
Casing Elevation:

Borehole Depth (ft. bgs.): 20.0
Surface Elevation: NA

Descriptions By: Megan Castles-Humphrey

Well/Boring ID: **B-58**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

Weather Conditions: Sunny, 75 F

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0 / 0									
	1	0-5'	5.0	0.0 0.0 0.0			(0.0-3.0') CLAY, medium plasticity, no dilatancy; and SAND, fine to coarse, subrounded; dry; medium stiff; little small to large pebbles, subrounded; dark yellowish brown (10YR 3/4). Note: Wet at 2.0' bgs. (3.0-11.0') SAND, fine to coarse, subrounded; some small to large pebbles, subrounded; little clay; poorly sorted; wet; dark yellowish brown (10YR 3/4).		
5 / -5									
	2	5-10'	2.58	0.0 0.0 0.0 0.0 0.0					
10 / -10									Borehole backfilled with bentonite.
	3	10-15'	2.75	0.0 0.0 0.0			(11.0-20.0') SAND, medium to coarse, subangular; well sorted; wet; loose; black (10YR 2/1).		
15 / -15									
	4	15-20'	1.92	0.0 0.0					
20 / -20							End of boring at 20' bgs.		

Remarks: bgs = below ground surface

Hand auger from 0-5' bgs.
Groundwater encountered at 11' bgs.
Temporary well screened from 15-20' bgs.
No staining or odor observed.

ARCADIS
Infrastructure · Water · Environment · Buildings

Date Start: 9/23/14
Date Finish: 9/23/14
Drilling Company: Fibertec
Driller's Name: Nick and Richard
Drilling Method: Direct Push/ Hand Auger
Sampling Method: Macrocore/ Hand Auger
Rig Type: 6620 DT Geoprobe
Water Level Start (ft. bgs.): NA
Water Level Finish (ft. btoc.): NA

Northing: NA
Easting: NA
Casing Elevation:

Borehole Depth (ft. bgs.): 20.0
Surface Elevation: NA

Descriptions By: Megan Castles-Humphrey

Well/Boring ID: **B-59**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

Weather Conditions: Sunny, 75 F

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0 / 0									
	1	0-5'	5.0	0.0			(0.0-4.0') CLAY, medium plasticity, no dilatancy; some small to large pebbles, little sand, subrounded; dry; soft; dark yellowish brown (10YR 4/4).		
				0.0					
				0.0			(4.0-5.0') SAND, medium to coarse, subangular; some clay; little small to large pebbles; trace granules; poorly sorted; dark yellowish brown (10YR 4/4).		
5 / -5							(5.0-7.5') No recovery.		
	2	5-10'	2.58	0.0			(7.5-11.25') CLAY, high plasticity, slow dilatancy; some sand; little small to large pebbles, subrounded to subangular; moist; medium stiff; brown (10YR 4/3).		
				0.0					
				0.0					
10 / -10				0.0					Borehole backfilled with bentonite.
				0.0			(11.25-13.0') SAND, medium to coarse, subangular; well sorted; wet; loose; black (10YR 2/1).		
	3	10-15'	4.12	1.0	X				
				0.0			(13.0-20.0') CLAY, medium plasticity; slow dilatancy; some small to large pebbles, subrounded to subangular; moist; stiff; dark gray (10YR 4/1).		
				0.0			Note: 2 inch thick sand layer, wet, black at 14.5' bgs.		
15 / -15							Note: Dry, stiff from 15.0-20.0' bgs.		
	4	15-20'	3.42	0.0					
				0.0					
				0.0					
20 / -20				0.0			End of boring at 20' bgs.		

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

Hand auger from 0-5' bgs.
Groundwater encountered at 11.25' bgs.
Temporary well screened from 11-16' bgs.
No staining or odor observed.

Date Start: 9/23/14
Date Finish: 9/23/14
Drilling Company: Fibertec
Driller's Name: Nick and Richard
Drilling Method: Direct Push/ Hand Auger
Sampling Method: Macrocore/ Hand Auger
Rig Type: 6620 DT Geoprobe
Water Level Start (ft. bgs.): NA
Water Level Finish (ft. btoc.): NA

Northing: NA
Easting: NA
Casing Elevation:

Borehole Depth (ft. bgs.): 20.0
Surface Elevation: NA

Descriptions By: Megan Castles-Humphrey

Well/Boring ID: **B-60**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

Weather Conditions: Sunny, 75 F

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0 / 0							(0.0-0.5') CONCRETE.		
				0.0			(0.5-2.0) SAND, fine to coarse, subrounded; and CLAY, medium plasticity, no dilatancy; dry; soft to medium stiff; very dark brown (10YR 2/2).		
	1	0-5'	5.0	0.0			(2.0-10.0') CLAY, medium plasticity, no dilatancy; some sand, fine to coarse, subrounded; dry; soft to medium stiff; brown (10YR 4/3).		
5 / -5				0.0					
				0.0					
	2	5-10'	2.58	0.0			Note: Wet at 7.0' bgs. Note: Interbedded clay and sand layers, 2 to 6 inches thick from 7.0-9.5' bgs.	▽	
				0.0					
10 / -10				2.5			(10.0-14.5') SAND, fine to coarse, subrounded; some small to large pebbles, subrounded; little clay; poorly sorted; moist to wet; loose to medium dense; gray (10YR 5/1). Note: Strong odor, black discoloration.		Borehole backfilled with bentonite.
				2.9					
	3	10-15'	4.12	10.6					
				9.6					
				8.4					
15 / -15				3.7			(14.5-20.0') CLAY, medium plasticity, no dilatancy; some small to large pebbles, subrounded; little sand, fine to coarse, subrounded; dry; very stiff. Note: Slight odor.		
	4	15-20'	3.42	0.0					
				0.0					
20 / -20				0.0			End of boring at 20' bgs.		

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

Hand auger from 0-5' bgs.
Groundwater encountered at 7.0' bgs.
Temporary well screened from 10.5-15.5' bgs.

Date Start: 9/23/14
Date Finish: 9/23/14
Drilling Company: Fibertec
Driller's Name: Nick and Richard
Drilling Method: Direct Push/ Hand Auger
Sampling Method: Macrocore/ Hand Auger
Rig Type: 6620 DT Geoprobe
Water Level Start (ft. bgs.): NA
Water Level Finish (ft. btoc.): NA

Northing: NA
Easting: NA
Casing Elevation:

Borehole Depth (ft. bgs.): 20.0
Surface Elevation: NA

Descriptions By: Megan Castles-Humphrey

Well/Boring ID: **B-61**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

Weather Conditions: Sunny, 75 F

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0 / 0	1	0-5'	5.0	0.0 0.6 0.1			(0.0-5.0') SAND, fine to very coarse, subrounded to subangular; some granules, subangular; little small to medium pebbles, subrounded; poorly sorted; dry; loose; brownish yellow (10YR 6/6). Note: Wet at 2.0' bgs.		
5 / -5	2	5-10'	1.08				(5.0-9.0') No recovery.		
10 / -10	3	10-15'	3.58	0.4 0.0 0.0 0.0 0.0			(9.0-12.0') SAND, fine to coarse, subrounded; some granules, subrounded; little small to large pebbles, subrounded; poorly sorted; moist; medium dense; yellowish brown (10YR 5/6). Note: Clay layer, 10 inches thick at 9.5' bgs. (12.0-20.0') CLAY, medium plasticity, no dilatancy; some small to large pebbles, subrounded; little sand; dry; very stiff; gray (10YR 5/1). Note: Sand layer, 1 inch thick at 13.0' bgs.		Borehole backfilled with bentonite.
15 / -15	4	15-20'	2.33	0.0 0.0 0.0					
20 / -20							End of boring at 20' bgs.		

Remarks: bgs = below ground surface

Hand auger from 0-5' bgs.
Groundwater encountered at 2.0' bgs.
No staining or odor observed.

ARCADIS
Infrastructure · Water · Environment · Buildings

Date Start: 9/24/14
Date Finish: 10/24/14
Drilling Company: Fibertec
Driller's Name: Nick and Richard
Drilling Method: Direct Push/ Hand Auger
Sampling Method: Macrocore/ Hand Auger
Rig Type: 6620 DT Geoprobe
Water Level Start (ft. bgs.): NA
Water Level Finish (ft. btoc.): NA

Northing: NA
Easting: NA
Casing Elevation:

Borehole Depth (ft. bgs.): 20.0
Surface Elevation: NA

Descriptions By: Megan Castles-Humphrey

Well/Boring ID: **B-62/MW-33**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

Weather Conditions: Sunny, 75 F

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0 / 0									
	1	0-5'	5.0	0.4			(0.0-0.5') CONCRETE.		
				0.7			(0.5-9.0') CLAY, medium plasticity, slow dilatancy; and SAND, fine to coarse, subrounded; some small to medium pebbles, subangular; trace granules, subangular; moist; soft; very dark grayish brown (10YR 3/2).		
5 / -5				1.1					
	2	5-10'	1.08	0.0	X				Bentonite Pellets (0.5-12' bgs)
				0.0					Sch-40 PVC Riser
				0.0					
10 / -10				0.0			(9.0-13.0') SAND, medium to coarse, subrounded; wet; well sorted; loose; black (10YR 2/1).		
	3	10-15'	3.58	0.0	X				
				0.0			(13.0-14.5') CLAY, medium plasticity, rapid dilatancy; and SAND; fine to coarse, subrounded; little small to medium pebbles, subrounded; wet; soft; brown (10YR 5/3).		
				0.0			(14.5-17.5') PEBBLES, small to large, rounded to subangular; little sand; trace clay, poorly sorted; wet; medium dense; dark gray (10YR 4/1). Note: Slight odor.		Sand Pack (12-18' bgs)
15 / -15				0.0					2" Sch-40 PVC 10 Slot Well Screen (13-18' bgs)
	4	15-20'	2.33	0.0	X		(17.5-20.0') CLAY, high plasticity, no dilatancy; trace small to medium pebbles, subrounded; dry; medium stiff; dark gray (10YR 4/1).		
				0.0					
20 / -20				0.0			End of boring at 20' bgs.		

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

Hand auger from 0-5' bgs.
Groundwater encountered at 2.0' bgs.
No staining observed.

Date Start: 9/23/14
Date Finish: 9/23/14
Drilling Company: Fibertec
Driller's Name: Nick and Richard
Drilling Method: Direct Push/ Hand Auger
Sampling Method: Macrocore/ Hand Auger
Rig Type: 6620 DT Geoprobe
Water Level Start (ft. bgs.): NA
Water Level Finish (ft. btoc.): NA

Northing: NA
Easting: NA
Casing Elevation:

Borehole Depth (ft. bgs.): 20.0
Surface Elevation: NA

Descriptions By: Megan Castles-Humphrey

Well/Boring ID: **B-63**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

Weather Conditions: Sunny, 75 F

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0 / 0							(0.0-0.5') CONCRETE.		
				0.0			(0.5-2.0') SAND, fine to coarse, subrounded; some small to medium pebbles, subrounded; trace granules; poorly sorted; dry; loose; yellowish brown (10YR 5/6).		
	1	0-5'	5.0	0.0			(2.0-11.0') CLAY, high plasticity, rapid dilatancy; and SAND, fine to coarse, subrounded; little small to large pebbles, subrounded; wet; soft; yellowish brown (10YR 5/4).		
				0.1					
5 / -5				0.0					
				0.0					
	2	5-10'	4.17	0.0					
				0.0					
				0.0					
10 / -10				0.0					
				0.0			(11.0-20.0') CLAY, high plasticity, no dilatancy; some small to large pebbles, subrounded; little sand, fine to coarse, subrounded; dry; stiff; dark gray (10YR 4/1). Note: Medium stiff at 12.0' bgs.		
	3	10-15'	3.92	0.0					
				0.0					
				0.0					
15 / -15									
	4	15-20'	2.42	0.0					
				0.0					
				0.0					
20 / -20							End of boring at 20' bgs.		

Borehole backfilled with bentonite.

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

Hand auger from 0-5' bgs.
Groundwater encountered at 2.0' bgs.
Temporary well screened from 8-18' bgs.
No staining or odor observed.

Date Start: 9/24/14
Date Finish: 9/24/14
Drilling Company: Fibertec
Driller's Name: Nick and Richard
Drilling Method: Direct Push/ Hand Auger
Sampling Method: Macrocore/ Hand Auger
Rig Type: 6620 DT Geoprobe
Water Level Start (ft. bgs.): NA
Water Level Finish (ft. btoc.): NA

Northing: NA
Easting: NA
Casing Elevation:

Borehole Depth (ft. bgs.): 14.0
Surface Elevation: NA

Descriptions By: Megan Castles-Humphrey

Well/Boring ID: **B-64**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

Weather Conditions: Sunny, 75 F

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0 / 0									
				0.0			(0.0-2.0') SAND, fine to coarse, subrounded; little clay; little small to large pebbles; poorly sorted; moist; loose; dark brown (10YR 3/2).		
	1	0-5'	5.0	0.0			(2.0-8.5') SAND, fine to coarse, subrounded; and CLAY, medium plasticity, slow dilatancy; little small to large pebbles, subrounded; poorly sorted; moist; medium dense; brown (10YR 4/2).		
5 / -5									
	2	5-10'	2.92	0.0					
				0.0	X		(8.5-9.5') SAND, fine to coarse, subrounded; little small to medium pebbles, subrounded; little clay; moist; medium dense; dark brown (10YR 3/3).	▽	
				0.0			(9.5-14.0') CLAY, medium plasticity, no dilatancy; some sand, fine to coarse, subrounded; little small to medium pebbles, subrounded; moist to dry; medium stiff; dark grayish brown (10YR 4/2).		
10 / -10	3	10-14'	2.25	0.0					
				0.0					
							End of boring at 14' bgs.		
15 / -15									
20 / -20									

Borehole backfilled with bentonite.

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

Hand auger from 0-5' bgs.
Groundwater encountered at 9.46' bgs.
Temporary well screened from 8-13' bgs.
No staining or odor observed.

Date Start: 9/24/14
Date Finish: 9/24/14
Drilling Company: Fibertec
Driller's Name: Nick and Richard
Drilling Method: Direct Push/ Hand Auger
Sampling Method: Macrocore/ Hand Auger
Rig Type: 6620 DT Geoprobe
Water Level Start (ft. bgs.): NA
Water Level Finish (ft. btoc.): NA

Northing: NA
Easting: NA
Casing Elevation:

Borehole Depth (ft. bgs.): 20.0
Surface Elevation: NA

Descriptions By: Megan Castles-Humphrey

Well/Boring ID: **MW-32D**

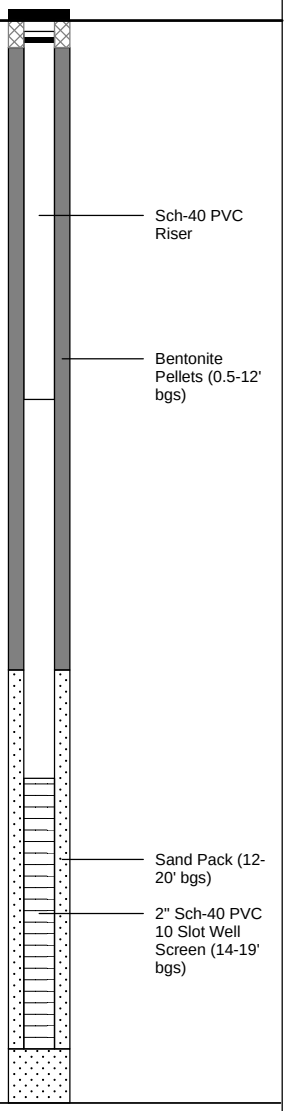
Client: RACER Trust

Location: Former Pontiac Employment Development Center

Weather Conditions: Sunny, 75 F

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)
0 / 0							(0.0-0.5') CONCRETE.	
	1	0-5'	5.0	0.1 0.1 0.0			(0.5-5.0') SAND, medium to coarse, subrounded; well sorted; dry; loose; black (10YR 2/1). Note: Brick and stone fragments from 4.0-5.0' bgs.	
5 / -5							(5.0-10.5') CLAY, low plasticity, no dilatancy; dry; some small to large pebbles, subangular; very stiff; yellowish brown (10YR 5/6).	
	2	5-10'	4.42	0.0 0.0 0.0 0.0 0.0				
10 / -10							(10.5-11.5') CLAY, high plasticity, slow dilatancy; and SAND, fine to coarse; subrounded; little small to large pebbles, subrounded; wet; soft; yellowish brown (10YR 5/6). Note: Some black discoloration.	
	3	10-15'	5.0	0.0 0.0 0.0 0.0 0.0			(11.5-16.0') CLAY, low plasticity, no dilatancy; little small to medium pebbles, subrounded; dry; very stiff; dark grayish brown (10YR 4/2).	
15 / -15							(16.0-17.0') SAND, medium to coarse, subrounded; well sorted; moist; medium dense; black (10YR 2/1).	
	4	15-20'	4.58	0.0 0.0 0.0 0.0 0.0			(17.0-20.0') CLAY, low plasticity, slow dilatancy; little small to medium pebbles, subrounded; dry; very stiff; very dark gray (10YR 3/1).	
20 / -20							End of boring at 20' bgs.	

Well/Boring Construction



Remarks: bgs = below ground surface

Hand auger from 0-5' bgs.
Groundwater not encountered.
No odor observed.

ARCADIS
Infrastructure · Water · Environment · Buildings

Date Start: 9/24/14
Date Finish: 9/24/14
Drilling Company: Fibertec
Driller's Name: Nick and Richard
Drilling Method: Direct Push/ Hand Auger/HSA
Sampling Method: Macrocore/ Hand Auger
Rig Type: 6620 DT Geoprobe
Water Level Start (ft. bgs.): NA
Water Level Finish (ft. btoc.): NA

Northing: NA
Easting: NA
Casing Elevation:

Borehole Depth (ft. bgs.): 12.0
Surface Elevation: NA

Descriptions By: Megan Castles-Humphrey

Well/Boring ID: **MW-32S**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

Weather Conditions: Sunny, 75 F

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0 / 0							(0.0-12.0') No lithology recorded. See MW-32D.		Bentonite Pellets (1.0-5.0' bgs); Sch-40 PVC Riser; Sand Pack (5-12' bgs); 2" Sch-40 PVC 10 Slot Well Screen (7-12' bgs)
5 / -5									
10 / -10									
12 / -12							End of boring at 12' bgs.		
15 / -15									
20 / -20									

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface
HSA = hollow stem auger

Hand auger from 0-5' bgs.
Groundwater not encountered.
No odor observed.

Date Start/Finish: 12/1/06
Drilling Company: Fibertec
Driller's Name: Nathan Keller
Drilling Method: Direct Push/HSA
Sampling Method: HSA/Macrocore
Rig Type: NA

Northing: 417593.2
Easting: 13412851.7
Casing Elevation: 916.91

Borehole Depth: 13' bgs
Surface Elevation: 917.2

Descriptions By: Wayne Patterson

Well/Boring ID: **EW-1**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
915								
0							No soil samples collected. See B-16 for soil description.	Portland Cement (0-1' bgs); Bentonite Seal (1-2' bgs); Sand Pack (2-13' bgs); 0.010" Wire Wrapped 4" PVC Screen (3-13' bgs)
910								
5								
905								
10								
900							End of boring at 13' bgs.	
15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 9/19/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 15' bgs
Surface Elevation: NA

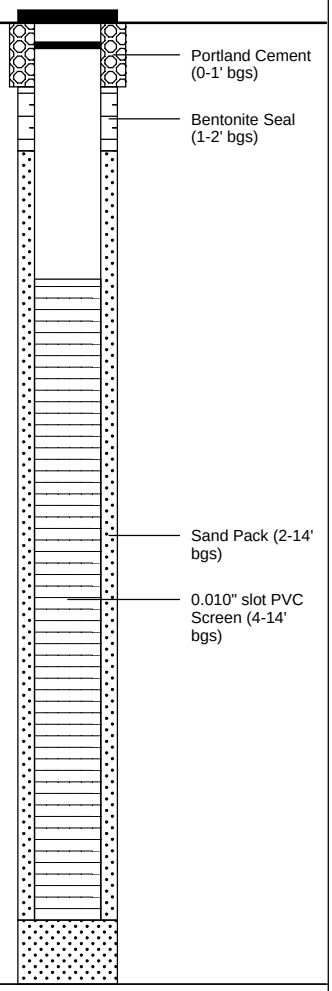
Descriptions By: Beth Lindblade

Well/Boring ID: **EW-2**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description
0	0							CONCRETE.
						SP		10YR 2/1 black SAND (SP).
					0.0			10YR 5/3 brown CLAY (CL) grading into 10YR 4/2 dark grayish brown CLAY at 1.25' bgs, stiff to hard, plastic, dry, no odor.
		1	0-5'	5'		CL		
					1.0			Soft to medium stiff.
5	-5							Some Sand, soft, moist.
						SM		10YR 4/2 dark grayish brown SILTY SAND (SM), very fine to medium Sand, little coarse Sand, poorly sorted, loose to slightly compacy, wet, strong odor.
					161			
		2	5-10'	5'		CL		10YR 4/2 dark grayish brown SANDY CLAY (CL), few fine to medium Sand, couple layers (1-2") of Silty Sand, stiff, plastic, moist, strong odor.
					170	SM		10YR 4/2 dark grayish brown SILTY SAND (SM), very fine to medium Sand, little coarse Sand, poorly sorted, loose to slightly compacy, wet, strong odor. Black to light yellow free product visible.
						CL		10YR 4/2 dark grayish brown SANDY CLAY (CL), few fine to medium Sand, couple layers (1-2") of Silty Sand, stiff, plastic, moist, strong odor.
10	-10							
						SP		10YR 4/2 dark grayish brown, fine to medium SAND (SP), poorly sorted, little very fine Sand and Silt, few Clay, very loose, wet, strong odor.
		3	10-15'	5'	253			
					98.4	CL		10YR 4/2 dark grayish brown CLAY (CL) with some Sand and Silt, increasing Clay content downhole, decreasing Sand content downhole, soft, non-plastic to low plasticity, wet, slight odor.
15	-15							End of boring at 14' bgs. Hard at 14.5' bgs, moist.



Well/Boring Construction

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 3-5' bgs.
NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 12/1/06
Drilling Company: Fibertec
Driller's Name: Nathan Keller
Drilling Method: Direct Push/HSA
Sampling Method: Macrocore
Rig Type: NA

Northing: 417694.9
Easting: 13412826.7
Casing Elevation: 917.46

Borehole Depth: 15' bgs
Surface Elevation: 917.9

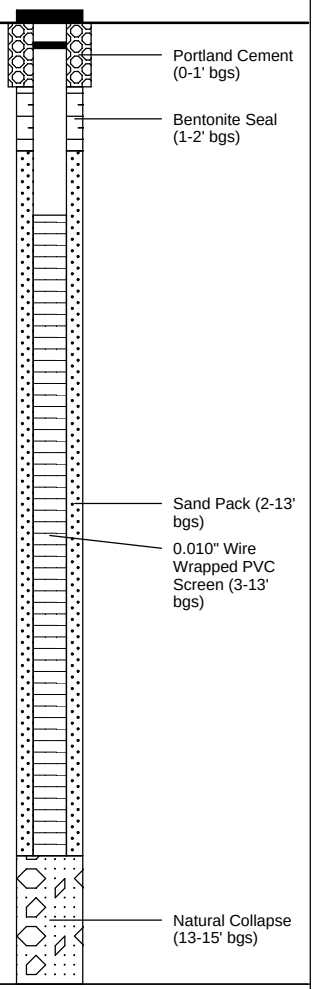
Descriptions By: Wayne Patterson

Well/Boring ID: **MW-2**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description
	920							
0								ASPHALT.
								Brownish gray LEAN CLAY (CL), roots, medium plasticity, stiff, moist, no odor, becoming wet and soft at 5'.
	915	1	0-5'	3'	0.0	CL		
5								Brown fine to coarse SILTY SAND (SM), predominately fine to medium grained, wet, loose, no odor.
	910	2	5-10'	4'	0.0			
10						SM		
	905	3	10-15'	4.5'	0.0			
								Brownish gray LEAN CLAY (CL), trace fine SAND, medium stiff, medium plasticity, wet, no odor.
15						CL		
								End of boring at 15' bgs.



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
No odors detected and no staining observed.

Date Start/Finish: 12/1/06
Drilling Company: Fibertec
Driller's Name: Nathan Keller
Drilling Method: Direct Push/HSA
Sampling Method: Macrocore
Rig Type: NA

Northing: 417562.54
Easting: 13412755.06
Casing Elevation: 916.9

Borehole Depth: 15' bgs
Surface Elevation: 917.3

Descriptions By: Wayne Patterson

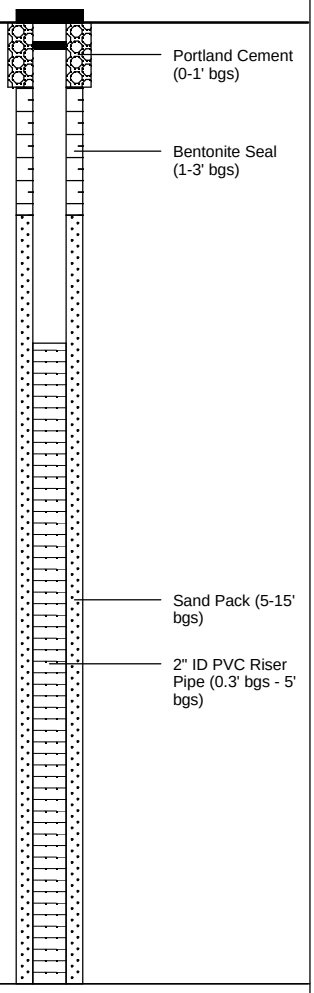
Well/Boring ID: **MW-3**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description
920							
0							No soil samples collected from 0-10' bgs. See B-14 for soil description.
915							
5							
910							
10							
905	1	10-15'	4.0'	NA	CL		Gray brown CLAY (CL), few fine to medium Sand, very soft, plastic, wet, slight odor detected and no staining observed, slight sheen on water.
15							End of boring at 15' bgs.

Well/Boring Construction



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 12/1/06
Drilling Company: Fibertec
Driller's Name: Nathan Keller
Drilling Method: Direct Push/HSA
Sampling Method: Macrocore
Rig Type: NA

Northing: 417541.2
Easting: 13413172.1
Casing Elevation: 912.78

Borehole Depth: 15' bgs
Surface Elevation: 913.1

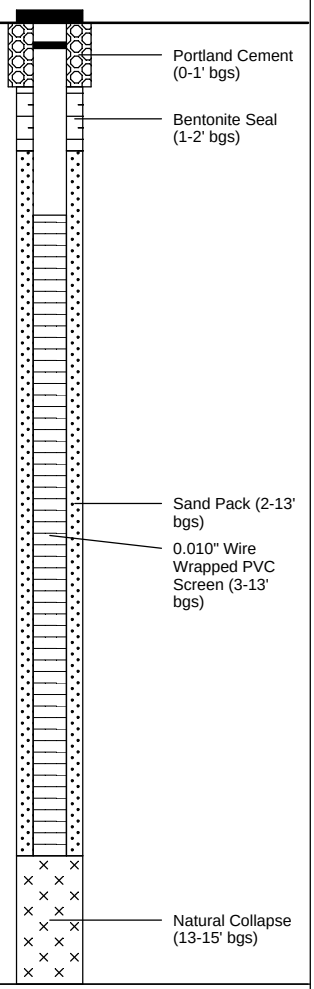
Descriptions By: Wayne Patterson

Well/Boring ID: **MW-4**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description
915							
0							ASPHALT.
							Grayish brown LEAN CLAY with SAND, fine to coarse subangular to angular Sand, few fine gravel, soft, moist, medium plasticity, no odor.
							Wet.
910	1	0-5'	3'	0.0			
5							
	2	5-10'	4'	0.0	CL		Brown, medium stiff.
905							
10							Gray, becoming stiff.
	3	10-15'	4'	0.0			
900							
15							End of boring at 15' bgs.



Well/Boring Construction

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface
No odors detected and no staining observed.

Date Start/Finish: 12/1/06
Drilling Company: Fibertec
Driller's Name: Nathan Keller
Drilling Method: Direct Push/HSA
Sampling Method: Macrocore
Rig Type: NA

Northing: 417422.5
Easting: 13412930.9
Casing Elevation: 916.14

Borehole Depth: 17' bgs
Surface Elevation: 916.8

Descriptions By: Wayne Patterson

Well/Boring ID: **MW-5**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 916							No soil samples collected. See B-2 for soil description.	Portland Cement (0-1' bgs); Bentonite Seal (1-5' bgs); Sand Pack (5-17' bgs); 2" ID PVC Riser Pipe (0.3' bgs - 7' bgs)
5 / 911								
10 / 906								
15 / 901								

Remarks: NA = not applicable/ not available
bgs = below ground surface

ARCADIS
Infrastructure · Water · Environment · Buildings

Date Start/Finish: 9/13/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417580.9
Easting: 13412874.8
Casing Elevation: 916.66

Borehole Depth: 13' bgs
Surface Elevation: 917.0

Descriptions By: Jim Kralik

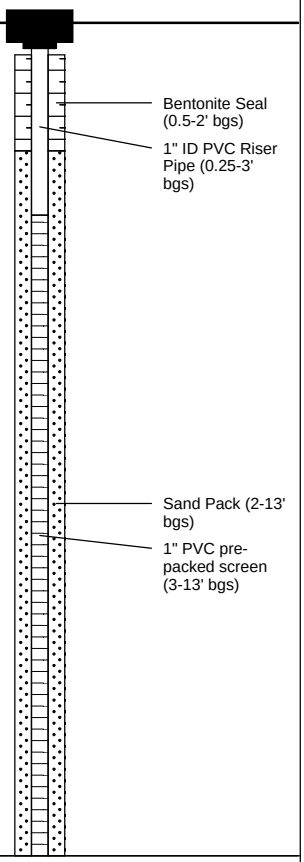
Well/Boring ID: **MW-6**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description
0								CONCRETE.
	915	1	0-4'	3.5'	1.3	CL		10YR 4/4 dark yellowish brown CLAY (CL), little fine Gravel, trace fine to coarse Sand, stiff to very stiff, plastic, dry, no odor.
					1.9			Slight odor at 2.7' bgs.
					99.4	SP		2.5Y 4/3 olive brown and grayish brown fine SAND (SP), poorly sorted, medium dense, wet, odor present, possible staining and sheen.
					164			
5					44.7	ML		2.5Y 4/3 olive brown SILT (ML), medium dense, moist, odor present. Staining from 4-4.7' bgs.
		2	4-8'	4'	1441	SP		Yellowish brown, fine SAND (SP), poorly sorted, little Clay, medium dense, moist, odor present.
	910					CL		Brownish gray CLAY (CL), some fine to coarse Sand, little fine Gravel, stiff, plastic, odor present.
10		3	8-12'	4'	2447	SP		Yellowish brown, fine SAND (SP), poorly sorted, medium dense, wet, odor present, sheen present.
					755	CL		Brownish gray CLAY (CL), some fine to coarse Sand, little fine Gravel, stiff, plastic, odor present.
	905							Blind drilled to 13' bgs to set well.
15								End of boring at 13' bgs.

Well/Boring Construction



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 6-8' bgs.
NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 9/14/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417532.7
Easting: 13412855.3
Casing Elevation: 916.48

Borehole Depth: 15' bgs
Surface Elevation: 916.9

Descriptions By: Jim Kralik

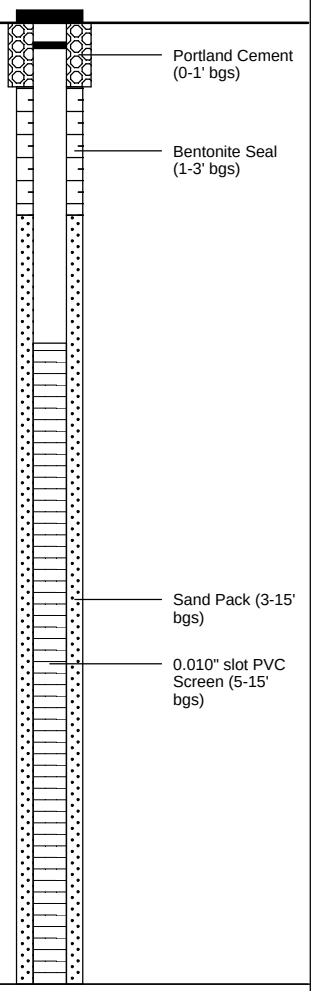
Well/Boring ID: **MW-7**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description
0								CONCRETE.
						SP		Yellowish brown, fine SAND (SP), loose, dry, no odor.
	915	1	0-5'	5'	0.6 0.9	CL		Dark yellowish brown to grayish brown CLAY (CL), some fine to medium Sand and fine Gravel, stiff, plastic, dry, slight odor.
5								Dark gray CLAY (CL), some olive brown, fine Sand, stiff, plastic, dry, odor present.
	910	2	5-10'	5'	643 755	SM		10YR 4/1 dark gray, fine SAND to SANDY SILT (SM), trace Clay, dense, wet, very strong petroleum-like odor, sheen present.
10								Dark gray to dark grayish brown, fine SAND (SP), some Silt, trace Clay, wet, strong odor and sheen present.
	905	3	10-15'	5'	1560 698	SP		
						CL		Brownish gray CLAY (CL), stiff, plastic, moist, odor present.
15								End of boring at 15' bgs.

Well/Boring Construction



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 5-7' bgs.
NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 9/17/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 18' bgs
Surface Elevation: NA

Descriptions By: Beth Lindblade

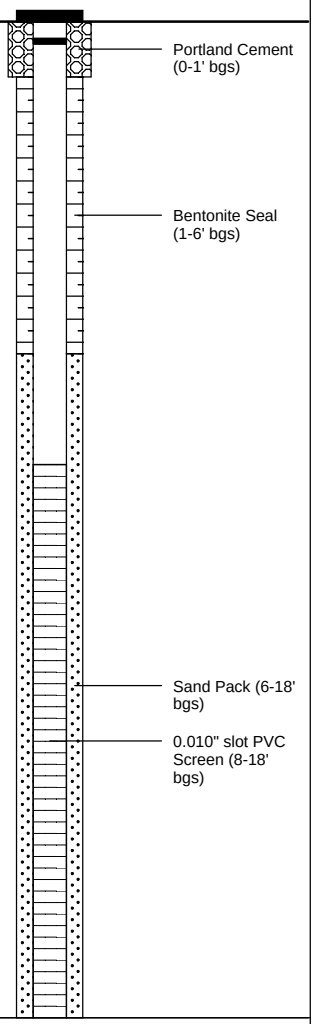
Well/Boring ID: **MW-8**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description
0	0							CONCRETE.
						CL		2.5Y 4/4 olive brown CLAY (CL), some very fine to medium Sand, hard, non-plastic, dry, no odor.
		1	0-5'	3.5'	0.0	SM		10YR 2/1 black, very fine to medium SAND and SILT (SM), dry, no odor.
					0.0			2.5Y 5/6 light olive brown, very fine SAND and SILT (SM), some fine to medium Sand, loose, dry, no odor.
5	-5	2	5-10'	5'	0.0			
					0.1			
10	-10					SP		10YR 5/2 grayish brown, medium SAND (SP), some very fine to fine Sand, poorly sorted, loose, dry to moist, no odor.
		3	10-14'	4'	136			10YR 4/1 dark gray, very fine to medium SAND (SP), poorly sorted, little Silt, trace Clay, increasing Silt with depth, loose, wet, strong odor.
					2183			
15	-15	4	14-18'	4'	1.9	ML		10YR 4/1 dark gray SILT (ML), some very fine to fine Sand and Clay, compact, moist to wet, moderately strong odor.
					11.7	CL		10YR 4/1 dark gray CLAY (CL), few coarse, subangular Gravel and Cobbles, hard to very hard, non-plastic to low plasticity, dry to moist, slight odor.
								End of boring at 18' bgs.

Well/Boring Construction



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 8.5-10.5' bgs.
NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 9/19/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 15' bgs
Surface Elevation: NA

Descriptions By: Beth Lindblade

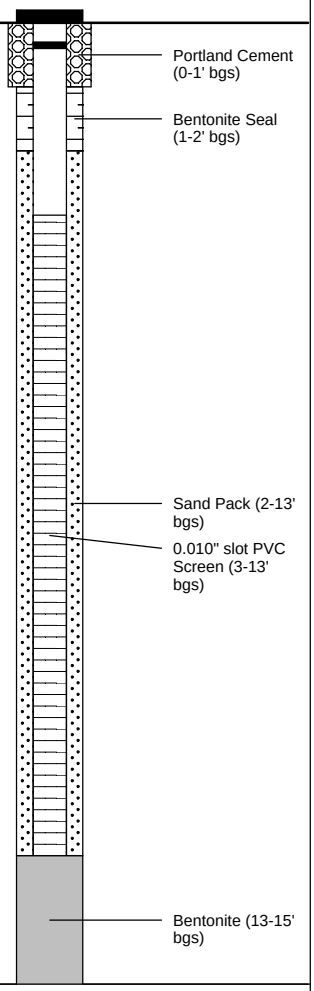
Well/Boring ID: **MW-9**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description
0	0							CONCRETE.
					0.0	CL		10YR 4/2 dark grayish brown SANDY CLAY (CL), soft, low plasticity, moist to wet, no odor.
		1	0-5'	3'	0.0	ML		10YR 4/3 dark yellowish brown SANDY SILT (ML), few pebbles and medium to coarse Gravel, some Clay, compact, dry to moist, no odor.
5	-5				0.0			Moist to wet.
		2	5-10'	5'	0.0	CL		10YR 4/3 dark yellowish brown SANDY CLAY (CL), some Silt, fine to medium Sand, little Gravel, compact, no odor.
					0.0			Wet at 8.5' bgs only in seams.
10	-10							Grading into Clay with little Sand, hard, non-plastic, dry.
		3	10-15'	5'	0.0			10YR 4/1 gray CLAY (CL), few subrounded Gravel, hard, non-plastic, dry to moist, no odor.
15	-15				0.0			End of boring at 15' bgs.

Well/Boring Construction



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 3-5' bgs.
NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 9/20/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 20' bgs
Surface Elevation: NA

Descriptions By: Beth Lindblade

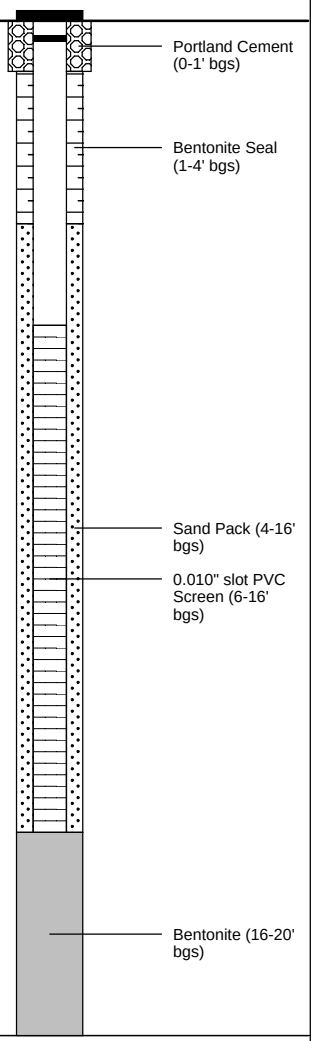
Well/Boring ID: **MW-10**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description
0	0							
		1	0-5'	2.5'	0.0	SP		ASPHALT.
								10YR 4/4 dark yellowish brown, fine to coarse SAND (SP), poorly sorted, some fine to medium Gravel, few 1-3" layers of plastic, soft to medium stiff Clay, loose, moist, no odor.
					0.0			Wet at 2.25' bgs.
5	-5							
		2	5-10'	5'	0.0			10YR 4/4 to 4/6 dark yellowish brown to yellowish brown, poorly sorted, fine to medium SAND (SP), some very fine to coarse Sand, little Silt and Clay, loose, wet.
						ML		10YR 4/6 dark yellowish brown SILT (ML) with little Clay, few Sand, trace Gravel, compact, dry to moist, no odor.
					0.0	CL		10YR 4/2 dark grayish brown CLAY (CL), few fine to medium subrounded Gravel, hard, non-plastic, dry, no odor.
10	-10					SP		10YR 4/2 dark grayish brown, fine to coarse SAND (SP) with some Silt, compact, moist. At 10' bgs - Fine to medium Sand, few coarse Sand, little Clay, loose, wet.
		3	10-15'	2.25'	0.0	CL		10YR 4/2 dark grayish brown CLAY (CL), few fine to medium subrounded Gravel, hard, non-plastic, dry, no odor.
					0.0			
15	-15					SP		10YR 4/2 dark grayish brown SAND (SP), poorly sorted with some fine to coarse Gravel, trace Pebbles, moist to wet.
		4	15-20'	5'	0.0	CL		10YR 4/2 dark grayish brown CLAY (CL), few fine to medium subrounded Gravel, hard, non-plastic, dry, no odor.
					0.0			
20	-20							End of boring at 20' bgs.

Well/Boring Construction



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 7.75-9.75' bgs.
NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 9/21/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417454.8
Easting: 13412773.2
Casing Elevation: 916.5

Borehole Depth: 20' bgs
Surface Elevation: 917.1

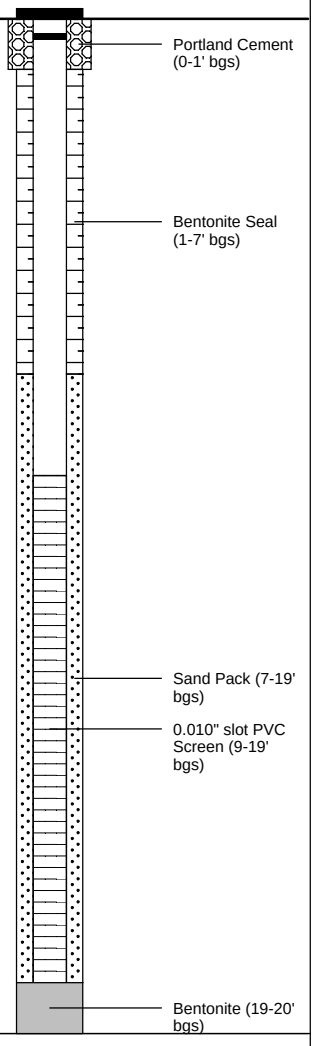
Descriptions By: Beth Lindblade

Well/Boring ID: **MW-11**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description
	920							
0								CONCRETE.
	915	1	0-5'	3'	0.0 0.0	SW		7.5Y 2/0 black, fine SAND (SW), well sorted, loose, soft, dry, no odor.
5								10YR 4/4/ dark yellowish brown SANDY CLAY (CL), fine to medium Sand, few coarse Sand to coarse Gravel, couple Pebbles, soft to medium stiff, low plasticity, dry to moist, no odor.
					0.0	CL		
	910					SW		7.5Y 2/0 black, fine SAND (SW), well sorted, loose, soft, dry, no odor.
		2	5-10'	2.5'	0.0			10YR 4/6 dark yellowish brown alternating layers of SANDY CLAY (CL) with Gravel as above and fine to medium, loose, dry SAND (SP), no odor.
10						CL		19YR 4/2 dark grayish brown CLAY (CL), few fine to coarse Gravel, stiff to hard, low plasticity, dry, no odor.
	905	3	10-15'	4'	0.0 0.0			Grading into 10YR 4/1 dark gray CLAY. At 14' bgs - 1-2" seam of CLAYEY SAND, moist to wet, no odor.
15						SP		10YR 4/1 dark gray, very fine to fine SAND (SP), poorly sorted, loose, wet.
	900	4	15-20'	4.5'	0.0 0.0	ML		10YR 4/1 dark gray SANDY SILT (ML), few 1-2" seams of Sand, compact, wet, no odor.
						CL		19YR 4/1 dark gray CLAY (CL), few fine to coarse Gravel, stiff to hard, low plasticity, dry to moist, no odor.
20								End of boring at 20' bgs.



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 13-15' bgs.
NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 9/21/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417507.7
Easting: 13412903.5
Casing Elevation: 916.10

Borehole Depth: 19' bgs
Surface Elevation: 916.9

Descriptions By: Beth Lindblade

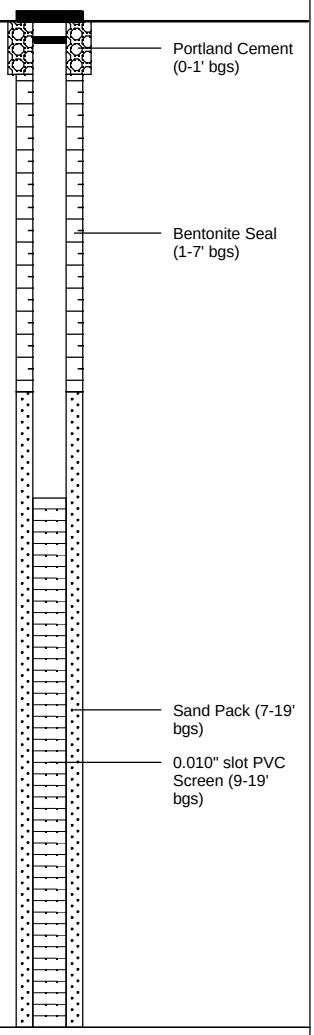
Well/Boring ID: **MW-12**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Stratigraphic Description
0							
	915	1	0-5'	2.75'	0.0	SW	ASPHALT.
						SP	7.5Y 2/0 black, fine SAND (SW), well sorted, loose, dry.
						SW	
						SP	10YR 4/6 dark yellowish brown SAND AND GRAVEL (SP), poorly sorted, loose, dry, no odor.
					0.0		7.5Y 2/0 black, fine SAND (SW), well sorted, loose, dry.
							10YR 4/6 dark yellowish brown SAND AND GRAVEL (SP), poorly sorted, loose, dry, no odor.
5							7.5Y 2/0 black, fine SAND (SW), well sorted, loose, dry. At 5' bgs - Becoming poorly sorted (SP), loose to slighty compact, few subangular Gravel.
	910	2	5-10'	2.5'	0.0	SW	
					0.0		
10							Wet at 11' bgs.
	905	3	10-15'	4'	0.0		
					0.0	CL	10YR 4/2 dark grayish brown CLAY (CL), few fine to coarse Gravel, couple Pebbles, hard, non-plastic, dry.
15							
	900	4	15-19'	3.5'	0.0	SP	7.5Y 2/0 black, fine SAND (SP), poorly sorted, loose, wet.
					0.0	CL	10YR 4/1 to 4/2 dark gray to dark grayish brown CLAY (CL), few fine to coarse subrounded Gravel, hard, low plasticity, dry to moist.
							End of boring at 19' bgs.

Well/Boring Construction



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 9-11' bgs.
NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 10/2/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417740.5
Easting: 13412814.7
Casing Elevation: 915.12

Borehole Depth: 20' bgs
Surface Elevation: 915.5

Descriptions By: Beth Lindblade

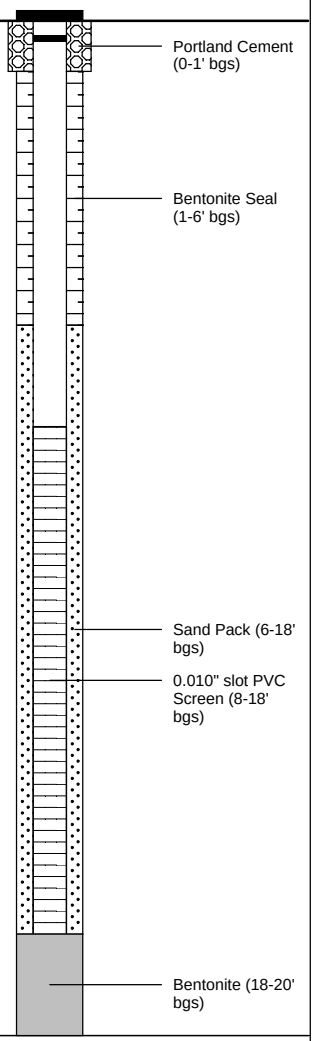
Well/Boring ID: **MW-13**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Stratigraphic Description
0	915	1	0-5'	2.5'	0.0		ASPHALT and Fill Gravel, dry to moist.
							10YR 4/6 dark yellowish brown CLAY (CL) and SAND, dry to moist, no odor.
					0.0	CL	10YR 4/2 dark grayish brown and 5Y 5/2 olive gray mottled CLAY (CL), some poorly sorted Sand and Gravel, soft, plastic, dry to moist, no odor.
5	910	2	5-10'	3.5'	0.0		7.5Y 2/0 black CLAY (CL), stiff, medium plasticity to plastic, dry to moist, slight organic odor.
					0.0		2.5Y 5/2 grayish brown CLAY (CL) with some fine to coarse Sand, medium stiff, low plasticity, dry, no odor.
10	905	3	10-15'	5'	0.0	SP	10YR 5/2 to 2.5Y 5/2 grayish brown, very fine to medium SAND (SP), poorly sorted, very loose, wet, no odor.
						CL	2.5Y 5/2 grayish brown CLAY (CL) and SILT, little fine to medium Sand, soft to medium stiff, dry to moist, no odor.
					0.0	SP	10YR 5/1 gray, fine to medium SAND (SP), wet, no odor.
							10YR 4/1 dark gray, SAND (SP), poorly sorted.
15						ML	10YR 5/3 brown SILT (ML), little very fine Sand, wet, no odor.
	900	4	15-20'	5'	0.0	SP	10YR 4/1 dark gray, very fine to coarse SAND (SP) and fine to medium GRAVEL, poorly sorted, very loose, wet, no odor.
							10YR 5/3 brown, very fine to fine SAND (SP), loose to slightly compact, wet, no odor.
					0.0	CL	10YR 5/3 brown SILT grading into CLAY (CL), compact, hard, low to medium plasticity, dry to moist, no odor.
20	895						End of boring at 20' bgs.

Well/Boring Construction



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 8-10' bgs.
NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 10/2/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417713.1
Easting: 13412787.6
Casing Elevation: 915.34

Borehole Depth: 20' bgs
Surface Elevation: 916.1

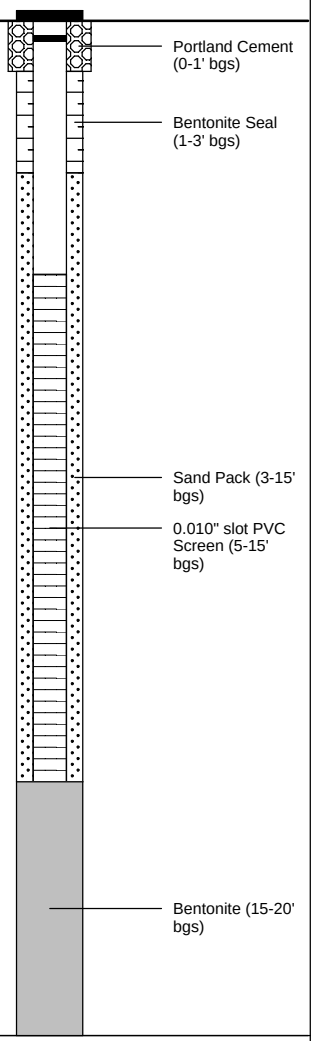
Descriptions By: Beth Lindblade

Well/Boring ID: **MW-14**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description
0	915	1	0-5'	2.5'	0.0 0.0	CL		ASPHALT and Fill Gravel, dry. 5Y 2.5/2 black SANDY CLAY (CL) mottled with some 10YR 5/2 grayish brown CLAY, some very fine to fine Sand, soft, non-plastic to low plasticity, dry to moist, no odor to slight organic odor.
5	910	2	5-10'	2.5'	0.0 0.0	SP		10YR 4/6 dark yellowish brown, fine to coarse SAND (SP) and fine to medium GRAVEL, poorly sorted, loose, dry to moist. 10YR 5/1 to 4/1 gray to dark gray, fine to medium SAND (SP), loose, dry to moist, no odor. Wet at 9' bgs.
10	905	3	10-15'	5'	0.0 0.0	SM		10YR 5/1 to 4/1 gray to dark gray, fine to coarse SAND (SP) and fine to medium GRAVEL, poorly sorted, few small Pebbles, loose, wet, no odor. 10YR 5/2 to 5/3 grayish brown to brown SILTY SAND (SM), loose to slightly compact, wet, no odor.
15	900	4	15-20'	2.25'	0.0 0.0	CL		10YR 5/2 grayish brown CLAY (CL), trace small subrounded Pebbles, medium stiff to stiff, medium plasticity to plastic, dry, no odor.
20								End of boring at 20' bgs.



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 7-9' bgs.
NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 10/3/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417606.7
Easting: 13412896.8
Casing Elevation: 916.78

Borehole Depth: 15' bgs
Surface Elevation: 917.4

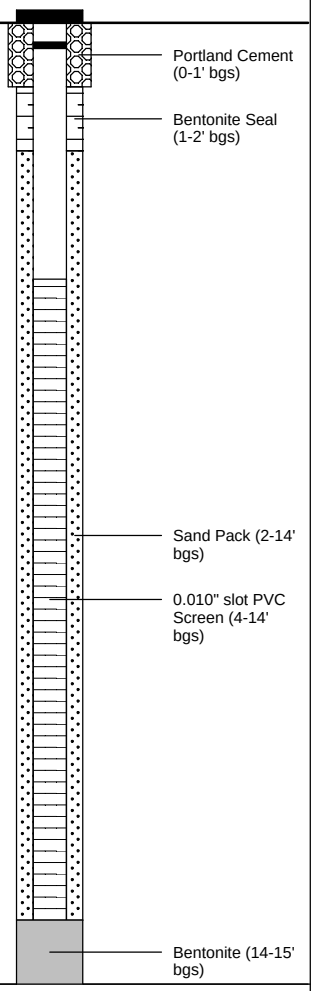
Descriptions By: Beth Lindblade

Well/Boring ID: **MW-15**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description
0 / 915	1	0-5'	4'	0.0	CL		ASPHALT and Fill Gravel, dry. 10YR 5/6 yellowish brown SANDY CLAY (CL), soft, low plasticity, moist, no odor. Grading into 2.5Y 5/3 light olive brown, strong gasoline-like odor.
5 / 910	2	5-10'	4'	503	GP		Dark brown GRAVEL (GP), loose, dry.
					SP		2.5Y 4/3 olive brown, poorly sorted SAND with Clay (SP), wet, strong odor.
				21.5	SM		2.5Y 4/3 olive brown grading into 2.5Y 5/2 grayish brown SILTY SAND (SM), moist to wet, strong odor.
10 / 905	3	10-15'	5'	236	SP		10YR 5/2 grayish brown, very fine to fine SAND (SP), little medium Sand and Silt, very loose, wet, very strong gasoline-like odor. Visible product from 10-11.5' bgs.
				1.4	CL		10YR 5/2 grayish brown CLAY (CL) with little very fine to fine Sand and Silt, trace small Pebbles, dry to moist, very slight odor.
15							End of boring at 15' bgs.



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 4.5-6.5' bgs.
NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 10/3/08
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417639.0
Easting: 13412963.5
Casing Elevation: 918.37

Borehole Depth: 15' bgs
Surface Elevation: 918.8

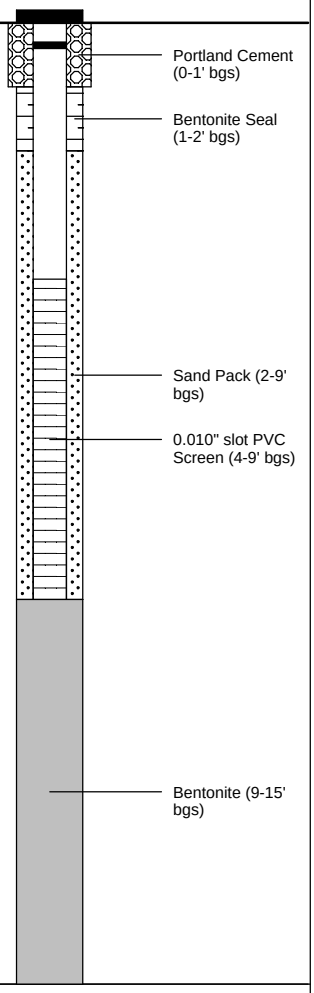
Descriptions By: Beth Linbblade

Well/Boring ID: **MW-16**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description
920 / 0							ASPHALT, dry.
	1	0-5'	2.5'	0.0	CL		10YR 5/2 to 5/3 grayish brown to brown CLAY (CL), soft to medium stiff, plastic, dry to moist, no odor. Wet from 1-1.25' bgs.
915 / 5				0.0			
	2	5-10'	5'	0.0	SP		10YR 5/3 to 5/4 brown to yellowish brown, fine to coarse SAND and GRAVEL (SP), some Clay, trace small Pebbles, very poorly sorted, loose, wet, no odor.
910 / 10				0.0			10YR 5/4 yellowish brown CLAY (CL), little Sand and Silt, few small Pebbles, soft to very soft, plsatic, moist to wet, no odor.
	3	10-15'	4.5'	0.0	CL		10YR 5/1 gray CLAY (CL), little fine to medium Sand, few small subrounded Pebbles, soft to medium stiff, medium plasticity, dry, no odor.
905 / 15				0.0			End of boring at 15' bgs.



Remarks: Soil samples collected from 0-2' bgs and 3-5' bgs.
NA = not applicable/ not available
bgs = below ground surface

ARCADIS
Infrastructure · Water · Environment · Buildings

Date Start/Finish: 10/3/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 15' bgs
Surface Elevation: NA

Descriptions By: Beth Lindblade

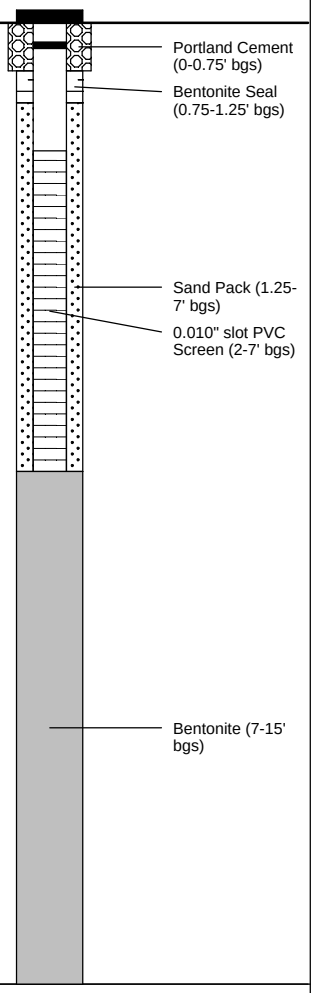
Well/Boring ID: **MW-17**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description
0	0							ASPHALT, dry.
					0.0			10YR 4/1 to 3/2 dark gray to very dark grayish brown CLAY (CL) and SAND, some angular Gravel, loose, wet, no odor.
		1	0-5'	4'		CL		10YR 5/4 yellowish brown CLAY (CL), few fine to medium Sand, soft to medium stiff, plastic, moist to wet.
					0.0			
5	-5					SP		10YR 4/2 dark grayish brown SAND and GRAVEL (SP), few Clay, loose, moist to wet, no odor.
					0.0			10YR 5/4 yellowish brown CLAY (CL), some Silt and very fine to fine Sand, little medium Sand, trace to little subrounded Pebbles and medium to coarse Gravel, stiff to hard, non-plastic, dry to moist, no odor.
		2	5-10'	5'				
					0.0			
10	-10					CL		10YR 5/1 gray CLAY (CL), stiff to hard, medium plasticity to plastic, dry, no odor.
					0.0			
		3	10-15'	5'				
					0.0			
15	-15							End of boring at 15' bgs.

Well/Boring Construction



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 10/3/07
Drilling Company: Boart Longyear
Driller's Name: Andrew Roberts
Drilling Method: Direct Push
Sampling Method: Macrocore
Rig Type: NA

Northing: 417468.4
Easting: 13413028.0
Casing Elevation: 916.43

Borehole Depth: 15' bgs
Surface Elevation: 916.9

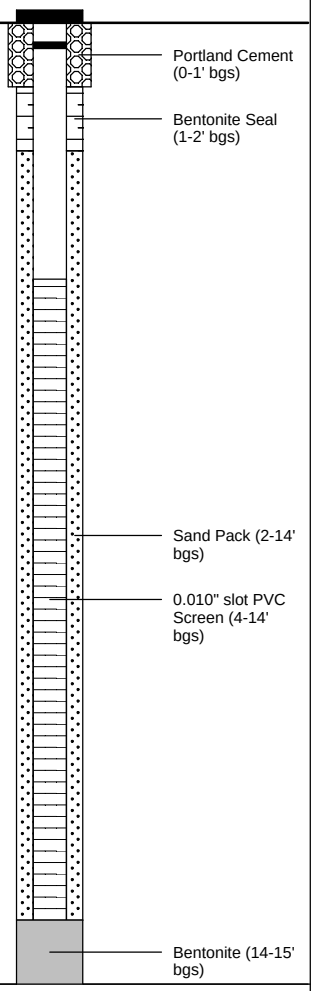
Descriptions By: Beth Lindblade

Well/Boring ID: **MW-18**

Client: General Motors Worldwide Real Estate

Location: Employee Development Center
Pontiac, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description
0							
					SP		ASPHALT, dry.
							10YR 4/6 dark yellowish brown SAND (SP) and angular to subangular GRAVEL, little Clay, very poorly sorted, loose, dry to moist.
915	1	0-5'	4'	0.0	CL		10YR 4/1 to 5/2 dark gray to grayish brown CLAY (CL), some subrounded Pebbles, hard to very hard, non-plastic, dry to moist, no odor.
				0.0			
5							10YR 4/1 dark gray mottled CLAY (CL), soft, dry to moist, no odor.
							2.5Y 4/4 olive brown CLAY (CL), some Silt, stiff to hard, non-plastic to low plasticity, dry to moist, no odor.
910	2	5-10'	5'	0.0	SM		2.5Y 5/6 light olive brown SILTY SAND (SM), compact, wet, no odor.
				0.0	CL		2.5Y 4/4 olive brown CLAY (CL), some Silt, stiff to hard, non-plastic to low plasticity, dry to moist, no odor.
10							
905	3	10-15'	5'	0.0	SP		2.5Y 5/6 to 4/4 light olive brown to olive brown, very fine to fine SAND (SP), some Silt, loose, wet, no odor.
				0.0	CL		10YR 5/1 to 5/2 gray to grayish brown CLAY (CL), few small subrounded Pebbles and medium to coarse Gravel, hard, non-plastic to low plasticity, dry, no odor.
15							End of boring at 15' bgs.



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Soil samples collected from 0-2' bgs and 5.5-7.5' bgs.
NA = not applicable/ not available
bgs = below ground surface

Date Start/Finish: 11/17/2010
Drilling Company: Terra Probe
Driller's Name: Joe Fojtik
Drilling Method: Geoprobe / Hollow Stem Auger
Sampling Method: Hand Auger & 4' Macrocore
Rig Type: 6620 DT Geoprobe

Northing: 417483.14
Easting: 13412718.40
Casing Elevation: 917.380081

Borehole Depth: 20' bgs
Surface Elevation: 917.77

Descriptions By: Amber Dmytro

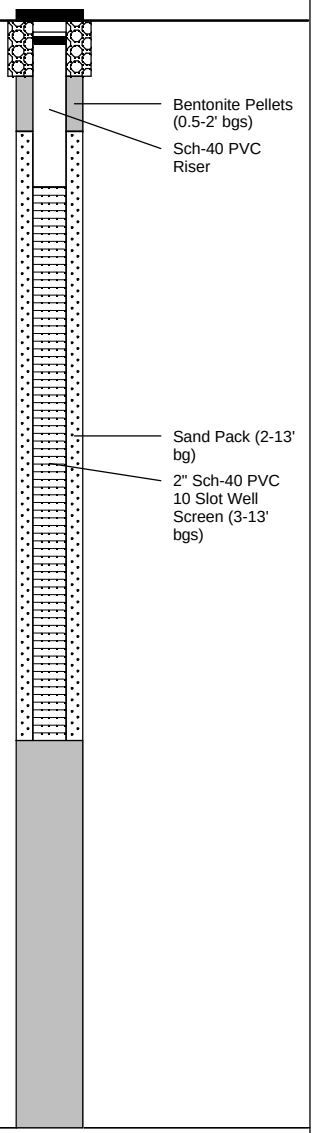
Well/Boring ID: **MW-19**

Client: Motors Liquidation Company

Location: MLC - Former Pontiac Employment Development Center

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description
0								
					0.0	FILL		ASPHALT
								FILL: Sand, gravel and brick.
					0.0			CLAY, medium plasticity, some silt, stiff to medium stiff, brown (10YR 5/3). Note: roots throughout.
	915	1	0-5'	5.0	0.0	CL		
					0.0			
					0.0	SP		SAND, very fine to fine some medium, trace coarse; poorly sorted; dry; yellowish brown (10YR 5/4).
5								Soils moist to wet at 5' bgs.
		2	5-8'	2.9	0.0			CLAY and silt, medium plasticity, little medium sand to small pebble, subangular to subrounded; stiff; dry to moist; no dilatancy; gray (10YR 5/1). Note: some wet seams, rapid dilatancy, trace very fine to fine sand seams.
	910				0.0			
		3	8-12'	3.0	0.0			
10					0.0			
					0.0	CL		
	905	4	12-16'	2.9	0.0			
15					0.0			
					0.0			
	900	5	16-20'	2.9	0.0			
20								End of boring at 20' bgs.

Well/Boring Construction



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

Soil sample MW-19-11172010 (4-5) collected for laboratory analysis
Groundwater encountered at 5' bgs.
No staining or odor detected.

Date Start/Finish: 11/17/2010
Drilling Company: Terra Probe
Driller's Name: Joe Fojtik
Drilling Method: Geoprobe / Hollow Stem Auger
Sampling Method: Hand Auger & 4' Macrocore
Rig Type: 6620 DT Geoprobe

Northing: 417546.01
Easting: 13412698.09
Casing Elevation: 917.45

Borehole Depth: 16' bgs
Surface Elevation: 917.92

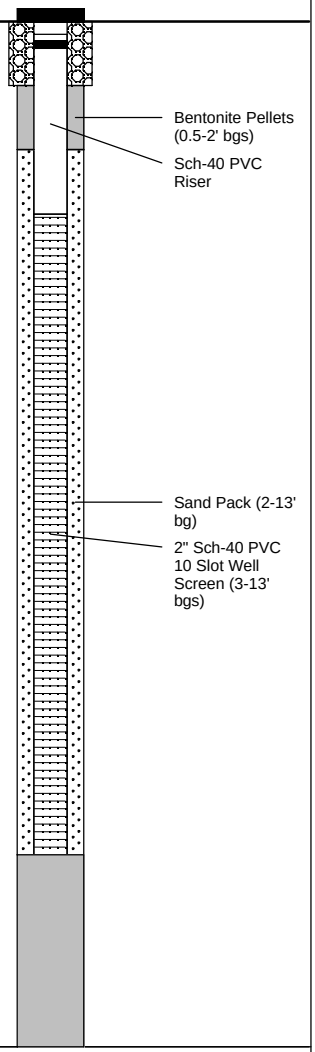
Descriptions By: Amber Dmytro

Well/Boring ID: **MW-20**

Client: Motors Liquidation Company

Location: MLC - Former Pontiac Employment Development Center

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description
0							
				0.0			ASPHALT
				0.0	FILL		FILL: Sand and brick.
915	1	0-5'	5.0	0.0	SP		SAND, very fine, some fine, some silt, trace clay; poorly sorted; dry; yellowish brown (10YR 5/6).
				0.0			
				0.0	CL		CLAY, medium plasticity, some silt, little very fine sand; dry; stiff to medium stiff; brown (10YR 5/3).
5							
	2	5-8'	2.3	0.0	SP		SAND, very fine to fine, some medium, little coarse to granule, trace small pebble, subangular to subrounded; poorly sorted; moist to wet; yellowish brown (10YR 5/4).
							CLAY, high plasticity, little silt; dry to moist; medium stiff; grayish brown (10YR 5/2).
910				0.0	SP		SAND, very fine to medium, some coarse, little very coarse to granule; poorly sorted; wet; yellowish brown (10YR 5/6).
	3	8-12'	3.3	0.0			
10							
					CL / ML		CLAY and silt, medium plasticity, little medium sand to small pebble, subangular to subrounded; dry to moist; stiff; gray (10YR 5/1). NOTE: some wet seams, rapid dilatancy.
905	4	12-16'	2.4	0.0			
15				0.0			
900							End of boring at 16' bgs.



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

Soil sample MW-20-11172010 (4.5-5.5) collected for laboratory analysis
Groundwater encountered at 5.6' bgs.
No staining or odor detected.

Date Start/Finish: 11/17/2010 **Drilling Company:** Terra Probe **Driller's Name:** Joe Fojtik **Drilling Method:** Geoprobe / Hollow Stem Auger **Sampling Method:** Hand Auger & 4' Macrocore **Rig Type:** 6620 DT Geoprobe	**Northing:** 417546.01 **Easting:** 13412698.09 **Casing Elevation:** 917.45 **Borehole Depth:** 16' bgs **Surface Elevation:** 917.92 **Descriptions By:** Amber Dmytro	**Well/Boring ID:** **MW-20** **Client:** Motors Liquidation Company **Location:** MLC - Former Pontiac Employment Development Center

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
20								

Remarks: bgs = below ground surface

Soil sample MW-20-11172010 (4.5-5.5) collected for laboratory analysis
Groundwater encountered at 5.6' bgs.
No staining or odor detected.

ARCADIS
Infrastructure · Water · Environment · Buildings

Date Start/Finish: 1/7/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Geoprobe / Hollow Stem Auger
Sampling Method: 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 20' bgs
Surface Elevation:

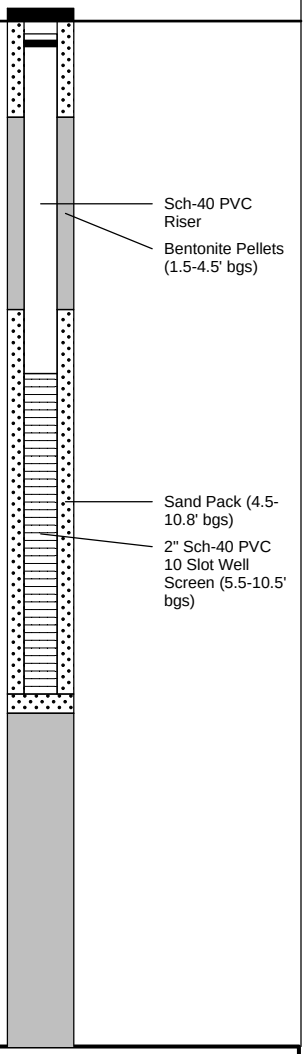
Descriptions By: Christine Snyder

Well/Boring ID: **MW-21**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description
0 / 0							
				4.0			(0-4) FILL, sand, fine to coarse, trace very coarse to granule; poorly sorted; moist; dark yellowish brown (10YR 4/6).
				6.7			
	1	0-5'	3.0	4.0			
				0.5			
				0.2			(4-5) CLAY, low plasticity, trace silt, trace medium to coarse sand; moist; meduim stiff; dark yellowish brown (10YR 4/4).
5 / -5				0.0			(5-6) SAND, medium to coarse, little clay, trace granule to medium pebble, subround to subangular; poorly sorted; wet; brown (10YR 4/3).
				0.0			(6-7) SILT, little clay, little very fine sand, trace granule to small pebble, subround to subangular; rapid dilatancy; wet; brown (10YR 5/3).
				0.0			(7-7.5) CLAY, medium plasticity, little silt, trace very fine sand, trace granule to small pebble, subround; moist; slow dilatancy; dark grayish brown (10YR 4/2).
	2	5-10'	3.5	0.0			(7.5-10.5) SAND and CLAY, very fine to fine, medium plasticity, trace granule to small pebble; wet; grayish brown (10YR 5/2).
				0.0			
				0.0			
10 / -10				0.0			(10.5-20) CLAY, medium plasticity, little silt, trace very fine to fine sand, trace granule to small pebble, subround to subangular; wet to moist; medium stiff; grayish brown (10YR 5/2).
				0.0			
	3	10-15'	4.1	0.0			
				0.0			
				0.0			
15 / -15				0.0			NOTE: silt seams from 15-17' bgs.



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

No soil samples collected for laboratory analysis
Groundwater encountered at 5' bgs.
No staining or odor detected.

Date Start/Finish: 1/7/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Geoprobe / Hollow Stem Auger
Sampling Method: 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 20' bgs
Surface Elevation:

Descriptions By: Christine Snyder

Well/Boring ID: **MW-21**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
				0.0				
	4	15-20'	3.9	0.0				
				0.0				
				0.0				
20 -20							End of boring at 20' bgs.	
25 -25								
30 -30								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

No soil samples collected for laboratory analysis
Groundwater encountered at 5' bgs.
No staining or odor detected.

Date Start/Finish: 1/7/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Geoprobe / Hollow Stem Auger
Sampling Method: 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 17' bgs
Surface Elevation:

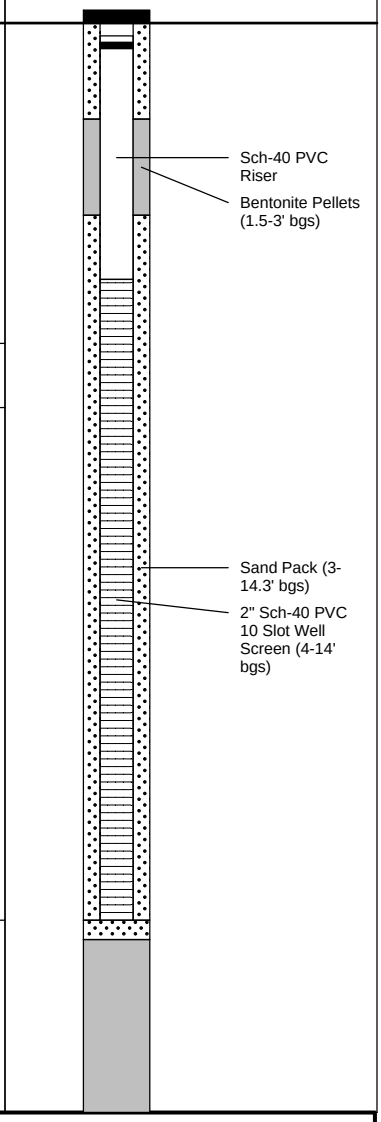
Descriptions By: Christine Snyder

Well/Boring ID: **MW-22**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description
0 / 0	1	0-5'	2.5	0.0 0.0 1.4 3.9 0.0			(0-5) FILL, sand, fine to medium, trace granule; poorly sorted; moist; dark yellowish brown (10YR 4/6).
5 / -5	2	5-10'	3.0	0.0 0.0 0.0 0.0 0.0			(5-6) CLAY, low to meduim plasticity, little silt, little very fine sand; wet; grayish brown (10YR 5/2). (6-14) SAND and SILT, very fine; poorly sorted; wet; rapid dilatancy; soft; grayish brown (10YR 5/2).
10 / -10	3	10-15'	3.1	0.0 0.0 0.0 0.0 0.0			(14-17) SILT, some very fine to fine sand, trace coarse to very coarse sand; moist; soft to stiff; grayish brown (10YR 5/2).
15 / -15	4	15-17'	0.5	1.7			Refusal at 17' bgs.



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

No soil samples collected for laboratory analysis
Groundwater encountered at 5' bgs.
No staining or odor detected.

Date Start/Finish: 1/7/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Geoprobe / Hollow Stem Auger
Sampling Method: 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 20' bgs
Surface Elevation:

Descriptions By: Christine Snyder

Well/Boring ID: **MW-23**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0								
				0.0			(0-0.2) FILL, pebble, small to very large, subangular to angular; gray (10YR 5/1).	
				0.0			(0.2-12.5) SAND, fine to medium, trace granule to small pebble; poorly sorted; dry; dark yellowish brown (10YR 4/6).	
	1	0-5'	3.0	0.0				Bentonite Pellets (1-2' bgs)
				0.0				Sch-40 PVC Riser
				0.0				
5 / -5				0.0				
				0.0				
	2	5-10'	5	0.0				Sand Pack (2-13.5' bgs)
				0.0				2" Sch-40 PVC 10 Slot Well Screen (3-13' bgs)
				0.0				
10 / -10				0.0				
				0.0				
	3	10-15'	3.9	0.0			(12.5-20) CLAY, high plasticity, little silt, trace small to large pebble, subround; moist; slow dilatancy; soft to medium stiff; grayish brown (10YR 5/2).	
				0.0				
				0.0			(12.5-20) CLAY, high plasticity, little silt, trace small to large pebble, subround; moist; slow dilatancy; soft to medium stiff; grayish brown (10YR 5/2).	
15 / -15				0.0				

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

No soil samples collected for laboratory analysis
Groundwater encountered at 5' bgs.
No staining or odor detected.

Date Start/Finish: 1/7/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Geoprobe / Hollow Stem Auger
Sampling Method: 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 20' bgs
Surface Elevation:

Descriptions By: Christine Snyder

Well/Boring ID: **MW-23**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
				0.0				
	4	15-20'	3.8	0.0				
				0.0				
				0.0				
20 -20							End of boring at 20' bgs.	
25 -25								
30 -30								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

No soil samples collected for laboratory analysis
Groundwater encountered at 5' bgs.
No staining or odor detected.

Date Start/Finish: 1/7/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Geoprobe / Hollow Stem Auger
Sampling Method: 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 10' bgs
Surface Elevation:

Descriptions By: Christine Snyder

Well/Boring ID: **MW-24S**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0								
				0.0			(0-0.2) FILL, pebble, small to very large, subangular to angular; gray (10YR 5/1).	
				0.0			(0.2-10) SAND, fine to medium, trace coarse sand to granule, subround to subangular; poorly sorted; moist; dark yellowish brown (10YR 4/6).	
	1	0-5'	3.1	0.0				Bentonite Pellets (1-3' bgs)
				0.0				Sch-40 PVC Riser
				0.0			NOTE: wet at 4.5' bgs.	
5 / -5								
				0.0				
				0.0				Sand Pack (3-10' bgs)
	2	5-10'	4.0	0.0				2" Sch-40 PVC 10 Slot Well Screen (4-9' bgs)
				0.0				
				0.0				
10 / -10							End of boring at 10' bgs.	
15 / -15								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

No soil samples collected for laboratory analysis
Groundwater encountered at 4.5' bgs.
No staining or odor detected.

Date Start/Finish: 1/7/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Geoprobe / Hollow Stem Auger
Sampling Method: 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 25' bgs
Surface Elevation:

Descriptions By: Christine Snyder

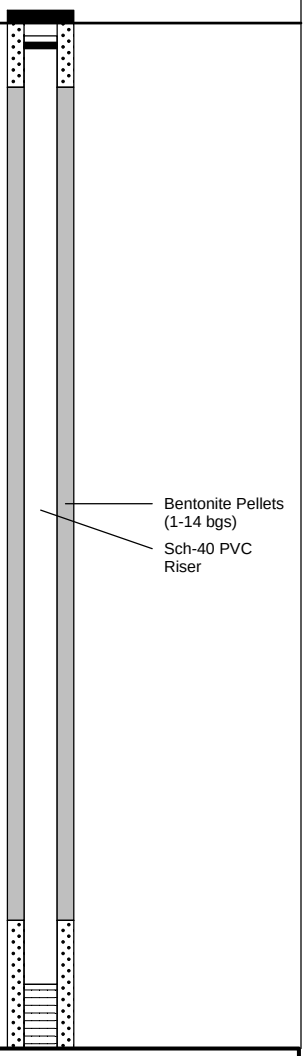
Well/Boring ID: **MW-24D**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description
0 / 0							
				0.9			(0-0.2) FILL, pebble, small to very large, subangular to angular; gray (10YR 5/1).
				0.0			(0.2-12) SAND, fine to medium, trace coarse sand to granule, subround to subangular; poorly sorted; moist; dark yellowish brown (10YR 4/6).
	1	0-5'	3.1	0.0			
				0.0			
				0.0			NOTE: wet at 4.5' bgs.
5 / -5							
				0.0			
				0.0			
	2	5-10'	4.0	0.0			
				0.0			
				0.0			
10 / -10							
				0.0			
				0.0			
	3	10-15'	3.5	910			(12-15) CLAY, low to medium plasticity, little silt, trace granule to small pebble; moist; slow dilatancy; dark grayish brown (10YR 4/2). NOTE: moderate to strong odor.
				1,920			
				485			
15 / -15							
				362			(15-20) SILT, little very fine sand; wet; rapid dilatancy; soft; grayish brown (10YR 5/2). NOTE: moderate odor.

Well/Boring Construction



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

Soil samples collected from 13-14' and 24-25' for laboratory analysis
Groundwater encountered at 4.5' bgs.
No staining detected.

Date Start/Finish: 1/7/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Geoprobe / Hollow Stem Auger
Sampling Method: 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 25' bgs
Surface Elevation:

Descriptions By: Christine Snyder

Well/Boring ID: **MW-24D**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
				50.8			(15-20) SILT, little very fine sand; wet; rapid dilatancy; soft; grayish brown (10YR 5/2). NOTE: moderate odor.	Sand Pack (14-20.3' bgs)
	4	15-20'	3.7	707				2" Sch-40 PVC 10 Slot Well Screen (15-20' bgs)
				91.8				
				534				
20 -20								
				122			(20-25) CLAY, low plasticity, some silt; moist; medium stiff; dark grayish brown (10YR 4/2).	
				153				
	5	20-25'	2.0	112				
				92.8				
				18.1				
25 -25							End of boring at 25' bgs.	
30 -30								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

Soil samples collected from 13-14' and 24-25' for laboratory analysis
Groundwater encountered at 4.5' bgs.
No staining detected.

Date Start/Finish: 1/8/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Air Knife / Geoprobe / HSA
Sampling Method: Air Knife / 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 18' bgs
Surface Elevation:

Descriptions By: Christine Snyder

Well/Boring ID: **MW-25**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0								
				NA			(0-0.7) CONCRETE.	
				0.3			(0.7-13) SAND, fine to medium, trace very coarse sand to small pebble, subround to subangular; poorly sorted; dry; dark yellowish brown (10YR 4/4).	
				0.1				Sch-40 PVC Riser
	1	0-8'	8.0	0.2				Bentonite Pellets (1.5-3' bgs)
5 / -5				0.2				
				0.2			NOTE: wet at 7' bgs.	
				0.1				
				0.1				Sand Pack (3-14.3' bgs)
				0.2				2" Sch-40 PVC 10 Slot Well Screen (4-14' bgs)
10 / -10							NOTE: some granules to small pebbles, subround to subangular from 10-11' bgs.	
	2	8-13'	3.5	0.1				
				0.1				
				0.1				
				0.0			(13-13.5) SILT, some very fine sand; soft; wet; rapid dilantancy; brown (10YR 5/3).	
				0.0			(13.5-18) CLAY, high plasticity; trace silt; medium stiff to soft; grayish brown (10YR 5/2).	
15 / -15								
	3	13-18'	3.1	0.0				

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

Soil sample collected at 6-7' for laboratory analysis
Groundwater encountered at 7' bgs.
No staining or odor detected.

Date Start/Finish: 1/8/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Air Knife / Geoprobe / HSA
Sampling Method: Air Knife / 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 18' bgs
Surface Elevation:

Descriptions By: Christine Snyder

Well/Boring ID: **MW-25**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
				0.0 0.0			(13.5-18) CLAY, high plasticity; trace silt; medium stiff to soft; grayish brown (10YR 5/2).	
20 -20 25 -25 30 -30							End of boring at 18' bgs.	

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

Soil sample collected at 6-7' for laboratory analysis
Groundwater encountered at 7' bgs.
No staining or odor detected.

Date Start/Finish: 1/8/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Air Knife / Geoprobe / HSA
Sampling Method: Air Knife / 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 18' bgs
Surface Elevation:

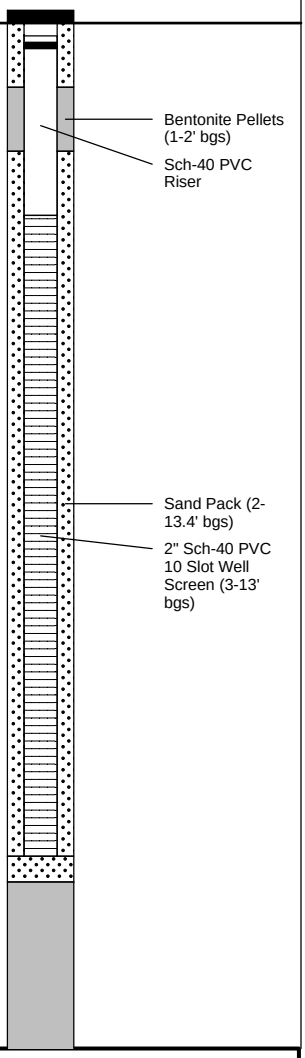
Descriptions By: Christine Snyder

Well/Boring ID: **MW-26**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0				NA			(0-0.7) CONCRETE.	
				0.3			(0.7-5) CLAY, high plasticity, trace silt; medium stiff; moist; grayish brown (10YR 5/2).	
				0.6				
	1	0-8'	8.0	0.5			NOTE: moist at 4-5' bgs.	
5 / -5				0.4			(5-10) SAND, very fine to fine, little silt; wet; rapid dilatancy; grayish brown (10YR 5/2).	
				4.6				
				6.6				
				0.0				
				0.0				
10 / -10				0.0			(10-18) CLAY, low to medium plasticity, trace small to large pebble, subround to subangular; medium stiff to stiff; moist; dark grayish brown (10YR 4/2).	
	2	8-13'	3.5	0.1				
				0.1				
				0.0				
				0.0				
15 / -15								
	3	13-18'	3.0	0.1				



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

Soil sample collected at 4-5' for laboratory analysis
Groundwater encountered at 5' bgs.
No staining or odor detected.

Date Start/Finish: 1/8/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Air Knife / Geoprobe / HSA
Sampling Method: Air Knife / 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 18' bgs
Surface Elevation:

Descriptions By: Christine Snyder

Well/Boring ID: **MW-26**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
				0.0 0.1			(10-18) CLAY, low to medium plasticity, trace small to large pebble, subround to subangular; medium stiff to stiff; moist; dark grayish brown (10YR 4/2).	
20 -20 25 -25 30 -30							End of boring at 18' bgs.	

Remarks: bgs = below ground surface

Soil sample collected at 4-5' for laboratory analysis
Groundwater encountered at 5' bgs.
No staining or odor detected.

ARCADIS
Infrastructure · Water · Environment · Buildings

Date Start/Finish: 1/8/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Air Knife / Geoprobe / HSA
Sampling Method: Air Knife / 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 23' bgs
Surface Elevation:

Descriptions By: Christine Snyder

Well/Boring ID: **MW-27**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0				NA			(0-0.8) CONCRETE.	
				0.0			(0.8-8) SAND, fine to medium, trace coarse sand to small pebble, subround to subangular; poorly sorted; dry; brown (10YR 5/3).	
				0.0				Bentonite Pellets (1-5.5' bgs)
	1	0-8'	8.0	0.0				Sch-40 PVC Riser
5 / -5				0.0				
				0.6				
				1.1				
				0.0			(8-13.5) SILT, some clay, medium plasticity, trace granule to medium pebbles, subround to subangular; soft; wet; grayish brown (10YR 5/2).	
				0.0				
10 / -10				0.0				Sand Pack (5.5-16.8' bgs)
	2	8-13'	4.6	0.0			NOTE: sand seam (0.3' thick), fine to medium at 12' bgs.	2" Sch-40 PVC 10 Slot Well Screen (6.5-16.5' bgs)
				0.0				
				0.0			(13.5-16.5) SAND, very fine to fine, little silt; well sorted; wet; rapid dilatancy; grayish brown (10YR 5/2).	
15 / -15				0.0				
	3	13-18'	3.8	0.0				

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

Soil sample collected at 6-8' for laboratory analysis
Groundwater encountered at 8' bgs.
No staining or odor detected.

Date Start/Finish: 1/8/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Air Knife / Geoprobe / HSA
Sampling Method: Air Knife / 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 23' bgs
Surface Elevation:

Descriptions By: Christine Snyder

Well/Boring ID: **MW-27**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
				0.0			(16.5-23) CLAY, low plasticity, little silt, trace granule to small pebble, subround to subangular; moist; stiff; dark grayish brown (10YR 4/2).	
				0.0				
				0.0				
20 -20				0.0				
				0.0				
	4	18-23'	4.5	0.0				
				0.0			End of boring at 23' bgs.	
25 -25								
30 -30								

Remarks: bgs = below ground surface

Soil sample collected at 6-8' for laboratory analysis
Groundwater encountered at 8' bgs.
No staining or odor detected.

ARCADIS
Infrastructure · Water · Environment · Buildings

Date Start/Finish: 1/8/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Geoprobe / HSA
Sampling Method: 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 20' bgs
Surface Elevation:

Descriptions By: Christine Snyder

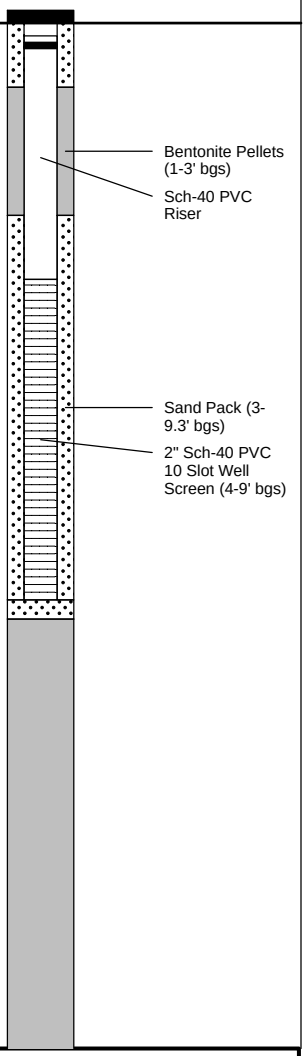
Well/Boring ID: **MW-28**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description
0 / 0				NA			(0-0.2) FILL, pebbles, small to large, subangular to angular; gray (10YR 5/1).
				0.0			(0.2-9) FILL, sand, fine to medium, trace coarse to small pebble; poorly sorted; dry; dark yellowish brown (10YR 4/6).
	1	0-5'	3.0	0.0			
				0.0			NOTE: wet at 4' bgs.
				0.0			
5 / -5				0.0			
				0.6			
	2	5-10'	3.9	1.1			
				0.0			
				0.0			(9-15) CLAY, low plasticity, some silt, trace granule to small pebble, subround to subangular; moist; medium stiff; grayish brown (10YR 5/2).
10 / -10				2.9			
				22.9			
	3	10-15'	3.1	18.8			
				11.6			
				0.3			
15 / -15				0.0			(15-20) CLAY, medium plasticity, little silt, trace granule to small pebble, subround to subangular; moist; medium stiff; grayish brown (10YR 5/2).

Well/Boring Construction



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

No soil samples collected for laboratory analysis
Groundwater encountered at 4' bgs.
No staining or odor detected.

Date Start/Finish: 1/8/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Geoprobe / HSA
Sampling Method: 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 20' bgs
Surface Elevation:

Descriptions By: Christine Snyder

Well/Boring ID: **MW-28**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
				0.0			(15-20) CLAY, medium plasticity, little silt, trace granule to small pebble, subround to subangular; moist; medium stiff; grayish brown (10YR 5/2).	
	4	15-20'	2.9	0.0				
				0.0				
20 -20				0.0				
							End of boring at 20' bgs.	
25 -25								
30 -30								

Remarks: bgs = below ground surface

No soil samples collected for laboratory analysis
Groundwater encountered at 4' bgs.
No staining or odor detected.

ARCADIS
Infrastructure · Water · Environment · Buildings

Date Start/Finish: 1/9/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Air Knife / Geoprobe / HSA
Sampling Method: Air Knife / 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 20' bgs
Surface Elevation:

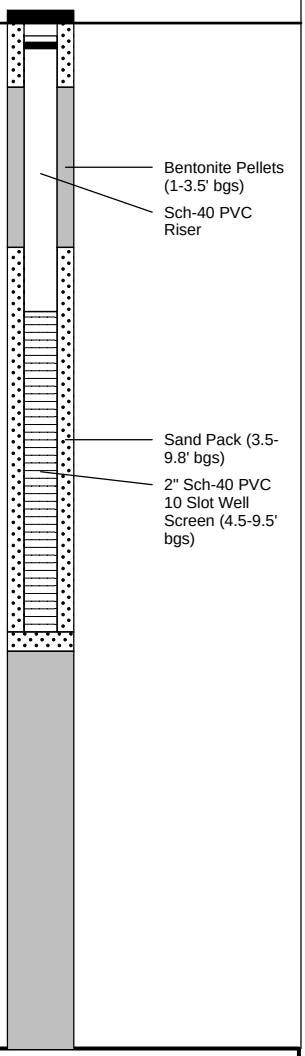
Descriptions By: Christine Snyder

Well/Boring ID: **MW-29**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description
0 / 0				NA			(0-0.5) ASPHALT.
				0.4			(0.5-2) CLAY, medium plasticity.
	1	0-6'	6.0	0.2			(2-8) SAND, very fine to fine, little silt; poorly sorted; dry; yellowish brown (10YR 5/4).
				0.4			
				0.6			
5 / -5				0.3			
				0.2			NOTE: wet at 7' bgs and trace granules, subround to subangular.
	2	6-10'	4.0	0.3			
				0.0			(8-9.5) SILT, nonplastic, trace small to medium pebble, subround to subangular, trace clay; moist; grayish brown (10YR 5/2).
				0.0			
10 / -10				0.0			(9.5-20) CLAY, medium plasticity, trace silt, trace granule to small pebble, subround to subangular; moist; dark grayish brown (10YR 4/2).
				0.0			
	3	10-15'	5.0	0.0			
				0.0			
				0.1			
15 / -15				0.6			NOTE: high plasticity and soft from 15-20' bgs.



ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

No soil samples collected for laboratory analysis
Groundwater encountered at 7' bgs.
No staining or odor detected.

Date Start/Finish: 1/9/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Air Knife / Geoprobe / HSA
Sampling Method: Air Knife / 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 20' bgs
Surface Elevation:

Descriptions By: Christine Snyder

Well/Boring ID: **MW-29**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
				0.1			(9.5-20) CLAY, medium plasticity, trace silt, trace granule to small pebble, subround to subangular; moist; dark grayish brown (10YR 4/2).	
	4	15-20'	4.1	0.0				
				0.0				
20 -20				0.0				
							End of boring at 20' bgs.	
25 -25								
30 -30								

Remarks: bgs = below ground surface

No soil samples collected for laboratory analysis
Groundwater encountered at 7' bgs.
No staining or odor detected.

ARCADIS
Infrastructure · Water · Environment · Buildings

Date Start/Finish: 1/9/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Air Knife / Geoprobe / HSA
Sampling Method: Air Knife / 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 20' bgs
Surface Elevation:

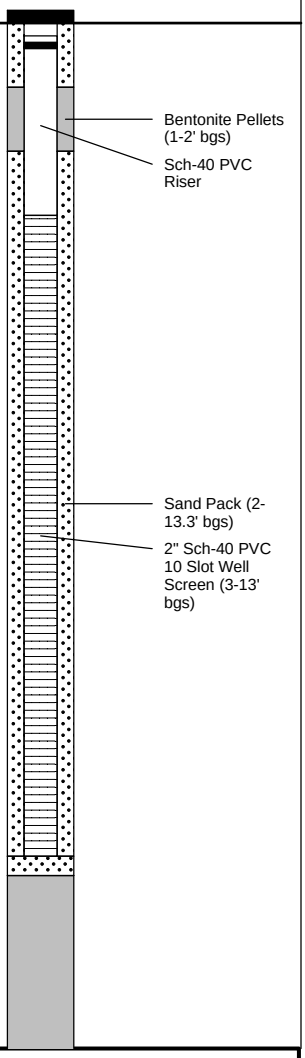
Descriptions By: Christine Snyder

Well/Boring ID: **MW-30**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0								
				0.0			(0-0.5) ASPHALT.	
				0.1			(0.5-2) CLAY, low plasticity, some silt, trace granule to small pebble, subround to subangular; moist; soft; grayish brown (10YR 5/2).	
	1	0-6'	6.0	0.0				
				0.0			NOTE: wet at 4' bgs.	
5 / -5				0.0				
				0.0			(5-8.5) SILT, some sand, very fine to fine, trace granule to medium pebble, subround to subangular; wet; rapid dilatancy; brown (10YR 5/3).	
	2	6-10'	3.4	0.0				
				0.2			(8.5-11.5) CLAY, low to medium plasticity, some silt; wet; slow to rapid dilatancy; grayish brown (10YR 5/2).	
10 / -10				0.0			NOTE: moist at 10' bgs.	
				0.0			(11.5-20) CLAY, low to medium plasticity, trace silt, trace granule to large pebble, subround to subangular; dry; stiff; dark grayish brown (10YR 5/2).	
	3	10-15'	3.2	0.0				
				0.0				
15 / -15				0.0				
				0.0				



Remarks: bgs = below ground surface

No soil samples collected for laboratory analysis
Groundwater encountered at 4' bgs.
No staining or odor detected.

ARCADIS
Infrastructure · Water · Environment · Buildings

Date Start/Finish: 1/9/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Air Knife / Geoprobe / HSA
Sampling Method: Air Knife / 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 20' bgs
Surface Elevation:

Descriptions By: Christine Snyder

Well/Boring ID: **MW-30**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
				0.0			(11.5-20) CLAY, low to medium plasticity, trace silt, trace granule to large pebble, subround to subangular; dry; stiff; dark grayish brown (10YR 5/2).	
	4	15-20'	3.0	0.0				
				0.0				
20 -20				0.0			NOTE: sand seam at 19.5' bgs.	
							End of boring at 20' bgs.	
25 -25								
30 -30								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

No soil samples collected for laboratory analysis
Groundwater encountered at 4' bgs.
No staining or odor detected.

Date Start/Finish: 1/9/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Air Knife / Geoprobe / HSA
Sampling Method: Air Knife / 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 20' bgs
Surface Elevation:

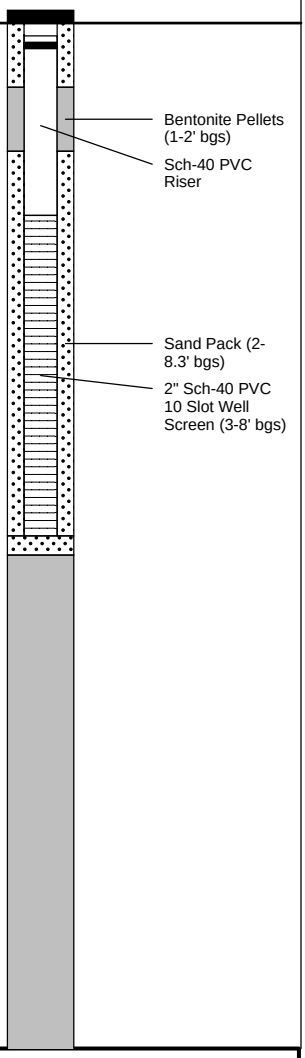
Descriptions By: Christine Snyder

Well/Boring ID: **MW-31**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description
0 / 0							
				NA			(0-0.5) ASPHALT.
				0.0			(0.5-6) CLAY, low to medium plasticity, some silt; wet; soft to very soft; brown (10YR 5/3).
				0.0			
	1	0-6'	6.0	0.0			
				0.0			
5 / -5				0.0			
				0.0			(6-9) SILT, some sand, very fine; wet; rapid dilatancy; soft; yellowish brown (10YR 5/6).
				0.0			
	2	6-10'	4.1	0.0			
				0.0			(9-12) CLAY, medium plasticity, some silt; moist; medium stiff; olive brown (2.5Y 4/3).
10 / -10				0.0			
				0.0			NOTE: silt seam (0.5' thick), wet, rapid dilatancy at 11.5' bgs.
	3	10-15'	5.0	0.0			(12-20) CLAY, low to medium plasticity, trace silt, trace granule to small pebble, subround to subangular; moist; stiff; dark grayish brown (10YR 5/2). NOTE: sand partings.
				0.0			
				0.0			
15 / -15				0.0			



Well/Boring Construction

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

No soil samples collected for laboratory analysis
Groundwater encountered at 0.5' bgs.
No staining or odor detected.

Date Start/Finish: 1/9/13
Drilling Company: Fibertec
Driller's Name: Garrett Careth
Drilling Method: Air Knife / Geoprobe / HSA
Sampling Method: Air Knife / 5' Macrocore
Rig Type: 6620 DT Geoprobe

Northing:
Easting:
Casing Elevation:

Borehole Depth: 20' bgs
Surface Elevation:

Descriptions By: Christine Snyder

Well/Boring ID: **MW-31**

Client: RACER Trust

Location: Former Pontiac Employment Development Center

DEPTH (feet bgs.) / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
				0.0			(12-20) CLAY, low to medium plasticity, trace silt, trace granule to small pebble, subround to subangular; moist; stiff; dark grayish brown (10YR 5/2). NOTE: sand partings.	
	4	15-20'	4.5	0.0				
				0.0				
20 -20				0.0				
							End of boring at 20' bgs.	
25 -25								
30 -30								

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: bgs = below ground surface

No soil samples collected for laboratory analysis
Groundwater encountered at 0.5' bgs.
No staining or odor detected.

APPENDIX B

Soil Analytical Reports

(on attached CD)

APPENDIX C

Groundwater and Storm Sewer Analytical Reports

(on attached CD)

APPENDIX D

Declaration of Restrictive Covenant (DRC)Groundwater Ordinance

LIBER 50023 PAGE 308
$21.00 MISC RECORDING
$4.00 REMONUMENTATION
$5.00 AUTOMATION
11/02/2016 05:19:46 PM RECEIPT# 131868
PAID RECORDED - Oakland County, MI
Lisa Brown, Clerk/Register of Deeds

DECLARATION OF RESTRICTIVE COVENANT

MDEQ Reference No: RC-RRD-201-16-031
MDEQ Approval Date: October 24, 2016

This Declaration of Restrictive Covenant (Restrictive Covenant) has been recorded with the Oakland County Register of Deeds to protect public health, safety, welfare and the environment pursuant to the applicable Sections of Part 201, Environmental Remediation, Michigan Compiled Laws (MCL) 324.20101, *et seq.* (Part 201) of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as amended, MCL 324.101, *et seq.*

This Restrictive Covenant is made by RACER Properties LLC, the address of which is 500 Woodward Avenue, Suite 2650, Detroit, MI 48226, the Grantor and an entity wholly owned by the Revitalizing Auto Communities Environmental Response Trust (Trust), and the current fee title holder of the Property, for the benefit of the Grantee, State of Michigan, Department of Environment Quality (MDEQ), the address of which is 525 West Allegan Street, P.O. Box 30473, Lansing, MI 48909-7973.

This Restrictive Covenant has been made to prohibit or restrict activities that could result in unacceptable exposure to environmental contamination present at the property commonly known as 65 University Drive, Pontiac, Oakland County, MI, Site IDs # 63006001 and 0-0015260, Tax Identification Numbers 14-29-428-002, 14-29-284-007, and 14-29-284-008, and legally described and illustrated in Exhibit 1 (Property or Site), and to assure that the use of the Property is consistent with the exposure assumptions used to develop the nonresidential clean-up criteria under Section 20120a(1)(b) of NREPA and the exposure control measures relied upon at the Property.

Recording of this Restrictive Covenant with the Oakland County Register of Deeds is designed to: (1) restrict land uses at the Property; (2) restrict exposures to groundwater on the Property; (3) require any future work or other activities on the Property by or for the Owner to be conducted in conformance with; i) applicable Michigan Department of Environmental Quality (MDEQ) soil relocation requirements including but not limited to MCL 324.20120c and any related administrative rules and MDEQ guidance, and ii) applicable due care obligations under MCL 324.20107a and associated administrative rules and guidance, and the Hazardous Waste Operations and Emergency Response Standard (HAZWOPER), 29 Code of Federal Regulations Part 1910; and (4) prohibit structures from being constructed on the Property in the area of the

Property illustrated in Exhibit 2, unless the Owner has considered the potential for vapor intrusion, if any, and has taken steps to address such potential, if necessary, as may be required by MDEQ.

The land or resource use restrictions contained in this Restrictive Covenant are based upon information available at the time this document was recorded. Future changes in the environmental condition of the Property or changes in the cleanup criteria developed under Part 201; the discovery of environmental conditions at the Property that were not known at the time this document was recorded; or use of the Property in a manner inconsistent with the restrictions described herein, may result in this Restrictive Covenant not being protective of public health, safety, and welfare, and the environment. Additional restrictions may become necessary.

Exhibit 1 provides a legal description and depict the areas subject to land use, resource use, or soil vapor management restrictions, and the areas subject to notification of potential presence of residual non-aqueous phase liquid (LNAPL) as specified in this Restrictive Covenant. Exhibit 2 depicts and describes the portion of the Property that is subject to soil vapor management restrictions.

MDEQ recommends that prospective purchasers or users of the Property undertake appropriate due diligence prior to acquiring or using this Property, and undertake appropriate actions to comply with the due care requirements of Section 20107a of NREPA.

Definitions

"MDEQ" means the Michigan Department of Environmental Quality, its successor entities, and those persons or entities acting on its behalf.

"Owner" means at any given time the then current fee title holder(s) of the Property or any portion thereof, including the fee title holder's lessees and those persons or entities authorized to act on its behalf. The title to the Property is currently held by RACER Properties LLC, an entity wholly owned by the Trust (RACER Properties and the Trust are collectively referred to herein as "RACER").

"RACER" means the Revitalizing Auto Communities Environmental Response Trust (Trust), which on March 31, 2011 was established and assumed the rights, title, and interest of Motors Liquidation Company in and to the Property pursuant to an Environmental Response Trust Consent Decree and Settlement Agreement (Settlement Agreement) entered by the U.S. Bankruptcy Court for the Southern District of New York on March 29, 2011, in the case of *In re Motors Liquidation Company*, et al., Debtors, Case No. 09-50026 (REG), among the Debtors, the United States of America, certain states including the State of Michigan, the Saint Regis Mohawk Tribe, and EPLET, LLC, (not individually but solely in its representative capacity as Administrative Trustee of the Trust) and RACER Properties LLC.

All other terms used in this document which are defined in Part 3 Definitions, Part 201 of NREPA, or Part 201 Rules under the Michigan Administrative Code (MAC), shall have the same meaning in this document as in those statutes and rules as on the date this Restrictive Covenant is made.

Summary of Response Activities

Several environmental assessments of the Property have been conducted between 1992 and 2015 to identify and document environmental conditions and the presence at the Property of substances potentially posing an adverse environmental impact as a result of past operations there. Subsurface investigations have been completed to delineate the nature and extent of impacts in soil and groundwater as a result of former underground storage tank (UST) systems and automobile service activities previously conducted at the Site.

Soils were found to contain select volatile organic compounds (VOCs) at concentrations exceeding their corresponding MDEQ criteria for Drinking Water Protection, Nonresidential Soil Volatilization to Indoor Air and Direct Contact. Groundwater concentrations were found to contain select VOCs at concentrations exceeding the corresponding MDEQ criteria for Drinking Water and Nonresidential Volatilization to Indoor Air. The horizontal and vertical extent of these conditions were delineated in 2012. In May 2012, excavation activities were conducted at the Site. The excavation was approximately 14,480 square feet and included approximately 9,250 tons of impacted soil excavated to depths ranging from nine (9) to seventeen (17) feet below ground surface. The excavation was backfilled with clean aggregate material imported from a local aggregate supplier. Additional monitoring wells were installed in the excavation area to assess post-soil remediation groundwater quality. Excavation confirmation samples and post-excavation groundwater sampling results indicate remaining VOC concentrations exceed Nonresidential Soil Drinking Water Protection and Volatilization to Indoor Air criteria and groundwater concentrations of select VOCs that exceed the Nonresidential Drinking Water criteria (Exhibit 3). The results of the assessments described above also indicate the collective presence of select VOCs in soil and groundwater at select locations of the Property at concentrations that exceed the corresponding nonresidential soil and groundwater vapor screening values presented in MDEQ's May 2013, *Guidance Document For The Vapor Intrusion Pathway, DEQ Policy and Procedure Number: 09-017*. Additionally, residual VOC contaminants present in soil at two locations on the Property (refer to Exhibit 4) indicate the potential for the presence of residual Light Non-Aqueous Phase Liquid (LNAPL), as defined in MDEQ's June 2014, Non-Aqueous Phase Liquid (NAPL) Characterization, Remediation, and Management for Petroleum Releases, RRD Resource Materials-25-2014-01. The potential residual LNAPL present is gasoline. Contaminants present in these two areas (referred to as Potential Residual LNAPL Areas 1 and 2) were properly characterized and assessed, and will remain in place at the Property. The potential for the presence of residual LNAPL exists at approximately six (6) to fourteen (14) feet below ground surface at Area 1 and approximately thirteen (13) to eighteen (18) feet below ground surface at Area 2. The restrictions provided for in this Restrictive Covenant serve to prevent unacceptable exposure to hazardous substances as a result of conditions created by the potential presence of residual LNAPL soil contaminant concentrations that exceed the unrestricted nonresidential criteria under Section 20120a(1)(a) of NREPA.

At the time this Restrictive Covenant was recorded, RACER was working with MDEQ to obtain appropriate approval pursuant to the requirements of Section 20120b(3) of NREPA.

Copies of all documents related to this matter are located in the MDEQ Southeast Michigan District Office.

NOW THEREFORE,

Declaration of Land Use or Resource Use Restrictions

RACER hereby declares and covenants that the Property shall be subject to the following restrictions and conditions and intends that said restrictions and covenants shall run with the land, and may be enforced in perpetuity against the Owner by the following entities: (1) MDEQ; and (2) RACER or its successor.

1. Land Use Prohibitions. The Owner shall refrain from or otherwise prohibit all uses of the Property that are not compatible with nonresidential land use category under MCL 324.20120a(1)(b) and generally described in the Description of Allowable Uses, attached hereto as Exhibit 5.

   Part 201 cleanup criteria for land use-based response activities are located in the Government Documents Section of the State of Michigan Library, MCL 324.201201, *et seq.*, effective December 31, 2013, and MAC Rules 299.5701 – 299.5727, also effective December 31, 2013, or as amended.

2. Activities Prohibited. The Owner shall refrain from or otherwise prohibit activities on the Property that may result in exposures above the nonresidential land use category. These prohibited activities include:

   a. Installation or use of drinking water or irrigation wells on the Property.

   b. Installation or use of groundwater extraction wells on the Property except for wells and devices that are part of an MDEQ-approved response activity and for short-term dewatering for construction purposes, provided the dewatering, including management and disposal of the groundwater, is conducted in accordance with all applicable environmental laws and does not cause or result in a new release, exacerbation of any pre-existing environmental condition, or any other violation of environmental laws.

   c. Relocation of contaminated soils on the Property except as provided for under Part 201, Section 20120c, MCL 324.20120c.

   d. "Treatment", "storage", "disposal", or "release" of any Hazardous Substances, on, at, or below the Property, in a manner that would require a permit under the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901 *et seq.* (RCRA), or equivalent State law, except pursuant to a plan or permit approved in writing by MDEQ.

e. Removal of any slabs, pavement or other impervious surface on the Property, unless the Owner takes responsibility for any and all obligations under environmental laws arising from any such removal, alteration or disturbance, whether or not caused by, arising from or related to, an environmental condition.

f. The Owner shall manage contaminated soils, media and/or debris (if any) and all other soils located at the Property whether encountered on the surface or during below grade work in accordance with any applicable requirements of Part 111, Subtitle C of RCRA, the administrative rules promulgated pursuant to Part 111 and RCRA, and all other relevant State and Federal laws, including but not limited to MCL 324.20120c, or other then applicable laws.

g. Building or occupying any structure in the Soil Vapor Management Area, which is described and illustrated in Exhibit 2, without first completing one of the following: Option 1) evaluate and determine, in accordance with applicable environmental laws, rules or regulations and to the satisfaction of MDEQ that no unacceptable vapor intrusion risks to human health exist in any existing or newly constructed site buildings; or Option 2) with the concurrence from MDEQ install, operate, and maintain a vapor barrier and/or mitigation system designed to eliminate the potential for subsurface vapor phase hazardous substances to migrate into any building at concentrations greater than applicable criteria. This prohibition does not apply to short-term occupancy of a building for purposes of construction, renovation, repair, or other short-term activities as long as adequate health and safety precautions are employed during these activities, and they are performed in compliance with Section 20107a of NREPA.

If Option 2 above is selected, the Owner shall install and thereafter maintain a vapor barrier and/or install and thereafter operate and maintain a vapor intrusion mitigation system in accordance with applicable standards and criteria at the time, for the purpose of mitigating the potential intrusion of soil vapor below any human-occupied building constructed on the property after the date of this Restrictive Covenant, until it is determined by MDEQ that a vapor barrier or mitigation system is no longer necessary in accordance with Option 1, above.

3. Contaminated Soil Management. The Owner shall manage contaminated soils, media and/or debris (if any) and all other soils located at the Property whether encountered on the surface or during below grade work in accordance with any applicable requirements of Part 111, Subtitle C of RCRA, the administrative rules promulgated pursuant to Part 111 and RCRA, and all other relevant State and Federal laws, including but not limited to MCL 324.20120c.

4. Access. The Owner shall grant MDEQ and RACER the right to enter the Property at reasonable times (1) to conduct and complete any and all response activities, together with any reasonably needed ingress and egress to the Property, and (2) for the purpose of determining and monitoring compliance with this Restrictive Covenant, including the

right to take samples and, inspect any records relating thereto, and to perform any actions necessary to maintain compliance with Part 111 and Part 201.

5. Notices. Any notice, demand, request, consent, approval, or communication that is required to be made or obtained under this Restrictive Covenant shall be made in writing and shall: include a statement that the notice is being made pursuant to the requirements of this Restrictive Covenant; include the MDEQ Reference Number: RC-RRD-201-16-031; and be served either personally, or sent via first class mail, postage prepaid, as follows:

For MDEQ:

Remediation and Redevelopment Division Chief
Michigan Department of Environmental Quality
P.O. Box 30241
Lansing, MI 48909-7926

For RACER:

RACER Trust
Attn: Michigan Clean-up Manager
500 Woodward Avenue, Suite 2650
Detroit, MI 48226

6. Conveyance of Property Interest. The Owner shall provide notice to MDEQ and RACER at the addresses in Paragraph 5, above, of the Owner's intent to transfer any interest in the Property at least fourteen (14) days prior to consummating the conveyance. A conveyance of title, easement, or other interest in the Property shall not be consummated by the Owner without adequate and complete provision for compliance with the terms and conditions of this Restrictive Covenant and the applicable provisions of MCL 324.20116. The Owner shall include in any instrument conveying any interest in any portion of the Property, including, but not limited to, deeds, leases, and mortgages, a notice which is in substantially the following form:

NOTICE: THE INTEREST CONVEYED HEREBY IS SUBJECT TO A DECLARATION OF RESTRICTIVE COVENANT DATED _____ [*month, day, year*], AND RECORDED WITH THE OAKLAND COUNTY REGISTER OF DEEDS, LIBER _____, PAGE _____.

A copy of this Restrictive Covenant shall be provided to all future owners, heirs, successors, lessees, easement holders, assigns, and transferees by the person transferring the interest.

7. Term. This Restrictive Covenant shall run with the Property and shall be binding on the Owner, and all current and future successors, lessees, easement holders, their assigns, and their authorized agents, employees, or persons acting under their direction and

control. This Restrictive Covenant may only be modified or rescinded with the written approval of MDEQ and RACER.

8. Modification/ Release/Rescission. The Owner may request in writing to MDEQ and RACER, at the addresses provided in Paragraph 5, above, modifications to, or release or rescission of, this Restrictive Covenant. This Restrictive Covenant may be modified, released or rescinded only with the written approval of MDEQ and RACER. Any approved modification to, or release or rescission of, this Restrictive Covenant shall be filed with the Oakland County Registrar of Deeds by the Owner and a certified copy of such modification or release shall be returned to MDEQ and RACER at the addresses provided in Paragraph 5.

   The Owner may request in writing to MDEQ and RACER a modification of this Restrictive Covenant to provide for a residential use for a portion of the Property. Such request shall include an evaluation and demonstration, in accordance with applicable environmental laws, rules, or regulations at the time the request is made, that residential use of the Property does not present any unacceptable risks to human health. This Restrictive Covenant may be modified to provide for a residential use if such use is: approved in writing by MDEQ and RACER; implemented in full compliance with the technical specifications established as a condition of, and incorporated in, such approval; and memorialized in an amended Restrictive Covenant recorded per this Paragraph 8.

9. Enforcement. RACER is entitled to enforce the restrictions and covenants in this Restrictive Covenant by specific performance or other legal action in a court of competent jurisdiction against the current and subsequent Owners of all or part of the Property. MDEQ is entitled to enforce the restrictions and covenants in this Restrictive Covenant by specific performance or other legal action in a court of competent jurisdiction. All remedies available hereunder shall be in addition to any and all other remedies at law or equity.

10. Severability. If any provision of this Restrictive Covenant is held to be invalid by a court of competent jurisdiction, the invalidity of such provision shall not affect the validity of any other provisions of this Restrictive Covenant and all other provisions shall continue to remain in full force and effect.

11. Limitation on RACER's Liability. The liability of RACER and the Administrative Trustee under this Restrictive Covenant is limited by the terms and conditions of the Settlement Agreement, which are incorporated herein by reference.

12. Compliance with this Restrictive Covenant and Applicable Due Care Obligations. The Owner shall at all times comply with the conditions and restrictions of this Restrictive Covenant and the applicable Due Care obligations under Section 107a of NREPA, MCL 324.20107a, under the applicable Michigan administrative rules R299.51003, and under the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601, *et seq.* The Owner agrees to maintain records of its activities to comply with this Restrictive Covenant and applicable Due Care obligations, and timely supply copies of any records documenting such compliance upon request from MDEQ or RACER.

13. Authority to Execute Restrictive Covenant. The undersigned person executing this Restrictive Covenant represents and certifies that he is duly authorized and has been empowered to execute and deliver this Restrictive Covenant.

14. Miscellaneous.

a) Controlling Law. The interpretation and performance of this Restrictive Covenant shall be governed by the laws of the United States as to the obligations referred to in the Settlement Agreement and by the laws and regulations of the State of Michigan for all other purposes hereunder (without reference to choice of laws principles thereof). The right to enforce the conditions and restrictions in this Restrictive Covenant are in addition to other rights and remedies that may be available, including, but not limited to, administrative and judicial remedies under CERCLA or Part 201 of NREPA.

b) Liberal Construction. Any general rule of construction to the contrary notwithstanding, this Restrictive Covenant shall be liberally construed to affect the purpose of this Restrictive Covenant, and the policy and purpose of NREPA and the land use restrictions and prospective use limitations required by Part 201. If any provision of this Restrictive Covenant is found to be ambiguous, an interpretation consistent with the purpose of this Restrictive Covenant that would render the provision valid shall be favored over any interpretation that would render it invalid.

c) Entire Agreement. This Restrictive Covenant and its attachments and appendices supersedes all prior discussions, negotiations, understandings, or agreements relating specifically to this Restrictive Covenant, all of which are merged herein.

[signature page follows]

IN WITNESS WHEREOF, RACER Properties LLC has caused this Restrictive Covenant, RC-RRD-201-16-031, to be executed on this 31st day of October, 2016.

RACER PROPERTIES LLC

By: Revitalizing Auto Communities Environmental Response Trust, Sole Member of RACER Properties LLC

By: EPLET, LLC, acting solely in its capacity as Administrative Trustee of Revitalizing Auto Communities Environmental Response Trust

By: _____
ELLIOTT P. LAWS, not individually, but acting solely in his capacity as Managing Member of EPLET, LLC

* * * * * * *

STATE OF Michigan)
) ss.
COUNTY OF Wayne)

The foregoing instrument was acknowledged before me this 31st day of October, 2016, by ELLIOTT P. LAWS, not individually, but acting solely in his capacity as Managing Member of EPLET, LLC, a Delaware limited liability company, acting solely in its capacity as Administrative Trustee of Revitalizing Auto Communities Environmental Response Trust, a New York trust, as Sole Member of RACER Properties LLC, a Delaware limited liability company, on behalf of said limited liability company and said trust.

_____
Notary Public Signature

TRACIE L. NICHOLS
Notary Public, State of Michigan
County of Oakland
My Commission Expires 03-19-2017
Acting in the County of Wayne

Name of Notary Public Tracie L. Nichols
Notary Public, State of Michigan
County of Oakland
My Commission Expires: 3/19/17
Acting in the County of Wayne

This document is exempt from state and county transfer taxes pursuant MCL 207.505(a) and MCL 207.526(a).

Prepared by/Return to:
Carl Garvey, General Counsel
RACER Trust
500 Woodward Avenue, Suite 2650
Detroit, MI 48226

EXHIBIT 1

LEGAL DESCRIPTION AND ILLUSTRATION OF PROPERTY BOUNDARY

All those tracts or parcels of land lying and being in the eastern quarter of Section 29, Township 3 North, Range 10 East, City of Pontiac, County of Oakland, State of Michigan, more particularly described as follows, to wit:

That part of Lot 2 which lies West of U.S. Highway 10 (Wide Track Drive East) as opened, also all of Lots 3 through 7 inclusive, all of Lots 16 and 17, also Lots 8 through 15 inclusive except the West 10 feet of said lots as taken for the widening of Mill Street, all being part of "Assessor's Plat No. 121, a replat of part of Chamberlin's Addition, City of Pontiac, Oakland County, Michigan," as recorded in Liber 53 of Plats on Page 41, Oakland County Records. Being more particularly described as follows:

Beginning at the Northeasterly corner of Mill Street (50 feet more or less in width) as widened and University Drive (formerly Mt. Clemens Street), said point of beginning being distant 10.24 feet Easterly as measured along the Southerly line of Lot 8 of said "Assessor's Plat No. 121," (L. 53, P. 41 Plats) from the Southwesterly corner of said Lot 8; running thence from said point of beginning North 15 degrees 22 minutes 50 seconds West along the Easterly line of said Mill Street as widened, through the interior of Lots 8 through 15 inclusive of said subdivision, said line being 10.00 feet Easterly of, as measured as right angles to and parallel to the Westerly line of said lots as platted, a measured distance of 380.89 feet (recorded as 381.04 feet per street widening) to an angle point on said Mill Street, said angle point being located in a North line of said Lot 15, and being distant 10.96 feet Easterly, as measured along the North line of said Lot 15, from the Northwesterly corner thereof; thence North 50 degrees 27 minutes 10 seconds East along Southerly line of said Mill Street (40 feet more or less in width at this point), said line being also the Northerly line of part of said Lot 15 and all of Lots 16 and 17 of said subdivision, a measured distance of 170.42 feet (recorded as 170.59 feet) to the Northeasterly corner of said Lot 17; thence South 64 degrees 20 minutes 26 seconds East along the Northeasterly line of said Lot 17, a measured distance of 80.57 feet (recorded as 80.70 feet) to the Southeasterly corner thereof; thence North 30 degrees 53 minutes 44 seconds East along the rear of part of Lot 4, Lot 3 and part of Lot 2 of said subdivision, a distance of 160.00 feet to a point in the Westerly line of U.S. Highway 10 (Wide Track Drive East) as opened through Lots 1 and 2 of said subdivision; thence along the Westerly right-of-way line of said U.S. Highway 10, by the following courses and distances: Southerly along the arc of a curve which is concave to the West, radius 553.11 feet, an arc distance of 162.95 feet to the end of said curve (chord bears South 36 degrees 17 minutes 12 seconds East 162.36 feet); thence South 26 degrees 51 minutes 04 seconds East a distance of 18.22 feet to a point; thence North 63 degrees 08 minutes 56 seconds East a distance of 5.00 feet to a point; thence South 26 degrees 51 minutes 04 seconds East a distance of 221.00 feet to a point; thence South 21 degrees 20 minutes 37 seconds West a distance of 39.75 feet to a point of intersection of said Westerly line of U.S. Highway 10 as opened, with the Northerly line University Drive, said point being distant 40 feet Westerly as measured along the Southerly line of said Lot 2 from the Southeasterly corner thereof; thence South 62 degrees 17 minutes 40 seconds West along the Northerly line of said University Drive, said line being also the Southerly line of part of Lot 2, Lots 3

through 7 inclusive and part of Lot 8, a measured distance of 426.34 feet (recorded as 426.39 feet) to the point of beginning.

Subject to all recorded easements and rights-of-way.

Commonly known as 65 University Drive, Pontiac, Michigan 48342 and comprising tax parcels 14-29-428-002, 14-29-284-007, and 14-29-284-008.

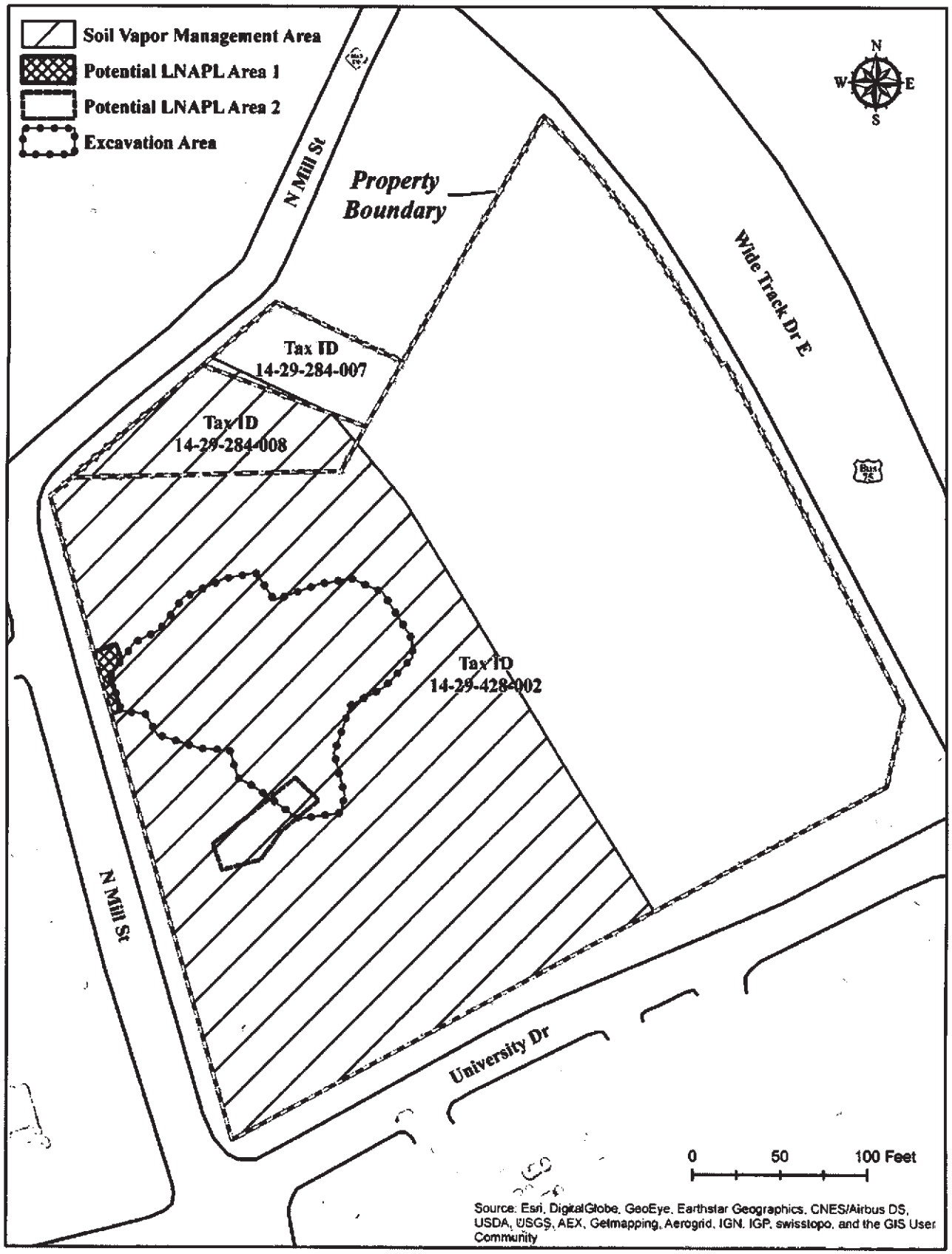

Soil Vapor Management Area
Potential LNAPL Area 1
Potential LNAPL Area 2
Excavation Area
N
W
E
S
N Mill St
Property Boundary
Wide Track Dr E
Tax ID
14-29-284-007
Tax ID
14-29-284-008
Tax ID
14-29-428-002
N Mill St
University Dr
0
50
100 Feet
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

EXHIBIT 2

ILLUSTRATION
OF SOIL VAPOR MANAGEMENT AREA

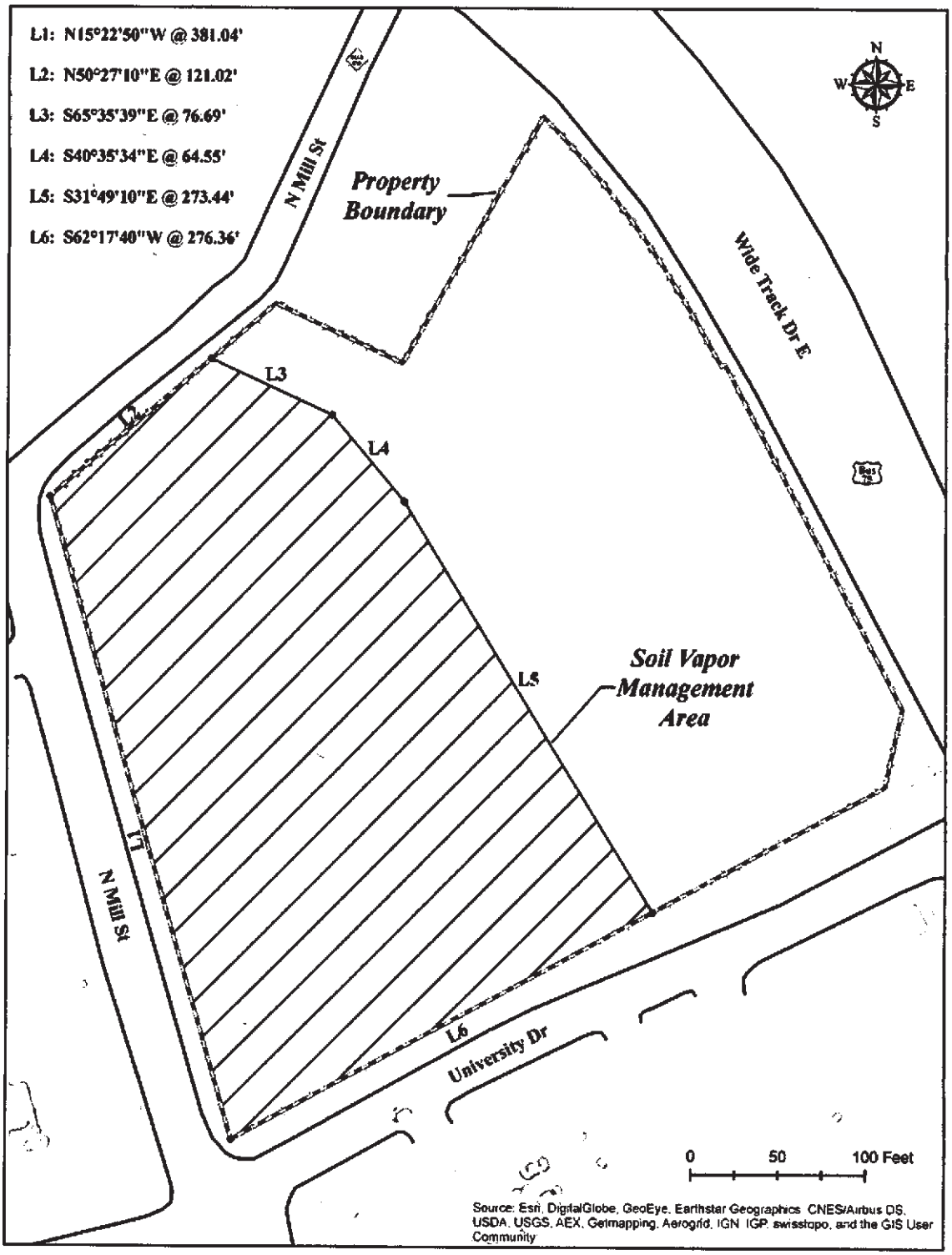


EXHIBIT 3

HAZARDOUS SUBSTANCES ABOVE CRITERIA IN SOILS AND GROUNDWATER

Media	Substance	Criteria Exceeded
Soil	1,2-Dichloroethane	NRDWP
	1,2-Dichloropropane	NRDWP
	1,2,4-Trimethylbenzene	NRDWP, GSIP
	1,3,5-Trimethylbenzene	NRDWP, GSIP
	Benzene	NRDWP, GSIP, NRSVII
	Ethylbenzene	NRDWP, GSIP
	n-Propylbenzene	NRDWP
	Naphthalene	GSIP
	Tetrachloroethene	NRDWP
	Toluene	NRDWP, GSIP
	Trichloroethene	NRDWP, NRSVII
	Vinyl Chloride	NRDWP, GSIP
	Xylenes, Total	NRDWP, GSIP

Media	Substance	Criteria Exceeded
Groundwater	2-Methylnaphthalene	GSI
	Naphthalene	GSI
	1,2,4-Trimethylbenzene	NRDW, GSI
	1,3,5-Trimethylbenzene	NRDW, GSI
	Benzene	NRDW, GSI
	Ethylbenzene	NRDW, GSI
	Toluene	NRDW, GSI
	Trichloroethene	NRDW
	Xylenes, Total	NRDW, GSI

SOIL
NRDWP- Nonresidential Drinking Water Protection
GSIP – Groundwater Surface Water Interface Protection
NRSVII – Nonresidential Soil Volatilization to Indoor Inhalation Criteria

GROUNDWATER
NRDW – Nonresidential Drinking Water Criteria
GSI – Groundwater Surface Water Interface Criteria

1 – MDEQ Part 201Generic Cleanup Criteria – Nonresidential Soil and Groundwater Criteria, Table 1 and Table 2, dated December 30, 2013.

EXHIBIT 4

ILLUSTRATION OF POTENTIAL RESIDUAL LNAPL AREAS

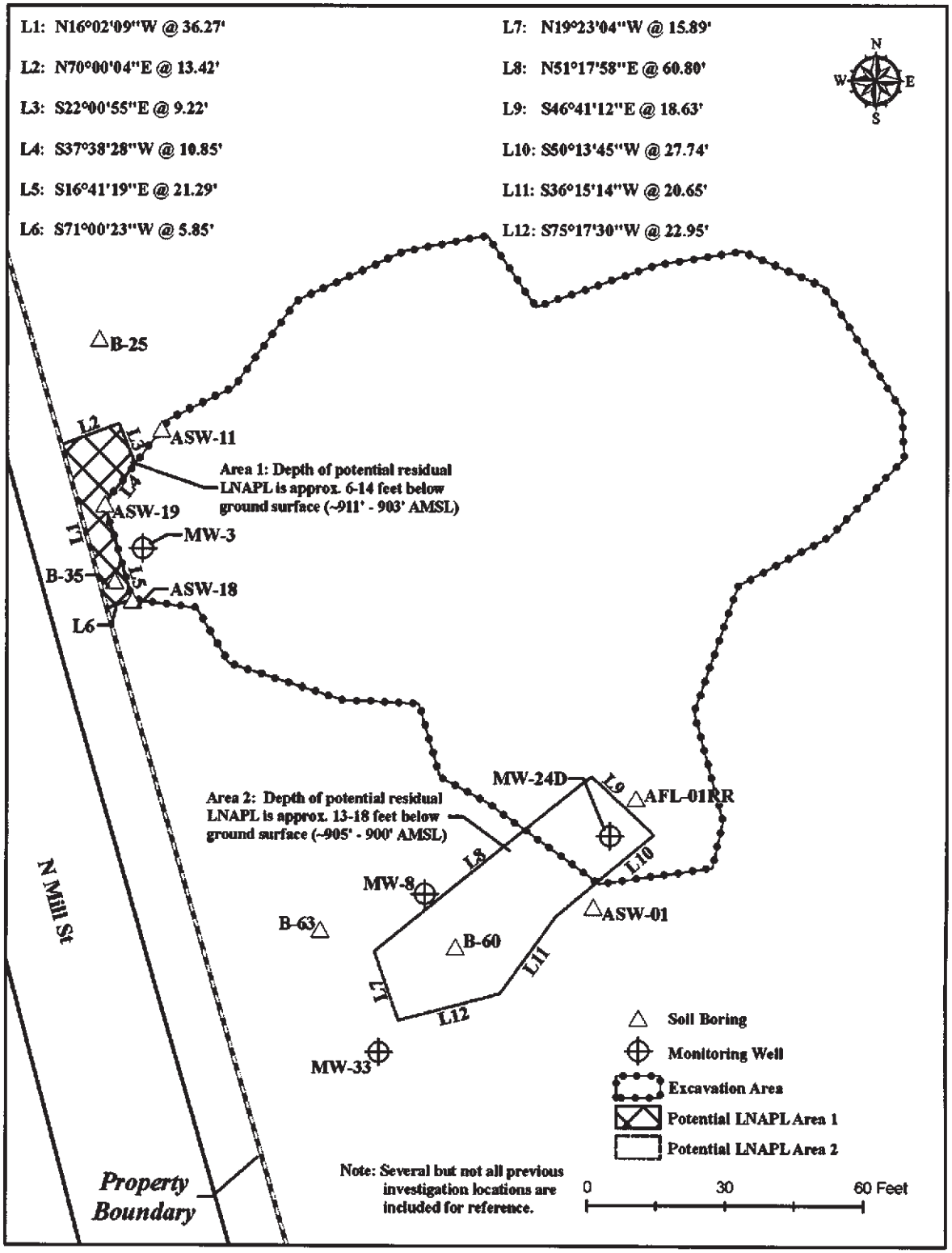


EXHIBIT 5

DESCRIPTION OF ALLOWABLE USES

Nonresidential Land Use: This land use is characterized by any use which is not residential in nature and is primarily characterized by industrial and commercial uses. Industrial uses typically involve manufacturing operations engaged in processing and manufacturing of materials or products. Other examples of industrial uses are utility companies, industrial research and development, and petroleum bulk storage. Commercial uses include any business or income-producing use such as commercial warehouses, lumber yards, retail gas stations, auto dealerships and service stations, as well as office buildings, banks, and medical/dental offices (not including hospitals). Commercial uses also include retail businesses whose principal activity is the sale of food or merchandise within an enclosed building and personal service establishments which perform services indoors such as health clubs, barber/beauty salons, photographic studios, etc.

Any residential use is specifically prohibited from the nonresidential land use category. This would include the primary use of the property for human habitation and includes structures such as single family dwellings, multiple family structures, mobile homes, condominiums, and apartment buildings. Residential use is also characterized by any use which is intended to house, educate, or provide care for children, the elderly, the infirm, or other sensitive populations, and therefore could include day care centers, educational facilities, hospitals, elder care facilities, and nursing homes. The use of any accessory building or portion of an existing building as a dwelling unit permitted for a proprietor or storekeeper and their families, located in the same building as their place of occupation, or for a watchman or caretaker is also prohibited. Any authority that allows for residential use of the Property as a legal non-conforming use is also restricted per the prohibitions contained in this restrictive covenant.

APPENDIX E

City of Pontiac Groundwater Ordinance Number 2311

CITY OF PONTIAC
OFFICE OF THE EMERGENCY MANAGER
LOUIS H. SCHIMMEL

47450 Woodward Avenue
Pontiac, Michigan 48342
Telephone: (248) 758-3133
Fax: (248) 758-3292

Dated: August 16, 2013

ORDER NO. S-326

RE: **Adopt ordinance to amend the Code of Ordinances of the City of Pontiac by amending Chapter 58, Article VIII to regulate the use of groundwater in certain areas of the City.**

TO: Sherikia Hawkins, City Clerk
Charles Smith, Project Manager, Wade Trim

The Local Financial Stability and Choice Act, 2012 PA 436, MCL 141.1541 to 141.1575 ("Act 436") in Section 10(1) states that "[a]n emergency manager shall issue orders to the appropriate local elected and appointed officials and employees, agents, and contractors of the local government the orders the emergency manager considers necessary to accomplish the purposes of [the] act, including, but not limited to, orders for the timely and satisfactory implementation of a financial and operating plan... or to take actions, or refrain from taking actions, to enable the orderly accomplishment of the financial and operating plan." Any such orders are binding on the local elected and appointed officials and employees, agents, and contractors of the local government to whom they are issued.

Section 12(1) of the Act provides that "[a]n emergency manager may take 1 or more of the following additional actions with respect to a local government that is in receivership, notwithstanding any charter provision to the contrary: (dd) [e]xercise solely, for and on behalf of the local government, all other authority and responsibilities of the chief administrative officer and governing body concerning the adoption, amendment, and enforcement of ordinances...."

WHEREAS, Emergency Manager Schimmel introduced the attached emergency ordinance at a public meeting on August 16, 2013; and,

WHEREAS, the Emergency Manager at a public meeting on August 16, 2013 announced that he is adopting the proposed emergency ordinance.

It is hereby ordered:

1. That the attached Ordinance No. 2311, an ordinance to amend the Code of Ordinances of the City of Pontiac by amending Chapter 58, Article VIII to regulate the use of groundwater in certain areas of the City, is adopted.
2. That the City Clerk shall take all actions required under the law to reflect the attached ordinance changes on the City books and records, including publication of the adopted ordinance.

The Order shall have immediate effect.

Copies of the documents referenced in this Order are to be maintained in the offices of the City Clerk and may be reviewed and/or copies may be obtained upon submission of a written request consistent with the requirements of FOIA and subject to applicable or available FOIA exemptions.

This order is effective as indicated and is necessary to carry out the duties and responsibilities required of the Emergency Manager under Act 436 and the contract between the Local Emergency Financial Assistance Loan Board and the Emergency Manager.

Louis H. Schimmel
City of Pontiac
Emergency Manager

cc: State of Michigan Department of Treasury
Mayor Leon B. Jukowski
Pontiac City Council

Ordinance No. 2311

AN ORDINANCE TO AMEND THE CODE OF ORDINANCES OF THE CITY OF PONTIAC BY AMENDING CHAPTER 58, ARTICLE VIII TO REGULATE THE USE OF GROUNDWATER IN CERTAIN AREAS OF THE CITY.

Whereas, a previously adopted ordinance was subsequently determined by the State of Michigan to be unenforceable.

THE CITY OF PONTIAC ORDAINS:

Section 1. Amendment.

The Code of Ordinances of the City of Pontiac, Michigan is hereby amended by adding Chapter 58, Article VIII entitled "Water Well Restriction" to read as follows:

ARTICLE VIII WATER WELL RESTRICTION.

SEC. 58-600. FINDINGS. The City has been informed and hereby finds that an aquifer in certain areas of the City has been contaminated or otherwise adversely impacted by hazardous substances and that identified public health, safety and welfare risks may affect drinking water drawn from certain areas of such impacted aquifers. The City has determined that it is necessary and appropriate to prohibit and/or otherwise restrict the use of wells to supply water in and from the affected areas in order to protect City residents by minimizing the health, safety and welfare risks and minimizing the potential for migration of contaminated groundwater into presently unaffected groundwater.

SEC. 58-601. DEFINITIONS. The following definitions shall apply to terms used in this Article:

(1) "Affected Parcel" means a parcel of land, any part of which is located within a Restricted Zone.

(2) "Applicant" means a person who applies or applied for the establishment of a Restricted Zone pursuant to this Article.

(3) "City" means the City of Pontiac.

(4) "City Property" means any interest in real property owned or held by the City and shall include but not be limited to the following: (i) Real property owned by the City; (ii) Real property leased by the City as Lessee; and (iii) City streets, alleys or other City rights-of-way or easements.

(5) "Contaminated Groundwater" means groundwater in which there is present concentrations of materials that exceed drinking water criteria under the Safe Drinking Water Act, 1976 PA 399, as amended, or the residential drinking water criteria established by the MDEQ in operational memoranda or rules promulgated pursuant to Part 201, Environmental Remediation (MCL 324.20101 *et seq.), or Part 213, Leaking Underground*

Storage Tanks (MCL 324.21301a et seq.), of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.101 et seq., dependent upon whether the release is regulated pursuant to Part 201 or Part 213.

(6) "Domestic Use" means the use of water by humans for drinking, cooking, food preparation and other food-related services, cleaning, washing, bathing and similar household-type water uses in any dwelling, or in any building in which commercial/business, governmental/public or industrial activities are conducted. The term does not include water used solely for closed-loop heat pumps, non-contact cooling, or production and/or processing purposes of commercial or industrial enterprises.

(7) "Irrigation Use" means the use of water for lawn, garden, or landscaping irrigation on a residential parcel of land. The term does not include water used for commercial, agricultural or farm irrigation, except as specifically directed by the MDEQ.

(8) "MDEQ" means the Michigan Department of Environmental Quality, or its successor agency.

(9) "Owner" means the holder of record title for a parcel of land and also the occupant of a parcel of land in possession under a land contract or lease.

(10) "Person" means any individual, partnership, corporation, association, club, joint venture, estate, trust, and any other group or combination acting as a unit, and the individuals constituting such group or unit.

(11) "Restricted Zone" means an area or areas described within Section 58-602 of this Ordinance for which the prohibition of Wells and the use of groundwater applies and includes parcels of land that are legally described in this Ordinance, and as amended from time to time as provided in this Ordinance.

(12) "WRD" means the Water Resources Division of the MDEQ, or its successor agency.

(13) "Well" means an opening in the surface of the earth for the purpose of removing fresh water through non-mechanical or mechanical means for any purpose other than a public emergency or conducting response actions that are consistent with the Michigan Natural Resources and Environmental Protection Act, 1994 PA 451, as amended ("NREPA"), the Comprehensive Environmental Response, Compensation and Liability Act, the Resource Conservation and Recovery Act, or other applicable statute.

SEC. 58-602. RESTRICTED ZONE. The following described areas in the City shall be Restricted Zones under this Article. They may be referred to by reference to the names provided in the caption preceding their descriptions. Additional Restricted Zones, along with a map illustrating the Restricted Zone, may be added by amending the Ordinance in accordance with all applicable laws.

1. **Old Fiero Restricted Zone** – The **Old Fiero Restricted Zone** consists of three areas:

   Area A:

   Beginning at the intersection of East Kennett Road and Baldwin Avenue, traveling in an easterly direction to Saint Clair Street, then traveling south on Saint Clair Street to Owens Street. Traveling east on Owens Street to Portland Street, then continuing south on Portland Street to the northern boundary of tax identification number #14-20-255-001. Following the northern boundary of tax identification number #14-20-255-001 to the vacated railroad tracks, then continuing south along the tracks and across Montcalm Avenue for approximately 400 feet to the inlet of Harris Lake. Continuing west along the southern boundary of tax identification number #14-20-256-027 (Harris Lake Park) and the southern boundary of tax identification number #14-20-256-017 to Baldwin Avenue, then continuing north the point of beginning.

   Inclusive of:

   #14-20-202 Lots 1 through 59, #14-20-252 Lots 75 through 102, #14-20-253 Lots 127 through 158, #14-20-254 Lots 179 through 214, #14-20-255-001 Lots 242 through 244, #14-20-256-026 Lots 264 through 266, #14-20-256-003 Lot 267, #14-20-256-004, #14-20-256-005 Lot 268, #14-20-256-017, #14-20-256-027 (Harris Lake Park).

   Area B:

   Beginning at the intersection of Saginaw Street and Montcalm Avenue, traveling in an easterly direction to Edison Street, then traveling south on Edison Street. Traveling west on Edison Street to the southern boundary of tax identification number #14-20-426-003 (Assessor's Plat No. 11, Lot 2). Continuing west along the southern boundary of tax identification number #14-20-426-003 (Assessor's Plat No. 11, Lot 2) to Saginaw Street, and then north to the point of beginning.

   Inclusive of:

   Assessor's Plat No. 11 Lot 2 and 3
   Montcalm Avenue

   Columbia Avenue Area:

   The area along Columbia Avenue consisting of the road area and easement from the railroad line east of Baldwin Avenue extending to approximately 350 feet east of the centerline of E. Highwood Street.

2. **Franklin and Rapid Street Restricted Zone**. The Franklin and Rapid Street Restricted Zone consists of the following described area:

Beginning at the Westerly Right of Way line of Woodward Avenue and the Northerly row line of South Blvd.; Thence traveling west along said right of way line to the Easterly right of way line of Franklin Road; Thence traveling North along said easterly right of way line to a point on the South line of Rapid Street and the Northwest corner of parcel 14-33-302-001; Thence Northeasterly along the South line of Rapid Street to the Northern most point of parcel 14-33-302-001 and the Southerly right of way line of The Railroad; Thence Southeasterly along the Southerly right of way line of The Railroad to the intersection of the Southerly right of way line of Woodward Avenue; Thence Southeasterly along said Southerly right of way line of Woodward Avenue and the Westerly line of Parcel identification number 14-33-351-012 to the point of beginning of Area B.

Inclusive of:

-14-33-351-001 Lots 1 through 8 (Sachse Addition) and Lot 1(Assessor's Plat No. 91)
-14-33-351-012 Lots 2 through 16 (Assessor's Plat No. 91), Lots 1 through 32 (Donaldson Addition), Lots 33-42 (Donaldson Addition No. 16),
-14-33-302-001 Part of lots 7, 8, and 9, Lots 1 through 6, Lots 10-42 (Rapid Motor Addition)
-14-33-302-002 Lots 1 through 12 (Assessor's Plat No. 90),
-14-33-302-003 Lots 11 and 12 (Assessor's Plat No. 90),
-Wilson Avenue.

3. **North Mill Streets Restricted Zone.** The North Mill Street Restricted Zone consists of the following area:

   The area encompasses a portion of Mill Street (City of Pontiac property), and is located in the SE ¼ of Section 29, T3N, R10E. The area is bounded by Mill Street and Parcel Number 14-29-283-020 to the north, Parcel Number 14-29-428-002 to the east, University Drive to the south, and Parcel Numbers 14-29-283-020, 14-29-427-004, 14-29-427-012, 14-29-427-007, and 14-29-427-009 to the west.

SEC. 58-603. PROHIBITION. Except as provided in Section 58-604, no person shall install or utilize, or allow, permit, or provide for the installation or utilization of a Well on any Affected Parcel. Any existing Well at the time of the enactment of a Restricted Zone on any Affected Parcel within that Restricted Zone shall be plugged/abandoned at the expense of the Applicant for that particular Restricted Zone and as provided for in Section 58-605 and in accordance with applicable laws, regulations and ordinances, unless such existing Well falls within one of the exceptions listed in Section 58-604. Except as provided in Section 58-604, no person shall use any groundwater from an Affected Parcel.

SEC. 58-604. EXCEPTIONS. A person may install or utilize, or allow, permit, or provide for the installation or utilization of a Well in any Restricted Zone if any of the following exceptions applies and the requirements of the exception are complied with. The party proposing an exception to the Well prohibition shall conduct all appropriate inquiry and prepare a due care analysis pursuant to Part 201 or Part 213 of the NREPA.

(1) *Proof of No Influence.* If the MDEQ determines based on information provided to it by the person seeking this exception that the use of a Well ina Restricted Zone will not exacerbate existing groundwater contamination, and that water from the proposed Well will not be affected by Contaminated Groundwater, and proof of those determinations is delivered to the City, the Well maybe so used.

(2) *Groundwater Monitoring/Remediation.* A Well may be used for groundwater monitoring and/or remediation as part of a response activity or corrective action approved by the MDEQ or the United States Environmental Protection Agency.

(3) *Construction Dewatering.* A Well may be used for construction dewatering if the following conditions are satisfied: (i) the use of the dewatering Well will not result in unacceptable exposure to Contaminated Groundwater, possible cross-contamination between saturated zones, or exacerbation of Contaminated Groundwater, as defined in Part 201 of NREPA; and (ii) the water generated by that activity is properly handled and disposed of in compliance with all applicable laws, rules, regulations, permit and license requirements, orders and directives of any governmental entity or agency of competent jurisdiction. Any exacerbation caused by the use of the Well under this exception shall be the responsibility of the person operating the de-watering Well, as provided in Part 201 or Part 213 of NREPA.

(4) *Processing Activities.* If the MDEQ determines that the use of a Well for non-contact heating, cooling, production, or processing involved in industrial or commercial activities will not cause migration or exacerbation of contaminated Groundwater, and proof of that determination is delivered to the City, such use of the Well under terms and conditions specified by the MDEQ will be allowed. All information necessary for the MDEQ determination described in this subsection shall be provided by the person seeking this exception.

(1) *Public Emergencies.* A Well may be used in the event of a public emergency. Notice of such use shall be provided to the MDEQ within a reasonable time thereafter.

SEC. 58-605. SOURCES OF WATER SUPPLIED FOR DOMESTIC AND IRRIGATION USE.

(1) For Affected Parcels that are not already connected to the City water system on the day of enactment of a Restricted Zone, the Applicant of the Restricted Zone shall be responsible for the costs to connect those Affected Parcels within that Restricted Zone to the City water system. Furthermore, for Affected Parcels that have a Well on the day of enactment of a Restricted Zone which is used primarily for Irrigation Uses, the Applicant of the Restricted Zone shall be responsible for the costs to connect the irrigation system on the Affected Parcel within that Restricted Zone to the City water system.

(2) This Section shall not be deemed as affecting the rights and remedies of an Owner, or any other person or entity and/or of any federal, state or local government that may exist under any law, regulation, rule, ordinance, order, agreement and or/remedial action plan addressing groundwater within the City.

(3) In no event shall the City be required to incur any expense or cost under this Ordinance, except as may otherwise be approved by the City Council for a public works project or by a separate agreement with the Applicant, Owner, other person or entity, or a governmental body or agency.

SEC. 58-606 ENFORCEMENT. The Mayor, or his/her designee, shall be the official having the authority to enforce this Ordinance. After the Effective Date of this Ordinance, the enforcement official shall contact all Owners of Affected Parcels, which from the information available to the City, appear to have Wells prohibited under this Ordinance (if any), giving written notice of the need to cease using such Wells and of the need for establishment of a Domestic Use water source (to the extent required) as prescribed under Section 58-605, or to obtain approval or acknowledgment of an exception under Section 58-604. The Owner shall immediately take steps so as to comply with the provisions of this Ordinance with regard to provision of Domestic Use water within sixty (60) days from the date of such notice. Any existing Well in violation of this Ordinance shall then be plugged or abandoned in conformance with applicable legal requirements. Where, upon information available to the enforcement official, it is suspected that a Well is being used on an Affected Parcel in violation of this Ordinance, the enforcement official may inspect such Affected Parcel and serve an appropriate notice and order of such violation requiring that action be taken promptly by the Owner to bring the Affected Parcel into compliance. If the Owner fails to act in accordance with such order, the enforcement official my seek remedies and penalties as provided in Section 58-607.

SEC. 58-607. PENALTY. Any person who violates any provision of this Ordinance shall be liable for a municipal civil infraction under the provisions of the Code of Ordinances. In addition, the City may seek an order from a court of appropriate jurisdiction requiring compliance with this Ordinance and may also seek collection of costs and attorney fees associated with such enforcement action. Any violation of this Ordinance is a public nuisance, subject to abatement, and any Well in violation of this Ordinance shall be immediately taken out of service and lawfully abandoned in compliance with applicable legal requirements. A court of competent jurisdiction may order any person violating any provision of this Ordinance to properly and lawfully remove or abandon a Well.

SEC. 58-608. BUILDING AND ZONING PERMITS. No permit for the construction or alteration of a building or structure nor any permit for any zoning approval shall be issued by the City Building and Zoning Administrator for any improvement on an Affected Parcel which has, or proposes, a water supply from a Well in violation of this Ordinance.

SEC. 58-609. ADMINISTRATIVE LIABILITY. No officer, agent or employee of the City or member of the City Council shall render himself or herself personally liable for any damage which may occur to any person or entity as the result of any act or decision performed in the discharge of his or her duties and responsibilities pursuant to the Ordinance.

SEC. 58-610. AMENDMENT; REPEAL. The MDEQ, an Applicant, an Owner, an entity involved in performing remedial actions in order to seek approval of a No Further Action Report under Section 20114d of Part 201 or in performing corrective actions in order to seek approval of a Closure Report under Section 21312a of Part 213 or other interested party may request in writing to add parcels to or delete parcels from a Restricted Zone or to establish an additional Restricted Zone or to otherwise amend or repeal this Ordinance, and shall provide advance notice to the MDEQ and any Applicant for such Restricted Zone of any proposed change hereunder, including the reasons supporting such request. The amendment or repeal of this Ordinance shall be by an appropriate ordinance adopted in the same manner as this Ordinance, and any such action shall be in the sole legislative discretion of the City Council.

SEC. 58-611. NOTIFICATION OF LAPSE, OR INTENT TO AMEND OR REPEAL. At least thirty (30) days prior to any action regarding a proposed amendment or repeal in whole or in part of this Ordinance, the City shall notify the MDEQ and any Applicant of its intent to so act. The City shall also notify the MDEQ and any Applicant that this Ordinance may lapse at least thirty (30) days prior to the Ordinance being allowed to lapse.

SEC. 58-612. REIMBURSEMENT OF ADDITIONAL CITY CONSTRUCTION COSTS. The Applicant of a Restricted Zone shall reimburse the City for the reasonable additional costs the City incurs for dewatering Contaminated Groundwater or disposing of soils impacted by Contaminated Groundwater in connection with construction activity undertaken by the City on City property in that Restricted Zone, provided that the City supplies the Applicant with documentation confirming the amount and necessity of such additional costs, including the extent to which they exceeded the cost of dewatering or disposing of materials not impacted by Contaminated Groundwater.

Section 2. Severability.

If any section, clause, or provision of this Ordinance shall be declared to be unconstitutional, void, illegal, or ineffective by any Court of competent jurisdiction, such section, clause, or provision declared to be unconstitutional, void, or illegal shall thereby cease to be a part of this Ordinance, but the remainder of this Ordinance shall stand and be in full force and effect.

Section 3. Saving Clause.

A prosecution which is pending on the effective date of this ordinance and which arose from a violation of an ordinance repealed by this ordinance, or a prosecution which is started within one (1) year after the effective date of this ordinance arising from a violation of an ordinance repealed by this ordinance and which was committed prior to the effective date of this ordinance, shall be tried and determined exactly as if the ordinance had not been repealed.

Section 4. Repealer

All Ordinances or parts of Ordinances in conflict herewith are hereby repealed only to the extent necessary to give this Ordinance full force and effect.

Section 5. Publication and Recording

(1) The Clerk shall publish this Ordinance in a newspaper of general circulation.

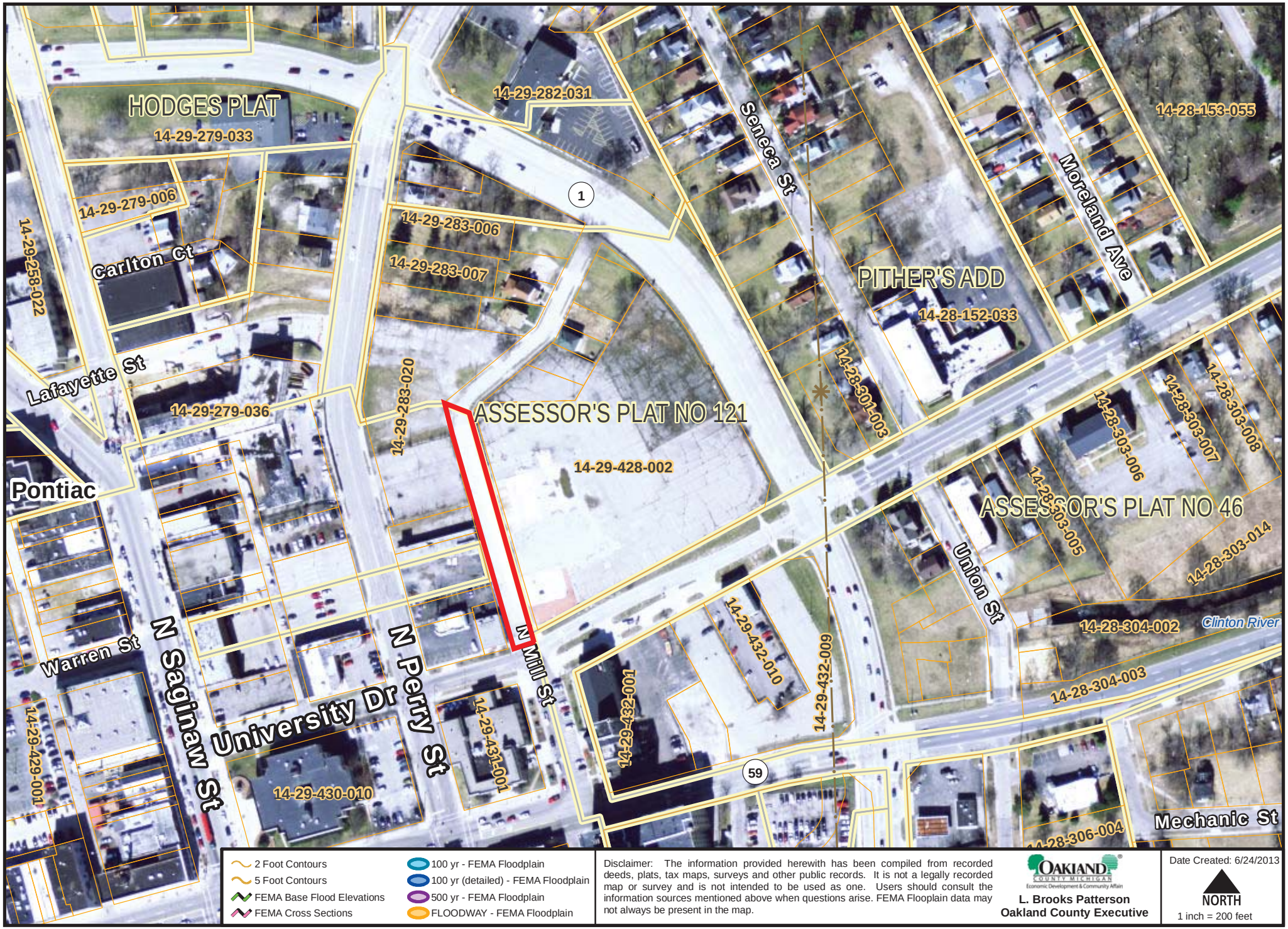
(2) If the release for which this ordinance or amendment to this ordinance is sought is regulated pursuant to Part 201, then this ordinance or amendment to the ordinance shall be published and maintained in the same manner as zoning ordinances.

(3) If the release for which this ordinance or amendment to this ordinance is sought is regulated pursuant to Part 213, then the ordinance or amended ordinance shall be filed by the Applicant with the register of deeds as an ordinance affecting multiple properties.

Section 6. Emergency Declaration

This Ordinance is hereby determined to be immediately necessary for the preservation of the public health, safety, and welfare and shall be in full force and effect upon publication as required by law.

NORTH MILL STREET RESTRICTED ZONE



2 Foot Contours	100 yr - FEMA Floodplain
5 Foot Contours	100 yr (detailed) - FEMA Floodplain
FEMA Base Flood Elevations	500 yr - FEMA Floodplain
FEMA Cross Sections	FLOODWAY - FEMA Floodplain

Disclaimer: The information provided herewith has been compiled from recorded deeds, plats, tax maps, surveys and other public records. It is not a legally recorded map or survey and is not intended to be used as one. Users should consult the information sources mentioned above when questions arise. FEMA Flooplain data may not always be present in the map.

OAKLAND COUNTY MICHIGAN
Economic Development & Community Affairs

L. Brooks Patterson
Oakland County Executive

Date Created: 6/24/2013

NORTH

1 inch = 200 feet

Oakland County One Stop Shop 2100 Pontiac Lake Road Bldg. 41 West Waterford, MI 48328 Phone: 248-858-0721 Web: www.advantageoakland.com

APPENDIX F

City of Pontiac Well Record and Well Viewer Log

APR 22 1975

Layne NORTHERN COMPANY INCORPORATED

INDIANAPOLIS • MISHAWAKA • LANSING

☒ TEST
☐ PERMANENT

Job No. L-33895

WELL LOG No. 74-A CITY PONTIAC County OAKLAND

Owner CITY OF PONTIAC Township PONTIAC

WATER POLLUTION CONTROL Section 28, T3N, R10E

Location State MICHIGAN

From Land Description WELL SITE NO. 4, 80'+ S. of ℄ CLINTON RIVER, SE1/4 NE1/4 NE1/4 Sec 2

From Street or Road 200' + W. OF EAST BLVD. NORTH & 600' ± N. of M-59

FORMATION FOUND – DESCRIBE FULLY	FROM NATURAL GROUND LEVEL			
	Depth to Top of Stratum	Depth to Bottom of Stratum	Thickness of Stratum	Static Water Level
TOPSOIL	0	3	3	
CLAY	3	23	20	
SAND	23	33	10	
SAND & COBBLES W/SOME CLAY	33	38	5	
CLAY W/SAND, GRAVEL & COBBLES	38	53	15	
CLAY, GRAVELLY & COBBLES	53	73	20	
SAND, FINE TO MEDIUM W/SOME GRAVEL	73	93	20	
GRAVEL	93	98	5	
GRAVEL, COARSE TO COARSE SAND	98	118	20	
GRAVELLY SAND W/SOME CEMENTING	118	128	10	
GRAVEL, COARSE	128	133	5	
GRAVELLY SAND	133	148	15	
SAND, COARSE TO FINE	148	153	5	
SAND & GRAVEL, CEMENTED, DIRTY, SOME COBBLES	153	179	26	32'
SAND & GRAVELW/SOME CLAY, CEMENTED, DIRTY, HEAVES	179	200	21	
CEMENTED GRAVEL, HARD	200	205	5	32'
SAND & GRAVEL, DIRTY	205	211	6	32'
CLAY (STOPPED IN CLAY AT 217')	211	217	6	

ADDED INFO BY DRILLER, ITEM NO.
*CORRECTED BY
**ADDITION BY
ELEVATION
DEPTH TO ROCK

Hole 8 "Dia Drilled by: { Cable Tool 153'-217' Rotary 0'-153' Jetting ____ Reverse Circ. ____ Bucket ____ Auger ____ }

Rotary Hole Grouted: Neat Cement ____ Drilling Mud ____ Other ____

Casing 8 5/8 "OD From ____ "above ground to ____ feet below ground. Weight ____ Pounds per foot

Screen 8 " Set from 180 to 200 feet Make Johnson Type SS Slot .055"

Pumping test ____ GPM drawdown to ____ feet after ____ hours pumping

Date Completed AUGUST, 1974 Driller D. J. EGGLESTON & L. D. COONROD

0550'

MAY 23 1977

COPY

Erwin H. A. Stahl, PE

0550

Layne NORTHERN COMPANY INCORPORATED

INDIANAPOLIS • MISHAWAKA • LANSING

☐ TEST

☒ PERMANENT

Job No. L34-77

WELL LOG No. 4 CITY PONTIAC County OAKLAND

Owner CITY OF PONTIAC Township PONTIAC

WATER POLLUTION CONTROL Section 28, T3N, R10E

Location State MICHIGAN

From Land Description 80' ± S. OF ℄ CLINTON RIVER, SE¼ NE¼ NE¼ Sec. 28

From Street or Road 260' ± W. OF ℄ EAST BLVD. NORTH ℄ 600' ± N. OF M-59

FORMATION FOUND -- DESCRIBE FULLY	FROM NATURAL GROUND LEVEL			
	Depth to Top of Stratum	Depth to Bottom of Stratum	Thickness of Stratum	Static Water Level
clay & fill	0	10	10	
gray clay	10	20	10	
brown sand	20	31	11	
clay & rocks	31	53	22	
gravelly clay & stones	53	83	30	
sand & gravel	83	104	21	
clay & stones	104	111	7	
sand, gravel & stones	111	150	39	21'
cemented sand & gravel	150	153	3	
stopped in above @ 153'				
ADDED INFO BY DRILLER, ITEM NO.				
*CORRECTED BY				
**ADDITION BY				
ELEVATION				
DEPTH TO ROCK				

Hole 24 "Dia Drilled by: { Cable Tool ____ Rotary ____ Jetting ____ / Reverse Circ. X Bucket ____ Auger ____ }

Rotary Hole Grouted: Neat Cement ____ Drilling Mud ____ Other X

Casing 16 "OD From 12 "above ground to 119 feet below ground. Weight 62.6 Pounds per foot

Screen 16" TEL.** Set from 121.5 to 151.5 feet Make LAYNE WESTERN Type SS/WW Slot TOP 10'-#155 MID. 10'-#105 BTM. 10'-#80

Pumping test 3002 GPM drawdown to 42.77 feet after 14 hours pumping

Date Completed MARCH 20, 1976 Driller L. COONROD

0550

MAY 23 1977

Erwin H. A. Stahl, PE

2

Layne NORTHERN COMPANY INCORPORATED

INDIANAPOLIS • MISHAWAKA • LANSING

0550

☐ TEST

☒ PERMANENT

Job No. L3[illegible]

WELL LOG No. 4 CITY PONTIAC County OAKLAND

Owner CITY OF PONTIAC Township PONTIAC

WATER POLLUTION CONTROL Section 28, T3N R10E

Location State MICHIGAN

From Land Description 80' ± S. OF ℄ CLINTON RIVER, SE¼ NE¼ NE¼ Sec. 28

From Street or Road 260' ± W. OF ℄ EAST BLVD. NORTH ∓ 600' ± N. OF M-59

FORMATION FOUND – DESCRIBE FULLY	FROM NATURAL GROUND LEVEL			
	Depth to Top of Stratum	Depth to Bottom of Stratum	Thickness of Stratum	Static Water Level
clay & fill	0	10	10	
gray clay	10	20	10	
brown sand	20	31	11	
clay & rocks	31	53	22	
gravelly clay & stones	53	83	30	
sand & gravel	83	104	21	
clay & stones	104	111	7	
sand, gravel & stones	111	150	39	21'
cemented sand & gravel	150	153	3	
stopped in above @ 153'				
ADDED INFO BY DRILLER, ITEM NO.				
*CORRECTED BY				
**ADDITION BY				
ELEVATION				
DEPTH TO ROCK				

Hole 24 "Dia Drilled by: { Cable Tool ____ Rotary ____ Jetting ____ / Reverse Circ. X Bucket ____ Auger ____ }

Rotary Hole Grouted: Neat Cement ____ Drilling Mud ____ Other X

Casing 16 "OD From 12 "above ground to 119 feet below ground. Weight 62.6 Pounds per foot

Screen 16' TEL.** Set from 121.5 to 151.5 feet Make LAYNE WESTERN Type SS/WW Slot TOP 10'-#155 MID. 10'-#105 BTM. 10'-#80

Pumping test 3002 GPM drawdown to 42.77 feet after 14 hours pumping

Date Completed MARCH 20, 1976 Driller L. COONROD

0550

GEOLOGICAL SURVEY SAMPLE No.

JAN 27 1976

3

WATER WELL RECORD

ACT 294 PA 1965

MICHIGAN DEPARTMENT OF PUBLIC HEALTH

1 LOCATION OF WELL

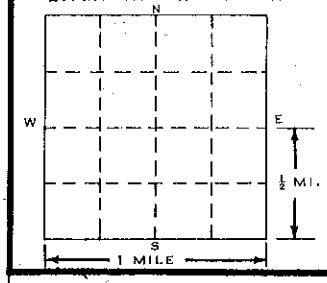
County	Township Name	Fraction	Section Number	Town Number	Range Number
Oakland	Pontiac	NE¼ SE¼ NW¼ SE¼	28	~~N~~ 3 N/S.	10 E/W.

Distance And Direction from Road Intersections: approx. 3/4 mile W. of Joslyn

Street address & City of Well Location:

Locate with "X" in section below

Sketch Map:



3 OWNER OF WELL: E P Thomas (builder)

Address

4 WELL DEPTH: (completed) 50' ft. Date of Completion 10/27/75

5 ☐ Cable tool ☐ Rotary ☐ Driven ☐ Dug ☑ Hollow rod ☐ Jetted ☐ Bored ☐ ____

6 USE: ☑ Domestic ☐ Public Supply ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☐ ____

7 CASING: Threaded ☑ Welded ☐ Diam. 2 in. to 47 ft. Depth; ____ in. to ____ ft. Depth. Height: Above/~~Below~~ Surface 1 ft. Weight ____ lbs./ft. Drive Shoe? Yes ☑ No ☐

8 SCREEN: Type: S. galvanized Dia.: 2" Slot/~~Gauze~~ 10 Length 3' Set between 47 ft. and 50 ft. Fittings: tailpipe - 2-1¼ couplings.

9 STATIC WATER LEVEL 15 ft. below land surface

10 PUMPING LEVEL below land surface 45 ft. after 2 hrs. pumping 10 g.p.m.; ____ ft. after ____ hrs. pumping ____ g.p.m.

11 WATER QUALITY in Parts Per Million: Iron (Fe) ____ Chlorides (Cl) ____ Hardness ____ Other ____

12 WELL HEAD COMPLETION: ☐ In Approved Pit ☑ Pitless Adapter ☐ 12" Above Grade

13 Well Grouted? ☐ Yes ☑ No ☐ Neat Cement ☐ Bentonite ☐ ____ Depth: From ____ ft. to ____ ft.

14 Nearest Source of possible contamination: 200 feet W. Direction S tank Type. Well disinfected upon completion ☐ Yes ☐ No

15 PUMP: X ~~☐ Not Installed~~ Manufacturer's Name ____ Model Number ____ HP ____ Volts ____ Length of Drop Pipe ____ ft. capacity ____ G.P.M. Type: ☐ Submersible ☐ Jet ☐ Reciprocating

2 FORMATION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
Sand		20
clay + gravel	25	45
Coarse Sand	5	50

OAKLAND COUNTY DEPT. OF HEALTH — RECEIVED JAN 13 1976 — USE A 2ND SHEET IF NEEDED — E.H.N.O.

16 Remarks, elevation, source of data, etc. Supplied DB Meyers Pump (21' drop) (+ two foot valve) ½ H.P. S W Meyers tank

ADDED INFO BY DRILLER

17 WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Franzel Well Drilling 0474
REGISTERED BUSINESS NAME — REGISTRATION NO.

Address 1250 Cherrylawn, Pontiac

ITEM NO. Frank E Franzel Date 10/28/75
AUTHORIZED REPRESENTATIVE

D67d 100M (Rev. 12-68)

*CORRECTED BY

**ADDITION BY

ELEVATION

DEPTH TO ROCK

GEOLOGICAL SURVEY COPY

Water Well And Pump Record

Completion is required under authority of Part 127 Act 368 PA 1978.
Failure to comply is a misdemeanor.

Wellogic

Import ID:

Tax No:	Permit No:	County: Oakland	Township: Pontiac

Well ID: 63000038319

Elevation:
Latitude: 42.64084
Longitude: -83.28266
Method of Collection: GPS Std Positioning Svc SA Off

Town/Range:	Section:	Well Status:	WSSN:	Source ID/Well No:
03N 10E	28	Active	5440	PADD. STANDBY

Distance and Direction from Road Intersection:
PADDOCK STANDBY

Well Owner: CITY OF PONTIAC

Well Address:
PONTIAC-PADDOCK STANDBY

Owner Address:

Drilling Method: Unknown
Well Depth: 0.00 ft. **Well Use:** Type I public
Well Type: Unknown **Date Completed:**

Casing Type: Unknown **Height:**
Casing Joint: Unknown
Casing Fitting: Unknown

Diameter:

Borehole:

Pump Installed: No
Pressure Tank Installed: No
Pressure Relief Valve Installed: No

Static Water Level: Below Grade
Well Yield Test: **Yield Test Method:** Unknown

Screen Installed: No **Intake:** Unknown

Formation Description	Thickness	Depth to Bottom
No Log	1.00	1.00

Well Grouted: No

Wellhead Completion: Unknown

Geology Remarks:

Nearest Source of Possible Contamination:
Type **Distance** **Direction**
Unknown

Abandoned Well Plugged: No

Reason Not Plugged:

Drilling Machine Operator Name: UNKNOWN
Employment: Unknown

Contractor Type: Unknown **Reg No:**
Business Name: UNKNOWN
Business Address:

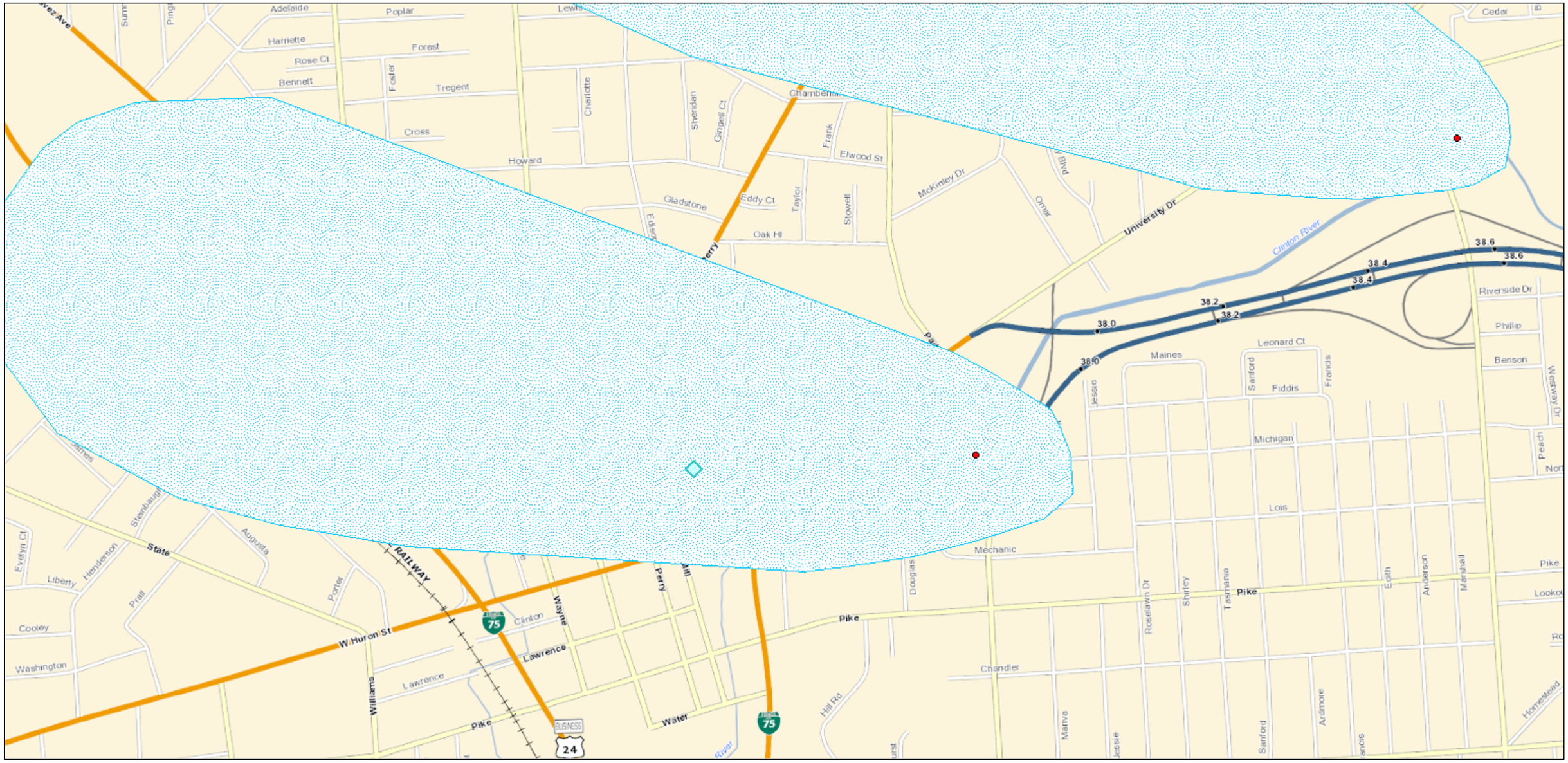
Water Well Contractor's Certification

This well was drilled under my supervision and this report is true to the best of my knowledge and belief.

Signature of Registered Contractor **Date**

General Remarks:
Other Remarks:

GeoWebFace



June 4, 2016

pointLayer

- 65 East University Drive
- City of Pontiac Stand By Well

Wellhead Protection Areas

- Type 1 Provisional Wellhead Protection Area

1:8,374

0 0.1 0.2 0.4 mi

0 0.15 0.3 0.6 km

Map by: State of Michigan - CSS

copyright 2013

RACER TRUST
EMPLOYEE DEVELOPMENT CENTER
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

WELL-HEAD PROTECTION AREA MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE

APPENDIX G

Notices of Migration to Contamination and Notice to Impacted Parties

ARCADIS BBL
Infrastructure, environment, facilities

ARCADIS G&M of Michigan, LLC
10559 Citation Drive
Suite 100
Brighton
Michigan 48116
Tel 810.229.8594
Fax 810.229.8837

Transmittal Letter

To:
Mr. Mark J. Hotz
City Attorney
City of Pontiac Law Department
4745 Woodward Avenue
Pontiac, Michigan 48342

Copies:

From:
John McKenna

Date:
January 26, 2007

Subject:
Notice of Migration of Contamination

ARCADIS BBL Project No.:
64486.003

We are sending you:

☒ **Attached** ☐ **Under Separate Cover Via _____ the Following Items:**

☐ Shop Drawings ☐ Plans ☐ Specifications ☐ Change Order
☐ Prints ☐ Samples ☐ Copy of Letter ☐ Reports
☒ Other:

Copies	Date	Drawing No.	Rev.	Description	Action*
1	1/26/07	NA	NA	Notice of Migration of Contamination	

Action*
☐ A Approved ☐ CR Correct and Resubmit ☐ Resubmit _____ Copies
☐ AN Approved As Noted ☒ F File ☐ Return _____ Copies
☐ AS As Requested ☐ FA For Approval ☐ Review and Comment
☐ Other:

Mailing Method
☐ U.S. Postal Service 1st Class ☐ Courier/Hand Delivery ☐ FedEx Priority Overnight ☐ FedEx 2-Day Delivery
☐ Certified/Registered Mail ☐ United Parcel Service (UPS) ☒ FedEx Standard Overnight ☐ FedEx Economy
☐ Other:

Comments: Please see attached Notice of Migration of Contamination for General Motors Corporation's Employee Development Center located at 65 East University Drive in Pontiac, Michigan.

WFG – Remediation

General Motors Corporation
Worldwide Facilities Group
483-520-190
2000 Centerpoint Parkway
Pontiac, MI 48341
U.S.A.

January 26, 2007

Mr. Mark J. Hotz
City Attorney
City of Pontiac Law Department
4745 Woodward Avenue
Pontiac, Michigan 48342

Subject: Notice of Migration of Contamination
General Motors Corporation Employee Development Center
65 East University Drive
Pontiac, Michigan

Mr. Hotz:

General Motors Corporation (GM) hereby provides precautionary notification of laboratory analytical results of samples collected on GM property at its Employee Development Center (Site) located at 65 East University Drive in Pontiac, Michigan.

In November 2006, GM conducted a routine due diligence investigation at the GM Employee Development Center. Based on initial analytical results, ARCADIS G&M of Michigan, LLC (ARCADIS BBL, formerly known as Blasland, Bouck & Lee, Inc.) reported a confirmed release to the Michigan Department of Environmental Quality (MDEQ) on November 14, 2006. The MDEQ assigned Incident Number C-0328-06 to this release case. Based on analytical results from the November investigation, monitoring wells were installed at the Site to determine the extent of groundwater contamination. On behalf of GM, ARCADIS BBL is currently preparing an *Initial Assessment Report* for submittal in accordance with the MDEQ Part 213 regulations. The information reported herein was obtained during the investigation related to the initial assessment activities.

As part of the initial assessment, grab groundwater samples were collected from the completed on-Site soil boring locations in November 2006. In addition, groundwater samples were collected from the on-Site monitoring wells after proper development and following proper groundwater sampling procedures in December 2006. The groundwater flow direction was determined in mid December and is based on water levels collected from the on-Site monitoring wells, which were installed on December 1, 2006. Based on test results, contamination may have migrated under Mill Street and University Drive.

Groundwater laboratory analytical results for the on-Site monitoring wells were received on December 15, 2006. The locations of the groundwater samples described below are depicted on the attached Figure 2. Elevated concentrations of benzene in groundwater were detected in soil boring B-14 and monitoring well MW-3, near Mill Street, in exceedance of the MDEQ Part 201 Residential and Commercial I Drinking Water Criteria (RDW) and Industrial and Commercial II, III, and IV Drinking Water Criteria (IDW). The concentration of benzene in monitoring well MW-3 was also in exceedance of the MDEQ Part 201 Groundwater/Surface Water Protection Criteria (GW/SWI). An elevated concentration of 1,2-dichloroethane was detected in monitoring well MW-3 in exceedance

of the MDEQ Part 201 RDW and IDW. An elevated concentration of 1,2-dichloropropane was detected in monitoring well MW-3 in exceedance of the MDEQ Part 201 RDW and IDW. Elevated concentrations of ethylbenzene in groundwater were detected in monitoring well MW-3 and soil boring B-14 in exceedance of the MDEQ Part 201 GW/SWI. The concentration of ethylbenzene in soil boring B-14 was also in exceedance of the MDEQ Part 201 RDW and IDW. An elevated concentration of naphthalene in groundwater was detected in soil boring B-14 in exceedance of the MDEQ Part 201 GW/SWI. Tetrachloroethylene was detected in groundwater at an elevated concentration in soil boring B-14 in exceedance of the MDEQ Part 201 RDW and IDW. Trichloroethene was detected in groundwater at an elevated concentration soil boring B-12 in exceedance of the MDEQ Part 201 RDW and IDW. An elevated concentration of 1,2,4-trimethylbenzene was detected in monitoring well MW-3 in exceedance of MDEQ Part 201 GW/SWI. Total xylenes were detected in groundwater at elevated concentrations in soil boring B-14 and monitoring well MW-3 in exceedance of the MDEQ Part 201 GW/SWI. The concentration of total xylenes in monitoring well MW-3 was also in exceedance of the MDEQ Part 201 RDW and IDW.

Trichloroethene was also detected in groundwater at elevated concentrations in monitoring well MW-5 and soil boring B-2, near University Drive, in exceedance of the MDEQ Part 201 RDW and IDW. Groundwater analytical results from other soil borings and monitoring wells near the property boundary indicated no exceedances of MDEQ Part 201 criteria.

A table listing the maximum levels of constituents detected in groundwater above MDEQ criteria and concentrations in groundwater sampled closest to the GM property boundary are attached. In addition, the locations of the groundwater samples described above are depicted on the attached Figure 2. GM is required to notify the City of Pontiac of the presence of these concentrations that are potentially migrating onto City property under Rule 299.51017 of NREPA Part 201 and Part 213.

GM's Remediation Team believes that no residents are affected by elevated constituent levels in the groundwater, if present, because it is understood that all occupants are connected to the city's water supply. GM plans to install additional monitoring wells along the Site's southern and western boundaries. In addition, GM plans to install monitoring wells off-Site to delineate the extent of groundwater contamination. Groundwater samples collected from off-Site monitoring wells would be to confirm if groundwater contamination has migrated off-Site.

We are committed to protecting the health and safety of our neighbors, and we appreciate your assistance and cooperation as we continue to conduct the investigation. If you have any questions regarding the enclosed information, please contact me at 248-753-5790.

Sincerely,

Fred Rindhage

Fred Rindhage
Program Manager

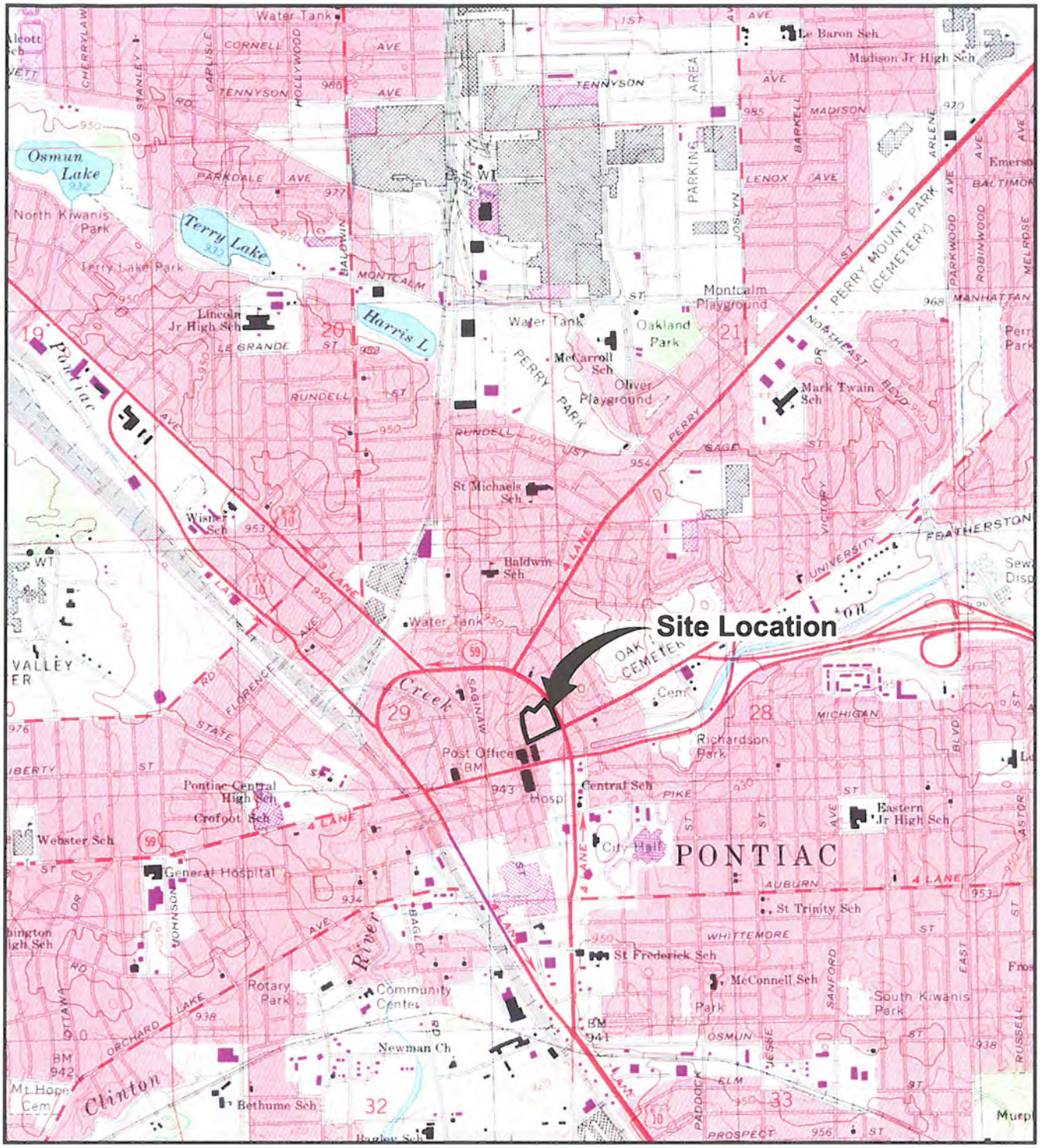
Enclosures

cc: B. Saunders/ARCADIS BBL
J. McKenna /ARCADIS BBL
L. Alkidas/ARCADIS BBL

Column A Name of hazardous substance.
Column B Chemical Abstract Service (CAS) Number for the hazardous substance.
Column C Maximum hazardous substance concentration measured on the property, expressed in parts per billion (e.g., ug/L or ug/Kg). Report maximum concentration separately for each environmental medium.
Column D Sample location for Column C (relate to label on map).
Column E Environmental medium in which concentration reported in Column C was measured (e.g., soil or groundwater).
Column F Distance from point of maximum measured concentration (Column D) to property boundary, in direction of contaminant migration, if direction is known or can reasonably be inferred. If direction is unknown, list distance to nearest property boundary.
Column G Direction of contaminant migration, if known.
Column H Concentration closest to property boundary, if known. If a concentration lower than the maximum concentration reported in Column C has been measured at a point closer to the property boundary in the direction of contaminant migration, use Column I to list the concentration that was measured closest to the property boundary in the direction of contaminant migration.
Column I Sample location for Column H (relate to label on map).
Column J Environmental medium for measurement reported in Column H, if applicable.

A Hazardous Substance	B CAS Number	C Maximum Concentration	D Sample Location for "C"	E Environmental Medium for "C"	F Distance to Property Boundary	G Direction of Migration	H Boundary Concentration	I Sample Location for "H"	J Environmental Medium for "H"
Benzene	71-43-2	7,200 ug/L	B-9	Groundwater	60 feet	South	37 ug/L & 3,000 ug/L	B-14 & MW-3	Groundwater
1,2-Dichloroethane	107-06-02	39 ug/L	B-16	Groundwater	117 feet	South	14 ug/L	MW-3	Groundwater
1,2-Dichloropropane	78-87-5	140 ug/L	MW-3	Groundwater	15 feet	West	140 ug/L	MW-3	Groundwater
Ethylbenzene	100-41-4	4,100 ug/L	B-21	Groundwater	46.5 feet	South	54 ug/L & 130 ug/L	MW-3 & B-14	Groundwater
Naphthalene	91-20-3	320 ug/L	B-16	Groundwater	117 feet	South	27 ug/L	B-14	Groundwater
Tetrachloroethylene	127-18-4	8 ug/L	B-14	Groundwater	15 feet	West	8 ug/L	B-14	Groundwater
Trichloroethene	79-01-6	100 ug/L	B-2	Groundwater	69 feet	South	11 ug/L & 17 ug/L & 100 ug/L &	MW-5 & B-12 & B-2	Groundwater
1,2,4-Trimethylbenzene	95-63-6	2,800 ug/L	B-21	Groundwater	46.5 feet	South	40 ug/L	MW-3	Groundwater
Xylenes, Total	95-47-6 108-38-3 106-42-3	18,900 ug/L	B-21	Groundwater	46.5 feet	South	267 ug/L & 327 ug/L	B-14 & MW-3	Groundwater

Total Number Samples Collected: 12 (naphthalene) & 19 (VOCs) Total Number of Samples Exceeding Criteria: 7 (naphthalene) & 13 (VOCs)



REFERENCE: Base Map Source: USGS 7.5 Min. Topo. Quads., Pontiac North, Michigan, 1971.

2000' 0 2000'

Approximate Scale: 1" = 2000'

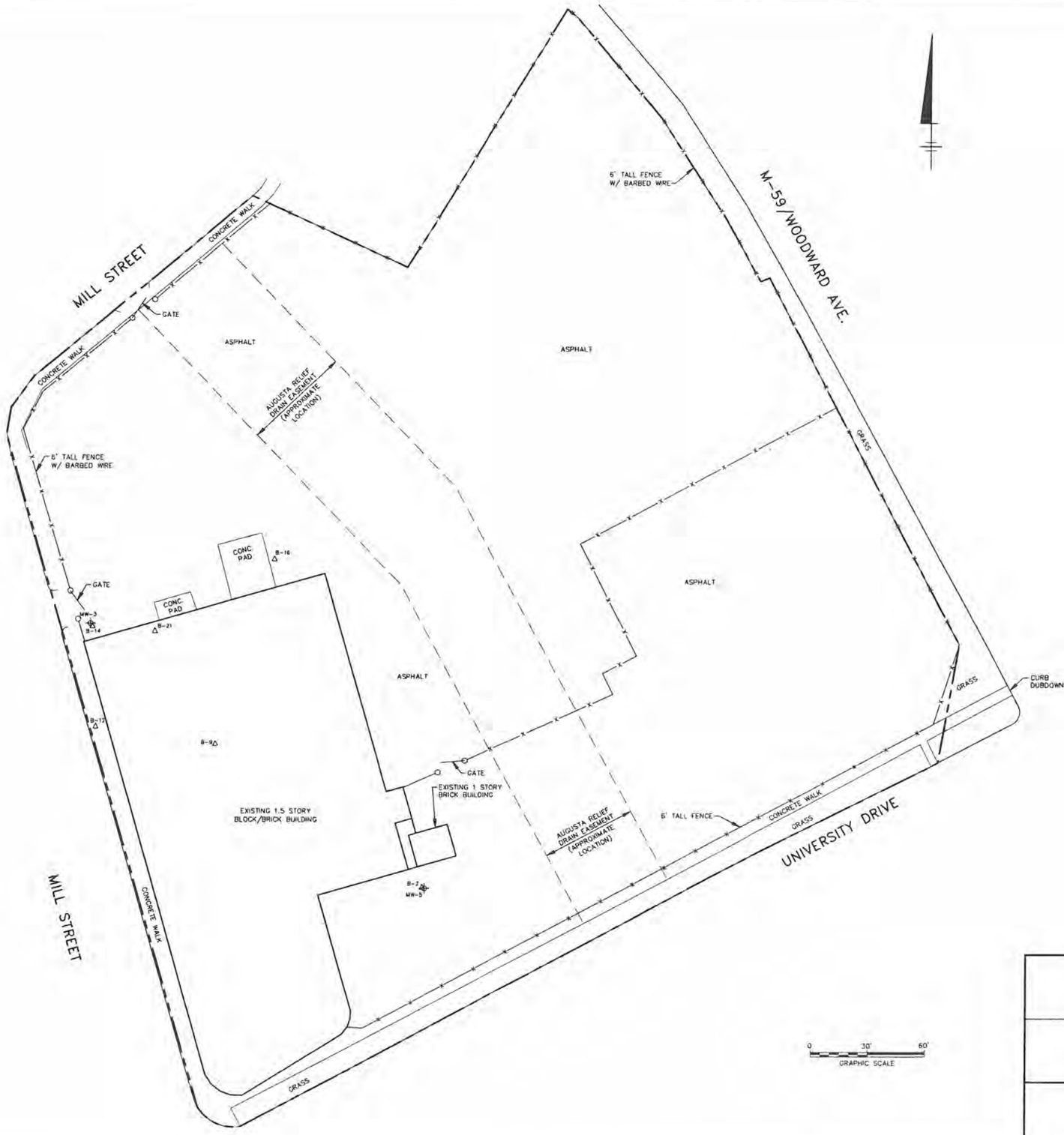
Area Enlargement

GENERAL MOTORS CORPORATION
EMPLOYEE DEVELOPMENT CENTER
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

SITE LOCATION MAP

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE 1



NOTE:

BASE MAP INFORMATION SUPPLIED BY ATWELL HICKS PLANIMETRIC, SOIL BORING AND MONITORING WELL SURVEY OF A PARCEL OF LAND, DATED 12-13-06.

GENERAL MOTORS CORPORATION
EMPLOYEE DEVELOPMENT CENTER
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

NOTICE OF MIGRATION OF CONTAMINATION

ARCADIS BBL

FIGURE 2

BR!-85-PFS LAYER: ON=*; OFF=*REF*
J:\2007\64486003\64486802.dwg SAVED:1/16/2007 2:45 PM LAYOUT:2 PAGESETUP:BR!-PDF-DL2B PENTABLE:PLTFULL.CTB PRINTED:1/16/2007 2:45 PM BY:AFOX
PROJECTNAME:----
XREFS:
IMAGES:
64486X02

ARCADIS BBL
Infrastructure, environment, facilities

ARCADIS G&M of Michigan, LLC
10559 Citation Drive
Suite 100
Brighton
Michigan 48116
Tel 810.229.8594
Fax 810.229.8837

Transmittal Letter

To:
Southeast Michigan District Office
Remediation and Redevelopment Division
27700 Donald Court
Warren, MI 48092-2793

Copies:

From:
John McKenna

Date:
January 26, 2007

Subject:
Notice of Migration of Contamination

ARCADIS BBL Project No.:
64486.003

We are sending you:

☒ **Attached** ☐ **Under Separate Cover Via _____ the Following Items:**

☐ Shop Drawings ☐ Plans ☐ Specifications ☐ Change Order
☐ Prints ☐ Samples ☐ Copy of Letter ☐ Reports
☒ Other:

Copies	Date	Drawing No.	Rev.	Description	Action*
1	1/26/07	NA	NA	Notice of Migration of Contamination	

Action*
☐ A Approved
☐ AN Approved As Noted
☐ AS As Requested
☐ Other:
☐ CR Correct and Resubmit
☒ F File
☐ FA For Approval
☐ Resubmit _____ Copies
☐ Return _____ Copies
☐ Review and Comment

Mailing Method
☐ U.S. Postal Service 1st Class ☐ Courier/Hand Delivery ☐ FedEx Priority Overnight ☐ FedEx 2-Day Delivery
☐ Certified/Registered Mail ☐ United Parcel Service (UPS) ☒ FedEx Standard Overnight ☐ FedEx Economy
☐ Other:

Comments: Please see attached Notice of Migration of Contamination for General Motors Corporation's Employee Development Center located at 65 East University Drive in Pontiac, Michigan.

WFG – Remediation

General Motors Corporation
Worldwide Facilities Group
483-520-190
2000 Centerpoint Parkway
Pontiac, MI 48341
U.S.A.

January 26, 2007

Southeast Michigan District Office
Remediation and Redevelopment Division
Michigan Department of Environmental Quality
27700 Donald Court
Warren, MI 48092-2793

Subject: Notice of Migration of Contamination
General Motors Corporation Employee Development Center
65 East University Drive
Pontiac, Michigan

Dear Sir/Madam:

General Motors Corporation (GM) hereby provides completed forms EQP 4482 (Rev 10/2003) to advise of contaminant migration pursuant to Part 201 and Part 213 of Act 451. This information is provided to satisfy obligations pursuant to R 299.51017.

In November 2006, GM conducted a routine due diligence investigation at the GM Employee Development Center (Site). Based on initial analytical results, ARCADIS G&M of Michigan, LLC (ARCADIS BBL, formerly known as Blasland, Bouck & Lee, Inc.) reported a confirmed release to the Michigan Department of Environmental Quality (MDEQ) on November 14, 2006. The MDEQ assigned Incident Number C-0328-06 to this release case. Based on analytical results from the November investigation, monitoring wells were installed at the Site to determine the extent of groundwater contamination. On behalf of GM, ARCADIS BBL is currently preparing an *Initial Assessment Report* (*IAR*) for submittal in accordance with the MDEQ Part 213 regulations. The information reported herein was obtained during the investigation related to the initial assessment activities.

As part of the initial assessment, grab groundwater samples were collected from the completed on-Site soil boring locations in November 2006. In addition, groundwater samples were collected from the on-Site monitoring wells after proper development and following proper groundwater sampling procedures in December 2006. The groundwater flow direction was determined in mid December and is based on water levels collected from the on-Site monitoring wells, which were installed on December 1, 2006. Based on test results, contamination may have migrated under Mill Street and University Drive.

Groundwater laboratory analytical results for the on-Site monitoring wells were received on December 15, 2006. The locations of the groundwater samples described below are depicted on the attached Figure 2. Elevated concentrations of benzene in groundwater were detected in soil boring B-14 and monitoring well MW-3, near Mill Street, in exceedance of the MDEQ Part 201 Residential and Commercial I Drinking Water Criteria (RDW) and Industrial and Commercial II, III, and IV

Drinking Water Criteria (IDW). The concentration of benzene in monitoring well MW-3 was also in exceedance of the MDEQ Part 201 Groundwater/Surface Water Protection Criteria (GW/SWI). An elevated concentration of 1,2-dichloroethane was detected in monitoring well MW-3 in exceedance of the MDEQ Part 201 RDW and IDW. An elevated concentration of 1,2-dichloropropane was detected in monitoring well MW-3 in exceedance of the MDEQ Part 201 RDW and IDW. Elevated concentrations of ethylbenzene in groundwater were detected in monitoring well MW-3 and soil boring B-14 in exceedance of the MDEQ Part 201 GW/SWI. The concentration of ethylbenzene in soil boring B-14 was also in exceedance of the MDEQ Part 201 RDW and IDW. An elevated concentration of naphthalene in groundwater was detected in soil boring B-14 in exceedance of the MDEQ Part 201 GW/SWI. Tetrachloroethylene was detected in groundwater at an elevated concentration in soil boring B-14 in exceedance of the MDEQ Part 201 RDW and IDW. Trichloroethene was detected in groundwater at an elevated concentration in soil boring B-12 in exceedance of the MDEQ Part 201 RDW and IDW. An elevated concentration of 1,2,4-trimethylbenzene was detected in monitoring well MW-3 in exceedance of MDEQ Part 201 GW/SWI. Total xylenes were detected in groundwater at elevated concentrations in soil boring B-14 and monitoring well MW-3 in exceedance of the MDEQ Part 201 GW/SWI. The concentration of total xylenes in monitoring well MW-3 was also in exceedance of the MDEQ Part 201 RDW and IDW.

Trichloroethene was also detected in groundwater at elevated concentrations in monitoring well MW-5 and soil boring B-2, near University Drive, in exceedance of the MDEQ Part 201 RDW and IDW. Groundwater analytical results from other soil borings and monitoring wells near the property boundary indicated no exceedances of MDEQ Part 201 criteria.

GM's Remediation Team believes that no residents are affected by elevated constituents in the groundwater, if present, it is understood that all occupants are connected to the city's water supply. After the completion of the *IAR*, GM plans to install additional monitoring wells along the Site's southern and western boundaries. In addition, GM plans to install monitoring wells off-Site to delineate the extent of groundwater contamination. Groundwater samples collected from off-Site wells would be to confirm if groundwater contamination has migrated off-Site.

If you have any questions regarding the enclosed information, please contact me at 248-753-5790.

Sincerely,

Fred Rindhage

Fred Rindhage
Program Manager

Enclosures:

cc: B. Saunders/ARCADIS BBL
J. McKenna /ARCADIS BBL
L. Alkidas/ARCADIS BBL

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
REMEDIATION AND REDEVELOPMENT DIVISION

For DEQ Use Only
ITS # _____
Site ID #_____
Category Code: _____

NOTICE OF MIGRATION OF CONTAMINATION

(Under the authority of Part 201, Natural Resources and Environmental Protection Act, 1994 Act 451, as amended, (NREPA) and the Rules promulgated thereunder)

An owner or operator of property that is a facility, and/or who is subject to MCL 324.20114, and who has reason to believe that a hazardous substance is emanating from, has emanated from, or is likely to be emanating from the property and migrating beyond the boundaries of the property that he or she owns or operates is required under R 299.5522 and R 299.51017(1) to notify the Michigan Department of Environmental Quality ("DEQ") and affected property owners, unless he or she is exempt from MCL 324.20107a (see MCL 324.20107a(4) for exemptions), or unless he or she has provided the notice required by MCL 324.21309a. Submission of this notice does not fulfill the notification requirements of MCL324.21309a.

The notice must be provided within 45 days after the owner or operator has reason to believe that hazardous substances have migrated, or are likely to have migrated, to or beyond the boundary of his or her property (see R 299.51017 and R 299.5522 for exceptions). If a person is required to provide additional notice as a result of the changes in R 299.51017 that took effect on December 21, 2002, then that additional notice shall be provided not later than September 21, 2003.

Use of this form is mandatory for the notice required by R 299.51017(1) and may also be used by parties subject to MCL 324.20114 to provide notice required by R 299.5522. This form may also be used to provide notice to affected property owners as required by those rules.

If a person holds a permit for an oil and gas well under Part 615, Supervisor of Wells, of the NREPA and there is a release from the oil and gas exploration or production activities, that person shall give notice to the DEQ and to the owner of the surface rights of the property.

If a person holds an easement and there is a release from the easement holder's activities, that person shall provide notice to the DEQ and to the grantor of the easement, or the grantor's successor in interest, if any.

Completing this notice in no way relieves a person who is subject to MCL 324.20114 from the responsibility to undertake required response activities.

This notice must be sent to the DEQ office that serves the county in which the property is located. A list of DEQ offices is available at www.michigan.gov/bea, or by calling the Remediation and Redevelopment's Lansing office at 517-373-9837. The DEQ will not prepare acknowledgement of receipt of these notices. The sender is responsible for sending the report using a method that provides proof of delivery if such proof is desired. Please label the outside of the envelope "Migration Notice." Additional guidelines for the compliance with the requirements of R 200.51017(1) or R 299.5522 are available at www.michigan.gov/bea.

THIS NOTICE IS PROVIDED PURSUANT TO: **R 299.5522** ☐ **R 299.51017** ☒
(check both, if applicable)

Please provide the following information as completely as possible.

1. Name and location of the property that hazardous substances are emanating from:

   Name: GM Employee Development Center
   Address: 65 East University Drive
   Location: Pontiac, Michigan 48342
   City/County: Pontiac/Oakland
   Property Tax Identification Number, or if applicable, the ward and item number:

2. Status relative to the property:
   (Check one or both, as applicable.)

   Owner ☒
   Operator ☒

Provide any additional ID numbers associated with the property (e.g., EPA ID No., BEA No., Part 213 facility ID No., etc.):
Facility ID: 00015260

3. Name, address, and telephone number of the property owner, operator, or other party submitting the notice:
   Name: General Motors Corporation
   Address: 2000 Centerpoint Parkway, Mail Code: 483-520-190
   City/State: Pontiac, Michigan 48341
   Telephone number: (248) 753-5790

4. Name, address and telephone number of a contact person familiar with the content of the notice:
   Name: Fred Rindhage (General Motors Corporation)
   Address: 2000 Centerpoint Parkway, Mail Code: 483-520-190
   City/State: Pontiac, Michigan 48341
   Telephone: (248) 753-5790

5. If this Notice is provided pursuant to R 299.51017, provide the address and other location information for the *adjacent* property(s) onto which contamination is migrating, has migrated, or is likely to migrate. If this Notice is provided pursuant to R 299.5522, provide the address and other location information for *each* property onto which contamination has migrated. Notice should be sent to the property owner of record. If the impacted property is owned by the State of Michigan, notice should be sent to the department managing the property (i.e. a prison, state park, etc.). Notices to the Michigan Department of Transportation (MDOT) for state owned roadways should be sent to Ms. Heather Hicks, MDOT-Bureau of Transportation Planning, 425 W. Ottawa Street, P.O. Box 30050, Lansing, MI 48989. If it isn't readily apparent what state department manages the property, notices should be sent to Mr. Thomas Saxton, Tenant and Land Services, Department of Management and Budget, 1st Floor Lewis-Cass Building, P.O. Box 30026, Lansing, MI 48909.

Mr. Mark J. Hotz, City of Pontiac Attorney — Notified? No ☐ Yes ☒ Date: 01/26/07
Address: 4745 Woodward Ave.
City/State: Pontiac, MI 48342
Property Tax ID number:
Other:

Address: — Notified? No ☐ Yes ☐ Date:
City/State:
Property Tax ID number:
Other:

Address: — Notified? No ☐ Yes ☐ Date:
City/State:
Property Tax ID number:
Other:

Address: — Notified? No ☐ Yes ☐ Date:
City/State:
Property Tax ID number:
Other:

Address: — Notified? No ☐ Yes ☐ Date:
City/State:
Property Tax ID number:
Other:

(Attach additional pages as needed)

6. Complete the Table on Page 3 of this Form for each hazardous substance which has migrated, or is likely to have migrated, beyond the property boundary at a concentration that exceeds a Generic Residential Cleanup Criterion developed by the DEQ pursuant to MCL 324.20120a(1). Complete and attach additional copies of Page 3, if necessary, to list all hazardous substances that must be reported. Include a scaled map or drawing that shows the location of sampling points identified on the Table on Page 3, the property boundaries, and the adjacent property owners if providing notice pursuant to R 299.1017(1) or all impacted property owners if providing notice pursuant to Rule 299.5522.

   The completed table and map indicating groundwater sample locations are attached.

7. Provide a summary of the information which shows that contamination is emanating from, or has emanated from, and is present beyond the boundary of the source property at a concentration which exceeds that allowed by MCL 324.20120a(1)(a). This summary shall identify the environmental media affected, specific hazardous substances, and the concentrations of those hazardous substances in all affected environmental media at the property boundary and in any sample locations beyond the property boundary. The summary shall also describe the basis for the conclusion that the contamination is emanating, has emanated, or is present beyond the boundary of the source property, including whether the conclusion is based on groundwater analytical data or fate and transport modeling, both, or neither.

   General Motors Corporation (GM) is investigating releases of petroleum products and hazardous constituents at the GM Employee Development Center located in Pontiac, Michigan. As part of due diligence investigation activities, groundwater samples were collected throughout the GM Employee Development Center property. Elevated concentrations of benzene in groundwater were detected in soil boring B-14 (37 ug/L) and monitoring well MW-3 (3,000 ug/L) in exceedance of the Michigan Department of Environmental Quality (MDEQ) Part 201 Residential and Commercial I Drinking Water Criteria (RDW) and Industrial and Commercial II, III, and IV Drinking Water Criteria (IDW). The concentration of benzene in monitoring well MW-3 was also in exceedance of the MDEQ Part 201 Groundwater/Surface Water Protection Criteria (GW/SWI). An elevated concentration of 1,2-dichloroethane was detected in monitoring well MW-3 (14 ug/L) in exceedance of the MDEQ Part 201 RDW and IDW. An elevated concentration of 1,2-dichloropropane was detected in monitoring well MW-3 (140 ug/L) in exceedance of the MDEQ Part 201 RDW and IDW. Elevated concentrations of ethylbenzene in groundwater were detected in monitoring well MW-3 (54 ug/L) and soil boring B-14 (130 ug/L) in exceedance of the MDEQ Part 201 GW/SWI. The concentration of ethylbenzene in soil boring B-14 was also in exceedance of the MDEQ Part 201 RDW and IDW. An elevated concentration of naphthalene (27 ug/L) in groundwater was detected in soil boring B-14 in exceedance of the MDEQ Part 201 GW/SWI. Tetrachloroethylene was detected in groundwater at an elevated concentration of 8 ug/L in soil boring B-14 in exceedance of the MDEQ Part 201 RDW and IDW. Trichloroethene was detected in groundwater at elevated concentrations in monitoring well MW-5 (11 ug/L), soil boring B-12 (17 ug/L), and soil boring B-2 (100 ug/L) in exceedance of the MDEQ Part 201 RDW and IDW. An elevated concentration of 1,2,4-trimethylbenzene was detected in monitoring well MW-3 (40 ug/L) in exceedance of MDEQ Part 201 GW/SWI. Total xylenes were detected in groundwater at elevated concentrations in soil boring B-14 (267 ug/L) and monitoring well MW-3 (327 ug/L) in exceedance of the MDEQ Part 201 GW/SWI. The concentration of total xylenes in monitoring well MW-3 was also in exceedance of the MDEQ Part 201 RDW and IDW. Groundwater analytical results from other soil borings and monitoring wells near the property boundary indicated no exceedances of MDEQ Part 201 criteria.

   GM's Remediation Team believes that no residents are affected by elevated constituents in the groundwater, if present, because it is understood that all occupants are connected to the city's water supply. Based on the groundwater analytical results and groundwater flow direction determined by onsite monitoring wells, GM has notified the City of Pontiac regarding a migration of groundwater contamination. The attached Figure 2 indicates the groundwater sampling locations.

8. If the person making this notice has reason to believe that a migrating hazardous substance has affected, or is likely to affect, a private or public water supply, then that water supply must be identified here:

   Not Applicable

	YES	NO
9. Is this notice being submitted within the timeframes established under 299.51017, as applicable?	☒	☐ R 299.5522 and/or R

10. Is this notice in addition to a notice submitted prior to *December 21, 2002?* (R 299.51017(4)(c)) ☐ ☒

11. Is this notice related to an oil and gas well permit (R 299.51017(2))? ☐ ☒
Permit #:

12. Is this notice related to an easement (R 299.51017(3))? ☐ ☒
(NOTE: All easement grantors *must* receive this notice.)

13. Has surface water been affected (R 299.51017(1) and R 299.5522(2))? ☐ ☒
(If yes, please identify the affected surface water body.)

CERTIFICATION:

With my signature below, I certify that I am the owner of the facility or that I am legally authorized to execute this notice on behalf of the owner or operator named on this form, and that to the best of my knowledge and belief the above representations are complete and accurate. I understand that intentionally submitting false information to the DEQ is a felony and may result in fines up to $25,000 for each violation.

Signature Fred W. Rindhage Date 1-26-07
(Owner or person legally authorized to bind the person making this report)

Name (Typed or Printed) Fred W. Rindhage

Title (Typed or Printed) Program Manager

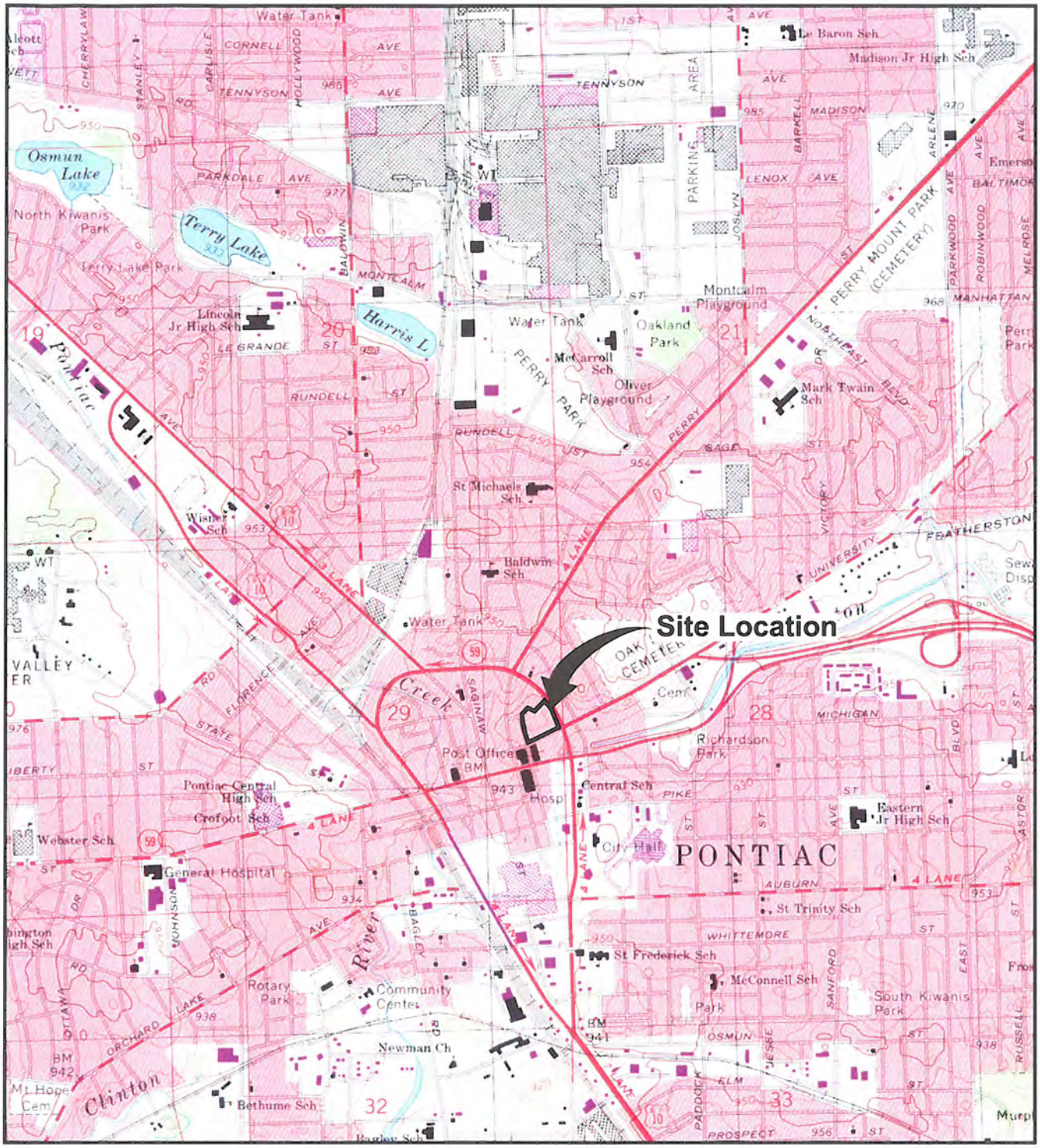
See Item 6 on Page 2 of this Form for instructions to be used in completing this Table. Attach additional pages if necessary. The information to be included in each column of the Table is:

Column A Name of hazardous substance.
Column B Chemical Abstract Service (CAS) Number for the hazardous substance.
Column C Maximum hazardous substance concentration measured on the property, expressed in parts per billion (e.g., ug/L or ug/Kg). Report maximum concentration separately for each environmental medium.
Column D Sample location for Column C (relate to label on map).
Column E Environmental medium in which concentration reported in Column C was measured (e.g., soil or groundwater).
Column F Distance from point of maximum measured concentration (Column D) to property boundary, in direction of contaminant migration, if direction is known or can reasonably be inferred. If direction is unknown, list distance to nearest property boundary.
Column G Direction of contaminant migration, if known.
Column H Concentration closest to property boundary, if known. If a concentration lower than the maximum concentration reported in Column C has been measured at a point closer to the property boundary in the direction of contaminant migration, use Column I to list the concentration that was measured closest to the property boundary in the direction of contaminant migration.
Column I Sample location for Column H (relate to label on map).
Column J Environmental medium for measurement reported in Column H, if applicable.

A Hazardous Substance	B CAS Number	C Maximum Concentration	D Sample Location for "C"	E Environmental Medium for "C"	F Distance to Property Boundary	G Direction of Migration	H Boundary Concentration	I Sample Location for "H"	J Environmental Medium for "H"
Benzene	71-43-2	7,200 ug/L	B-9	Groundwater	60 feet	South	37 ug/L & 3,000 ug/L	B-14 & MW-3	Groundwater
1,2-Dichloroethane	107-06-02	39 ug/L	B-16	Groundwater	117 feet	South	14 ug/L	MW-3	Groundwater
1,2-Dichloropropane	78-87-5	140 ug/L	MW-3	Groundwater	15 feet	West	140 ug/L	MW-3	Groundwater
Ethylbenzene	100-41-4	4,100 ug/L	B-21	Groundwater	46.5 feet	South	54 ug/L & 130 ug/L	MW-3 & B-14	Groundwater
Naphthalene	91-20-3	320 ug/L	B-16	Groundwater	117 feet	South	27 ug/L	B-14	Groundwater
Tetrachloroethylene	127-18-4	8 ug/L	B-14	Groundwater	15 feet	West	8 ug/L	B-14	Groundwater
Trichloroethene	79-01-6	100 ug/L	B-2	Groundwater	69 feet	South	11 ug/L & 17 ug/L & 100 ug/L &	MW-5 & B-12 & B-2	Groundwater
1,2,4-Trimethylbenzene	95-63-6	2,800 ug/L	B-21	Groundwater	46.5 feet	South	40 ug/L	MW-3	Groundwater
Xylenes, Total	95-47-6 108-38-3 106-42-3	18,900 ug/L	B-21	Groundwater	46.5 feet	South	267 ug/L & 327 ug/L	B-14 & MW-3	Groundwater

Total Number Samples Collected: 12 (naphthalene) & 19 (VOCs) Total Number of Samples Exceeding Criteria: 7 (naphthalene) & 13 (VOCs)

A scaled map or drawing showing these locations and the property boundaries must be submitted with this Notice



REFERENCE: Base Map Source: USGS 7.5 Min. Topo. Quads., Pontiac North, Michigan, 1971.

2000' 0 2000'

Approximate Scale: 1" = 2000'

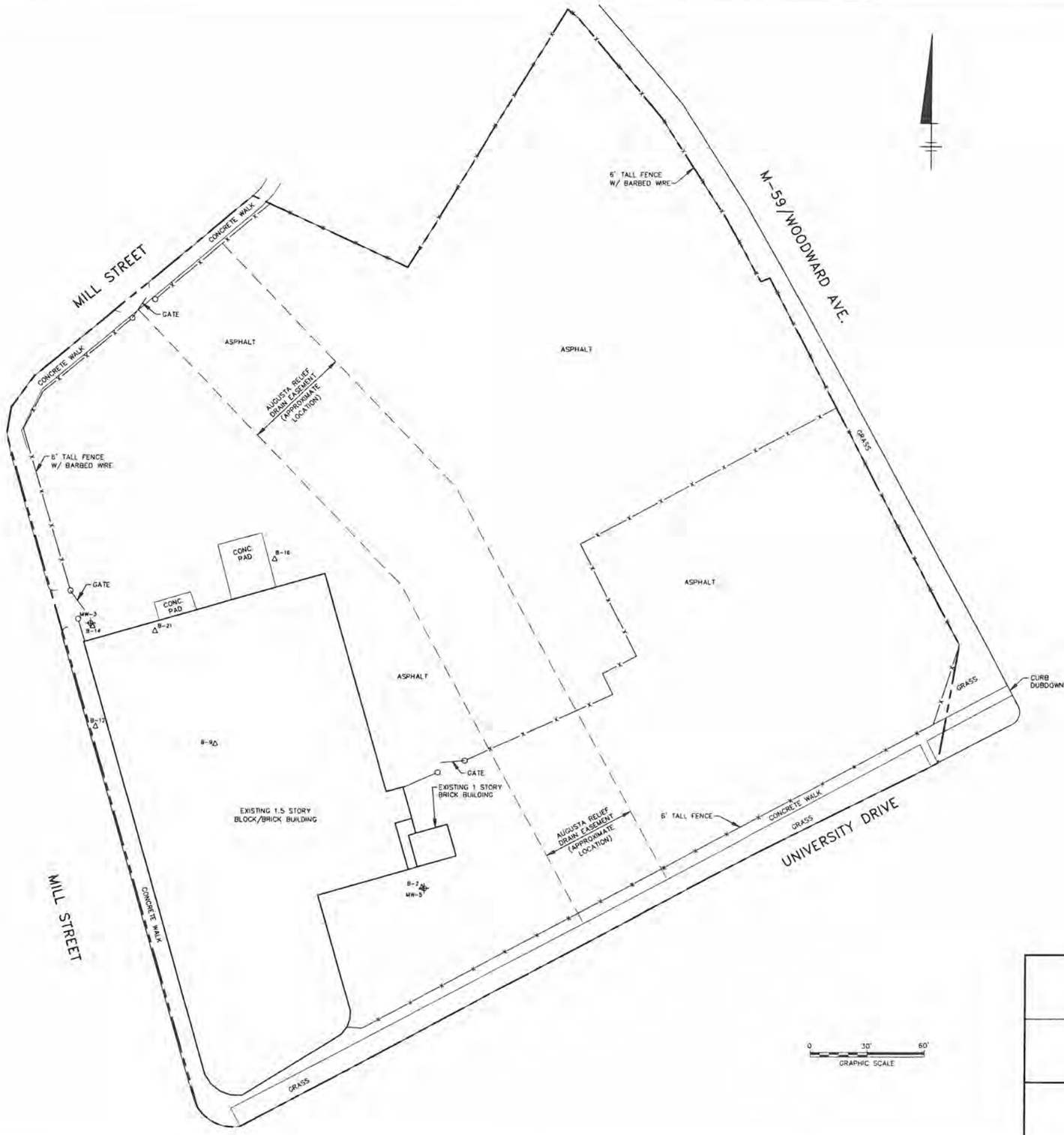
Area Enlargement

GENERAL MOTORS CORPORATION
EMPLOYEE DEVELOPMENT CENTER
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

SITE LOCATION MAP

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE 1



NOTE:

BASE MAP INFORMATION SUPPLIED BY ATWELL HICKS PLANIMETRIC, SOIL BORING AND MONITORING WELL SURVEY OF A PARCEL OF LAND, DATED 12-13-06.

GENERAL MOTORS CORPORATION
EMPLOYEE DEVELOPMENT CENTER
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

NOTICE OF MIGRATION OF CONTAMINATION

ARCADIS BBL

FIGURE 2

BR!-85-PFS LAYER: ON=*; OFF=*REF*
J:\2007\64486003\64486802.dwg SAVED:1/16/2007 2:45 PM LAYOUT:2 PAGESETUP:BR!-PDF-DL2B PENTABLE:PLTFULL.CTB PRINTED:1/16/2007 2:45 PM BY:AFOX
PROJECTNAME:----
XREFS:
IMAGES:
64486X02

City of Pontiac
Department of Public Works
Attention: Terrance King
47450 Woodward Ave, 1st Floor
Pontiac, MI 48341

Arcadis of Michigan, LLC
28550 Cabot Drive
Suite 500
Novi
Michigan 48377
Tel 248 994 2240
Fax 248 994 2241
www.arcadis.com

Subject:
Notice to Impacted Party
Pontiac Employee Development Center
Facility ID: 63006001/ 0-0015260
65 East University Drive
Pontiac, Michigan 48342

ENVIRONMENT

Date:
May 4, 2016

Contact:
Allyn Begnoche

Phone:
810.225.1971

Email:
Allyn.begnoche@arcadis.com

Our ref:
B0064486.2016

Dear Mr. King:

Arcadis of Michigan, LLC (Arcadis), on behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust, would like to provide you with an update on the progress of corrective actions at the Pontiac Employee Development Center (EDC), located at 65 East University Drive, Pontiac, Michigan (Site). Groundwater and soil data that has been collected from monitoring points associated with the Site has necessitated the need for the following notice.

In accordance with *Section 21309a(3) of Part 213, Leaking Underground Storage Tanks (LUST) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451)* Arcadis submits this Notice to Impacted Parties of Corrective Action (please see attachment) for the right-of-way (ROW) of North Mill Street located to the west of 65 East University Drive. This notice is a result of ongoing corrective action activities (such as, but not limited to, groundwater monitoring, soil probing, well installation, etc.) that have occurred at the Site, and is required by the Michigan Department of Environmental Quality – Remediation and Redevelopment Division (MDEQ-RRD).

Groundwater concentrations above MDEQ Part 201 Generic Cleanup Criteria for the drinking water and groundwater to surface water pathways have been observed in one off-site monitoring point associated with the Site located in the ROW of North Mill Street. Soil and groundwater concentrations above MDEQ Part 201 Generic Cleanup Criteria for the drinking water and groundwater to

surface water pathways have been observed in on-site monitoring points associated with the Site located immediately adjacent to the ROW of North Mill Street. Arcadis is continuing with corrective action activities until environmental closure at Pontiac Employee Development Center have been achieved.

If you have any questions regarding this matter, please contact Allyn Begnoche at 810.225.1971 or allyn.begnoche@arcadis.com.

Sincerely,

Arcadis of Michigan, LLC

Allyn Begnoche

Associated Project Manager

Copies:

Mr. David Favero, RACER Trust

Water Resource Commission

Attachments

Notice to Impacted Parties of Corrective Action Form EQP4003

Site Map

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY – REMEDIATION AND REDEVELOPMENT DIVISION
PO BOX 30426, LANSING, MI 48909-7926, Phone 517-284-5087, Fax 517-241-9581

NOTICE TO IMPACTED PARTIES OF CORRECTIVE ACTION

This information is being sent to notify you that your property is impacted by petroleum products or other regulated substances that were released from an Underground Storage Tank (UST) and to notify you of the steps that are being taken to address the contamination. This information is required to be sent to you under Sections 21309a(3) of Part 213, Leaking Underground Storage Tanks, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

OWNER OR OPERATOR PROPOSING CORRECTIVE ACTION: RACER Trust			
LOCATION OF RELEASE (SITE NAME): Pontiac Employee Development Center			
STREET ADDRESS: 65 East University Drive			
CITY: Pontiac	ZIP: 48342	COUNTY: Oakland	
CONTACT PERSON: David Favero	PHONE: 734.879.9525		
MAILING ADDRESS: 500 Woodward Avenue, Suite 2650	CITY: Detroit	STATE: MI	ZIP: 48226

PROPERTY DIRECTLY IMPACTED BY THE RELEASE:			
PROPERTY OWNERS NAME: City of Pontiac Public Works Attention Terrance King			
PROPERTY ADDRESS: North Mill Street Right of Way adjacent to 65 East University Drive			
CITY: Pontiac	ZIP: 48342	COUNTY: Oakland	
MAILING ADDRESS: 47450 Woodward Ave, 1 st Floor	CITY: Pontiac	STATE: MI	ZIP: 48341

☒ The groundwater at this property is contaminated with petroleum products or other regulated substances.

☒ The soil at this property is contaminated with petroleum products or other regulated substances.

Type of corrective action(s) or restriction(s) proposed for this release:

Restrictive Covenant, Non-MDOT Right-of-Way Alternative Institutional Control.

Corrective Action Goal/Objective for your property:

☐ **Unrestricted Residential** (Petroleum products or other regulated substances would remain at levels that allow for the use of the property for any residential purpose, with no restrictions.)

☐ **Unrestricted Non-Residential** (Petroleum products or other regulated substances would remain at levels that allow for the use of the property for any non-residential purpose, with no restrictions.)

☐ **Restricted Residential** (Petroleum products or other regulated substances would remain at levels that require some restricted use of the property. The property can be used for residential purposes with the appropriate restrictions applied to the deed with the property owner's approval.)

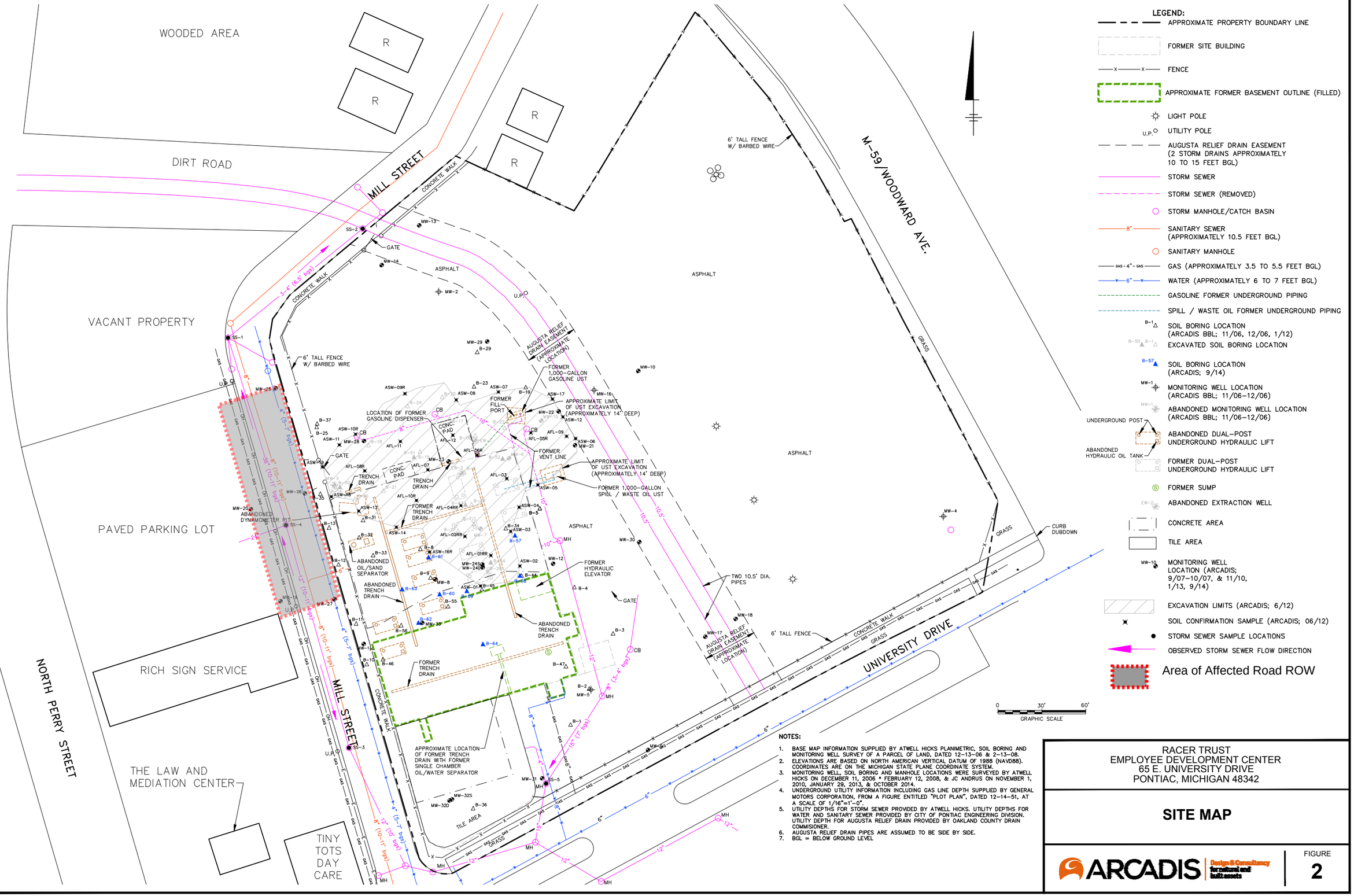
☒ **Restricted Non-Residential** (Petroleum products or other regulated substances would remain at levels that require some restricted use of the property. The property can be used for non-residential purposes with the appropriate restrictions applied to the deed with the property owner's approval.)

This notice does not constitute a warranty or representation of any kind by the State of Michigan that the corrective actions performed in accordance with this notice will result in the achievement of the remedial criteria established by Law, or that the property is suitable for any particular use.

Site release information and corrective action plans are made available to the public at the local Department of Environmental Quality (DEQ), Remediation and Redevelopment Division (RRD) District Office listed below:

Lansing District Headquarters: 525 W. Allegan Street, P.O. Box 30473, Lansing, MI 48909-7973

To obtain a copy of this information, please go to www.michigan.gov/deq, Freedom of Information Act (FOIA) Link for further details, or contact the DEQ FOIA Office by phone at: 800-662-9278.



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY LINE
- FORMER SITE BUILDING
- FENCE
- APPROXIMATE FORMER BASEMENT OUTLINE (FILLED)
- LIGHT POLE
- UTILITY POLE
- AUGUSTA RELIEF DRAIN EASEMENT (2 STORM DRAINS APPROXIMATELY 10 TO 15 FEET BGL)
- STORM SEWER
- STORM SEWER (REMOVED)
- STORM MANHOLE/CATCH BASIN
- SANITARY SEWER (APPROXIMATELY 10.5 FEET BGL)
- SANITARY MANHOLE
- GAS (APPROXIMATELY 3.5 TO 5.5 FEET BGL)
- WATER (APPROXIMATELY 6 TO 7 FEET BGL)
- GASOLINE FORMER UNDERGROUND PIPING
- SPILL / WASTE OIL FORMER UNDERGROUND PIPING
- SOIL BORING LOCATION (ARCADIS BBL; 11/06, 12/06, 1/12)
- EXCAVATED SOIL BORING LOCATION
- SOIL BORING LOCATION (ARCADIS; 9/14)
- MONITORING WELL LOCATION (ARCADIS BBL; 11/06-12/06)
- ABANDONED MONITORING WELL LOCATION (ARCADIS BBL; 11/06-12/06)
- ABANDONED DUAL-POST UNDERGROUND HYDRAULIC LIFT
- FORMER DUAL-POST UNDERGROUND HYDRAULIC LIFT
- FORMER SUMP
- ABANDONED EXTRACTION WELL
- CONCRETE AREA
- TILE AREA
- MONITORING WELL LOCATION (ARCADIS; 9/07-10/07, & 11/10, 1/13, 9/14)
- EXCAVATION LIMITS (ARCADIS; 6/12)
- SOIL CONFIRMATION SAMPLE (ARCADIS; 06/12)
- STORM SEWER SAMPLE LOCATIONS
- OBSERVED STORM SEWER FLOW DIRECTION
- Area of Affected Road ROW

0 30' 60'
GRAPHIC SCALE

NOTES:

1. BASE MAP INFORMATION SUPPLIED BY ATWELL HICKS PLANIMETRIC, SOIL BORING AND MONITORING WELL SURVEY OF A PARCEL OF LAND, DATED 12-13-06 & 2-13-08.
2. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). COORDINATES ARE ON THE MICHIGAN STATE PLANE COORDINATE SYSTEM.
3. MONITORING WELL, SOIL BORING AND MANHOLE LOCATIONS WERE SURVEYED BY ATWELL HICKS ON DECEMBER 11, 2006 * FEBRUARY 12, 2008, & JC ANDRUS ON NOVEMBER 1, 2010, JANUARY 29, 2013, & OCTOBER 2014.
4. UNDERGROUND UTILITY INFORMATION INCLUDING GAS LINE DEPTH SUPPLIED BY GENERAL MOTORS CORPORATION, FROM A FIGURE ENTITLED "PLOT PLAN", DATED 12-14-51, AT A SCALE OF 1/16"=1'-0".
5. UTILITY DEPTHS FOR STORM SEWER PROVIDED BY ATWELL HICKS. UTILITY DEPTHS FOR WATER AND SANITARY SEWER PROVIDED BY CITY OF PONTIAC ENGINEERING DIVISION. UTILITY DEPTH FOR AUGUSTA RELIEF DRAIN PROVIDED BY OAKLAND COUNTY DRAIN COMMISIONER.
6. AUGUSTA RELIEF DRAIN PIPES ARE ASSUMED TO BE SIDE BY SIDE.
7. BGL = BELOW GROUND LEVEL

RACER TRUST
EMPLOYEE DEVELOPMENT CENTER
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

SITE MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 2

CITY:BRIGHTON DIV/GROUP:85 DB:ADF LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF* PAGESETUP: ---
G:\ENVCAD\Lansing-MI\ACT\80064486\2015\00003\64486B15.dwg LAYOUT: 2 SAVED: 3/28/2016 11:16 AM ACADVER: 19.1S (LMS TECH)
XREFS: IMAGES: PROJECTNAME: ---
10s1215ZB SMI03P01140619090430_Page_1.tiff
64486x04

May 5,2016

Dear Customer:

The following is the proof-of-delivery for tracking number **776266724488**.

Delivery Information:

Status:	Delivered	**Delivered to:**	Receptionist/Front Desk
Signed for by:	S.MCCRAW	**Delivery location:**	47450 WOODWARD AVE PONTIAC, MI 48341
Service type:	FedEx Priority Overnight	**Delivery date:**	May 5, 2016 10:45
Special Handling:	Deliver Weekday		

Shipping Information:

Tracking number:	776266724488	**Ship date:**	May 4, 2016
		Weight:	0.5 lbs/0.2 kg

Recipient:
Terrance King
City of Pontiac - DPW
47450 Woodward Ave
1st Floor
PONTIAC, MI 48341 US

Shipper:
Cindy Jeffers
Arcadis
28550 Cabot Drive
Suite 500
Novi, MI 48377 US

Reference B0064486.2016.00001
Purchase order number: Pontiac EDC
Invoice number NIP

Thank you for choosing FedEx.

Consumers Energy
1 Energy Plaza
Land Development Seventh Floor
Jackson, MI 49201

Arcadis of Michigan, LLC
28550 Cabot Drive
Suite 500
Novi
Michigan 48377
Tel 248 994 2240
Fax 248 994 2241
www.arcadis.com

ENVIRONMENT

Subject:
Notice to Impacted Party
Pontiac Employee Development Center
Facility ID: 63006001/ 0-0015260
65 East University Drive
Pontiac, Michigan 48342

Date:
May 4, 2016

Contact:
Allyn Begnoche

Phone:
810.225.1971

Email:
Allyn.begnoche@arcadis.com

Our ref:
B0064486.2016

Dear Sir/Madam:

Arcadis of Michigan, LLC (Arcadis), on behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust, would like to provide you with an update on the progress of corrective actions at the Pontiac Employee Development Center (EDC), located at 65 East University Drive, Pontiac, Michigan (Site). Groundwater and soil data that has been collected from monitoring points associated with the Site has necessitated the need for the following notice.

In accordance with *Section 21309a(3) of Part 213, Leaking Underground Storage Tanks (LUST) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451)* Arcadis submits this Notice to Impacted Parties of Corrective Action (please see attachment) for the right-of-way (ROW) of North Mill Street located to the west of 65 East University Drive. This notice is a result of ongoing corrective action activities (such as, but not limited to, groundwater monitoring, soil probing, well installation, etc.) that have occurred at the Site, and is required by the Michigan Department of Environmental Quality – Remediation and Redevelopment Division (MDEQ-RRD).

Groundwater concentrations above MDEQ Part 201 Generic Cleanup Criteria for the drinking water and groundwater to surface water pathways have been observed in one off-site monitoring point associated with the Site located in the ROW of North Mill Street. Soil and groundwater concentrations above MDEQ Part 201 Generic Cleanup Criteria for the drinking water and groundwater to surface water pathways have been observed in on-site monitoring points

associated with the Site located immediately adjacent to the ROW of North Mill Street. Arcadis is continuing with corrective action activities until environmental closure at Pontiac Employee Development Center have been achieved.

If you have any questions regarding this matter, please contact Allyn Begnoche at 810.225.1971 or allyn.begnoche@arcadis.com.

Sincerely,

Arcadis of Michigan, LLC

Allyn Begnoche

Associate Project Manager

Copies:

Mr. David Favero, RACER Trust

City of Pontiac DPW

Attachments

Notice to Impacted Parties of Corrective Action Form EQP4003

Site Map

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY – REMEDIATION AND REDEVELOPMENT DIVISION
PO BOX 30426, LANSING, MI 48909-7926, Phone 517-284-5087, Fax 517-241-9581

NOTICE TO IMPACTED PARTIES OF CORRECTIVE ACTION

This information is being sent to notify you that your property is impacted by petroleum products or other regulated substances that were released from an Underground Storage Tank (UST) and to notify you of the steps that are being taken to address the contamination. This information is required to be sent to you under Sections 21309a(3) of Part 213, Leaking Underground Storage Tanks, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

OWNER OR OPERATOR PROPOSING CORRECTIVE ACTION: RACER Trust			
LOCATION OF RELEASE (SITE NAME): Pontiac Employee Development Center			
STREET ADDRESS: 65 East University Drive			
CITY: Pontiac	ZIP: 48342	COUNTY: Oakland	
CONTACT PERSON: David Favero	PHONE: 734.879.9525		
MAILING ADDRESS: 500 Woodward Avenue, Suite 2650	CITY: Detroit	STATE: MI	ZIP: 48226

PROPERTY DIRECTLY IMPACTED BY THE RELEASE:			
PROPERTY OWNERS NAME: Consumers Energy Land Department			
PROPERTY ADDRESS: North Mill Street Right of Way adjacent to 65 East University Drive			
CITY: Pontiac	ZIP: 48342	COUNTY: Oakland	
MAILING ADDRESS: 1 Energy Plaza, Land Department Seventh Floor	CITY: Jackson	STATE: MI	ZIP: 49201

☒ The groundwater at this property is contaminated with petroleum products or other regulated substances.

☒ The soil at this property is contaminated with petroleum products or other regulated substances.

Type of corrective action(s) or restriction(s) proposed for this release:

Restrictive Covenant, Non-MDOT Right-of-Way Alternative Institutional Control.

Corrective Action Goal/Objective for your property:

☐ **Unrestricted Residential** (Petroleum products or other regulated substances would remain at levels that allow for the use of the property for any residential purpose, with no restrictions.)

☐ **Unrestricted Non-Residential** (Petroleum products or other regulated substances would remain at levels that allow for the use of the property for any non-residential purpose, with no restrictions.)

☐ **Restricted Residential** (Petroleum products or other regulated substances would remain at levels that require some restricted use of the property. The property can be used for residential purposes with the appropriate restrictions applied to the deed with the property owner's approval.)

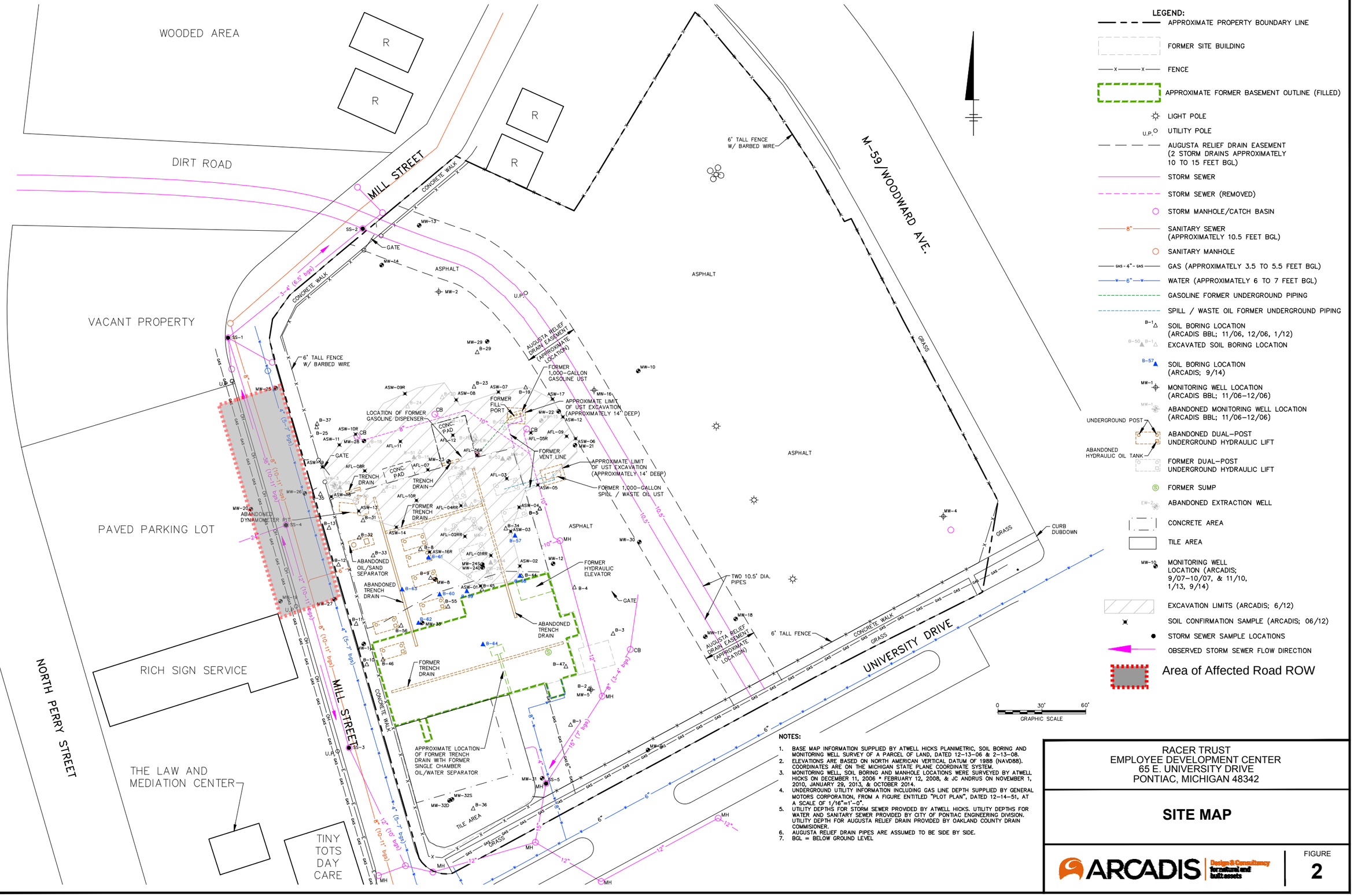
☒ **Restricted Non-Residential** (Petroleum products or other regulated substances would remain at levels that require some restricted use of the property. The property can be used for non-residential purposes with the appropriate restrictions applied to the deed with the property owner's approval.)

This notice does not constitute a warranty or representation of any kind by the State of Michigan that the corrective actions performed in accordance with this notice will result in the achievement of the remedial criteria established by Law, or that the property is suitable for any particular use.

Site release information and corrective action plans are made available to the public at the local Department of Environmental Quality (DEQ), Remediation and Redevelopment Division (RRD) District Office listed below:

Lansing District Headquarters: 525 W. Allegan Street, P.O. Box 30473, Lansing, MI 48909-7973

To obtain a copy of this information, please go to www.michigan.gov/deq, Freedom of Information Act (FOIA) Link for further details, or contact the DEQ FOIA Office by phone at: 800-662-9278.



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY LINE
- FORMER SITE BUILDING
- FENCE
- APPROXIMATE FORMER BASEMENT OUTLINE (FILLED)
- LIGHT POLE
- UTILITY POLE
- AUGUSTA RELIEF DRAIN EASEMENT (2 STORM DRAINS APPROXIMATELY 10 TO 15 FEET BGL)
- STORM SEWER
- STORM SEWER (REMOVED)
- STORM MANHOLE/CATCH BASIN
- SANITARY SEWER (APPROXIMATELY 10.5 FEET BGL)
- SANITARY MANHOLE
- GAS (APPROXIMATELY 3.5 TO 5.5 FEET BGL)
- WATER (APPROXIMATELY 6 TO 7 FEET BGL)
- GASOLINE FORMER UNDERGROUND PIPING
- SPILL / WASTE OIL FORMER UNDERGROUND PIPING
- SOIL BORING LOCATION (ARCADIS BBL; 11/06, 12/06, 1/12)
- EXCAVATED SOIL BORING LOCATION
- SOIL BORING LOCATION (ARCADIS; 9/14)
- MONITORING WELL LOCATION (ARCADIS BBL; 11/06-12/06)
- ABANDONED MONITORING WELL LOCATION (ARCADIS BBL; 11/06-12/06)
- ABANDONED DUAL-POST UNDERGROUND HYDRAULIC LIFT
- FORMER DUAL-POST UNDERGROUND HYDRAULIC LIFT
- FORMER SUMP
- ABANDONED EXTRACTION WELL
- CONCRETE AREA
- TILE AREA
- MONITORING WELL LOCATION (ARCADIS; 9/07-10/07, & 11/10, 1/13, 9/14)
- EXCAVATION LIMITS (ARCADIS; 6/12)
- SOIL CONFIRMATION SAMPLE (ARCADIS; 06/12)
- STORM SEWER SAMPLE LOCATIONS
- OBSERVED STORM SEWER FLOW DIRECTION
- Area of Affected Road ROW

0 30' 60'
GRAPHIC SCALE

NOTES:

1. BASE MAP INFORMATION SUPPLIED BY ATWELL HICKS PLANIMETRIC, SOIL BORING AND MONITORING WELL SURVEY OF A PARCEL OF LAND, DATED 12-13-06 & 2-13-08.
2. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). COORDINATES ARE ON THE MICHIGAN STATE PLANE COORDINATE SYSTEM.
3. MONITORING WELL, SOIL BORING AND MANHOLE LOCATIONS WERE SURVEYED BY ATWELL HICKS ON DECEMBER 11, 2006 * FEBRUARY 12, 2008, & JC ANDRUS ON NOVEMBER 1, 2010, JANUARY 29, 2013, & OCTOBER 2014.
4. UNDERGROUND UTILITY INFORMATION INCLUDING GAS LINE DEPTH SUPPLIED BY GENERAL MOTORS CORPORATION, FROM A FIGURE ENTITLED "PLOT PLAN", DATED 12-14-51, AT A SCALE OF 1/16"=1'-0".
5. UTILITY DEPTHS FOR STORM SEWER PROVIDED BY ATWELL HICKS. UTILITY DEPTHS FOR WATER AND SANITARY SEWER PROVIDED BY CITY OF PONTIAC ENGINEERING DIVISION. UTILITY DEPTH FOR AUGUSTA RELIEF DRAIN PROVIDED BY OAKLAND COUNTY DRAIN COMMISIONER.
6. AUGUSTA RELIEF DRAIN PIPES ARE ASSUMED TO BE SIDE BY SIDE.
7. BGL = BELOW GROUND LEVEL

RACER TRUST
EMPLOYEE DEVELOPMENT CENTER
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

SITE MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 2

CITY:BRIGHTON DIV/GROUP:85 DB:ADF LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF* PAGESETUP: ---
G:\ENVCAD\Lansing-MI\ACT\80064486\2015\00003\64486B15.dwg LAYOUT: 2 SAVED: 3/28/2016 11:16 AM ACADVER: 19.1S (LMS TECH)
XREFS: IMAGES: PROJECTNAME: ---
10s1215ZB SMI03P01140619090430_Page_1.tiff
64486x04

May 5,2016

Dear Customer:

The following is the proof-of-delivery for tracking number **776266674045**.

Delivery Information:

Status:	Delivered	**Delivered to:**	Shipping/Receiving
Signed for by:	P.TRAPKA	**Delivery location:**	1 ENERGY PLAZA JACKSON, MI 49201
Service type:	FedEx Priority Overnight	**Delivery date:**	May 5, 2016 10:10
Special Handling:	Deliver Weekday		

Shipping Information:

Tracking number:	776266674045	**Ship date:**	May 4, 2016
		Weight:	0.5 lbs/0.2 kg

Recipient:
Consumers Energy
1 Energy Plaza
Land Development Seventh Floor
JACKSON, MI 49201 US

Shipper:
Cindy Jeffers
Arcadis
28550 Cabot Drive
Suite 500
Novi, MI 48377 US

Reference B0064486.2016.00001
Purchase order number: Pontiac EDC
Invoice number NIP

Thank you for choosing FedEx.

Water Resource Commission
James Wineka
1 Public Works Drive, Building 95 West
Waterford, MI 48328

Arcadis of Michigan, LLC
28550 Cabot Drive
Suite 500
Novi
Michigan 48377
Tel 248 994 2240
Fax 248 994 2241
www.arcadis.com

ENVIRONMENT

Subject:
Notice to Impacted Party
Pontiac Employee Development Center
Facility ID: 63006001/ 0-0015260
65 East University Drive
Pontiac, Michigan 48342

Date:
May 4, 2016

Contact:
Allyn Begnoche

Phone:
810.225.1971

Email:
Allyn.begnoche@arcadis.com

Our ref:
B0064486.2016

Dear Mr. Wineka:

Arcadis of Michigan, LLC (Arcadis), on behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust, would like to provide you with an update on the progress of corrective actions at the Pontiac Employee Development Center (EDC), located at 65 East University Drive, Pontiac, Michigan (Site). Groundwater and soil data that has been collected from monitoring points associated with the Site has necessitated the need for the following notice.

In accordance with *Section 21309a(3) of Part 213, Leaking Underground Storage Tanks (LUST) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451)* Arcadis submits this Notice to Impacted Parties of Corrective Action (please see attachment) for the right-of-way (ROW) of North Mill Street located to the west of 65 East University Drive. This notice is a result of ongoing corrective action activities (such as, but not limited to, groundwater monitoring, soil probing, well installation, etc.) that have occurred at the Site, and is required by the Michigan Department of Environmental Quality – Remediation and Redevelopment Division (MDEQ-RRD).

Groundwater concentrations above MDEQ Part 201 Generic Cleanup Criteria for the drinking water and groundwater to surface water pathways have been observed in one off-site monitoring point associated with the Site located in the ROW of North Mill Street. Soil and groundwater concentrations above MDEQ Part 201 Generic Cleanup Criteria for the drinking water and groundwater to surface water pathways have been observed in on-site monitoring points

associated with the Site located immediately adjacent to the ROW of North Mill Street. Arcadis is continuing with corrective action activities until environmental closure at Pontiac Employee Development Center have been achieved.

If you have any questions regarding this matter, please contact Allyn Begnoche at 810.225.1971 or allyn.begnoche@arcadis.com.

Sincerely,

Arcadis of Michigan, LLC

Allyn Begnoche

Associate Project Manager

Copies:

Mr. David Favero, RACER Trust

City of Pontiac DPW

Attachments

Notice to Impacted Parties of Corrective Action Form EQP4003

Site Map

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY – REMEDIATION AND REDEVELOPMENT DIVISION
PO BOX 30426, LANSING, MI 48909-7926, Phone 517-284-5087, Fax 517-241-9581

NOTICE TO IMPACTED PARTIES OF CORRECTIVE ACTION

This information is being sent to notify you that your property is impacted by petroleum products or other regulated substances that were released from an Underground Storage Tank (UST) and to notify you of the steps that are being taken to address the contamination. This information is required to be sent to you under Sections 21309a(3) of Part 213, Leaking Underground Storage Tanks, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

OWNER OR OPERATOR PROPOSING CORRECTIVE ACTION: RACER Trust			
LOCATION OF RELEASE (SITE NAME): Pontiac Employee Development Center			
STREET ADDRESS: 65 East University Drive			
CITY: Pontiac	ZIP: 48342	COUNTY: Oakland	
CONTACT PERSON: David Favero	PHONE: 734.879.9525		
MAILING ADDRESS: 500 Woodward Avenue, Suite 2650	CITY: Detroit	STATE: MI	ZIP: 48226

PROPERTY DIRECTLY IMPACTED BY THE RELEASE:			
PROPERTY OWNERS NAME: Water Resource Commission Attention James Wineka			
PROPERTY ADDRESS: North Mill Street Right of Way adjacent to 65 East University Drive			
CITY: Pontiac	ZIP: 48342	COUNTY: Oakland	
MAILING ADDRESS: 1 Public Works Drive, Building 95 West	CITY: Waterford	STATE: MI	ZIP: 48328

☒ The groundwater at this property is contaminated with petroleum products or other regulated substances.

☒ The soil at this property is contaminated with petroleum products or other regulated substances.

Type of corrective action(s) or restriction(s) proposed for this release:

Restrictive Covenant, Non-MDOT Right-of-Way Alternative Institutional Control.

Corrective Action Goal/Objective for your property:

☐ **Unrestricted Residential** (Petroleum products or other regulated substances would remain at levels that allow for the use of the property for any residential purpose, with no restrictions.)

☐ **Unrestricted Non-Residential** (Petroleum products or other regulated substances would remain at levels that allow for the use of the property for any non-residential purpose, with no restrictions.)

☐ **Restricted Residential** (Petroleum products or other regulated substances would remain at levels that require some restricted use of the property. The property can be used for residential purposes with the appropriate restrictions applied to the deed with the property owner's approval.)

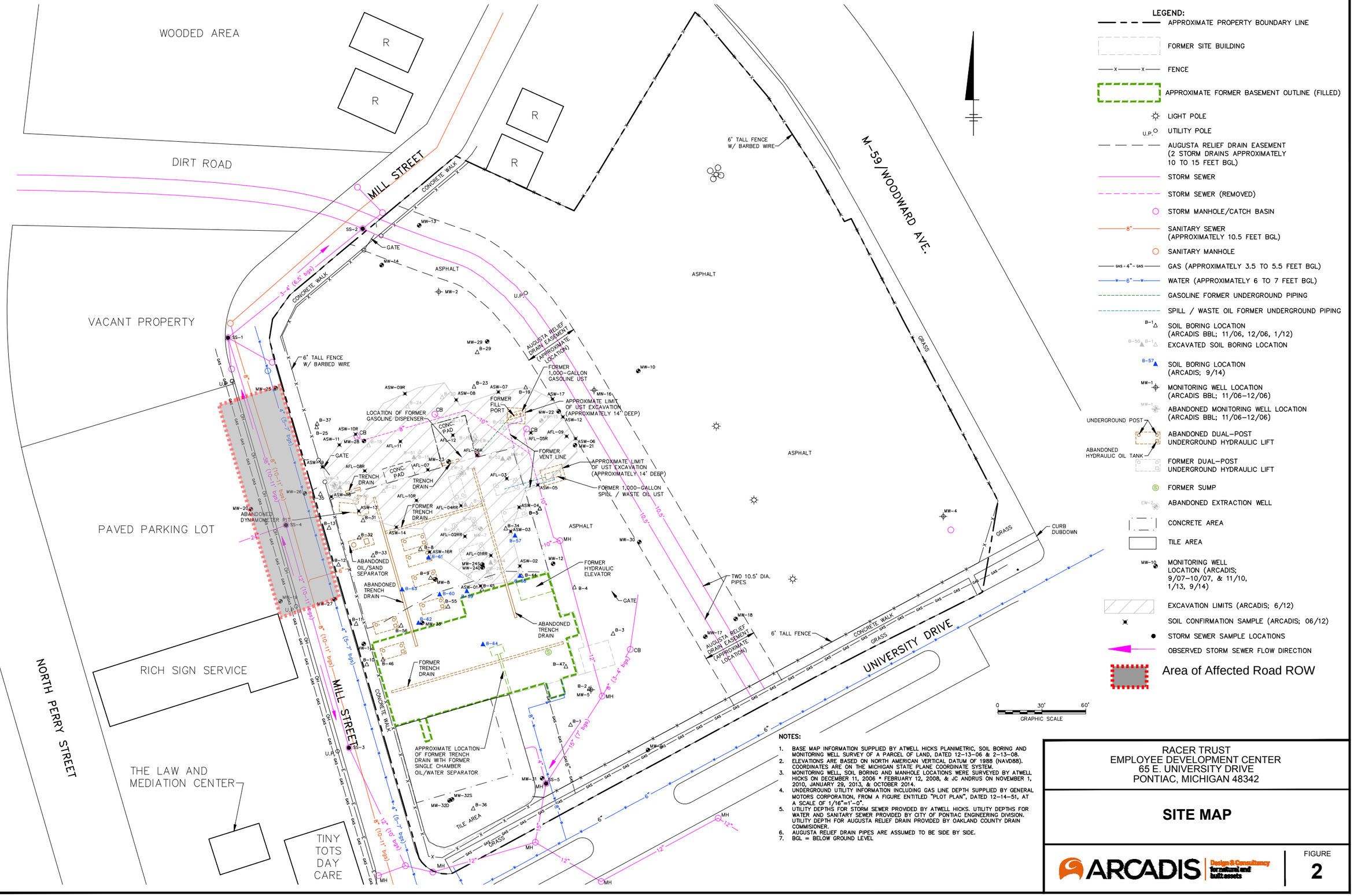
☒ **Restricted Non-Residential** (Petroleum products or other regulated substances would remain at levels that require some restricted use of the property. The property can be used for non-residential purposes with the appropriate restrictions applied to the deed with the property owner's approval.)

This notice does not constitute a warranty or representation of any kind by the State of Michigan that the corrective actions performed in accordance with this notice will result in the achievement of the remedial criteria established by Law, or that the property is suitable for any particular use.

Site release information and corrective action plans are made available to the public at the local Department of Environmental Quality (DEQ), Remediation and Redevelopment Division (RRD) District Office listed below:

Lansing District Headquarters: 525 W. Allegan Street, P.O. Box 30473, Lansing, MI 48909-7973

To obtain a copy of this information, please go to www.michigan.gov/deq, Freedom of Information Act (FOIA) Link for further details, or contact the DEQ FOIA Office by phone at: 800-662-9278.



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY LINE
- FORMER SITE BUILDING
- FENCE
- APPROXIMATE FORMER BASEMENT OUTLINE (FILLED)
- LIGHT POLE
- UTILITY POLE
- AUGUSTA RELIEF DRAIN EASEMENT (2 STORM DRAINS APPROXIMATELY 10 TO 15 FEET BGL)
- STORM SEWER
- STORM SEWER (REMOVED)
- STORM MANHOLE/CATCH BASIN
- SANITARY SEWER (APPROXIMATELY 10.5 FEET BGL)
- SANITARY MANHOLE
- GAS (APPROXIMATELY 3.5 TO 5.5 FEET BGL)
- WATER (APPROXIMATELY 6 TO 7 FEET BGL)
- GASOLINE FORMER UNDERGROUND PIPING
- SPILL / WASTE OIL FORMER UNDERGROUND PIPING
- SOIL BORING LOCATION (ARCADIS BBL; 11/06, 12/06, 1/12)
- EXCAVATED SOIL BORING LOCATION
- SOIL BORING LOCATION (ARCADIS; 9/14)
- MONITORING WELL LOCATION (ARCADIS BBL; 11/06-12/06)
- ABANDONED MONITORING WELL LOCATION (ARCADIS BBL; 11/06-12/06)
- ABANDONED DUAL-POST UNDERGROUND HYDRAULIC LIFT
- FORMER DUAL-POST UNDERGROUND HYDRAULIC LIFT
- FORMER SUMP
- ABANDONED EXTRACTION WELL
- CONCRETE AREA
- TILE AREA
- MONITORING WELL LOCATION (ARCADIS; 9/07-10/07, & 11/10, 1/13, 9/14)
- EXCAVATION LIMITS (ARCADIS; 6/12)
- SOIL CONFIRMATION SAMPLE (ARCADIS; 06/12)
- STORM SEWER SAMPLE LOCATIONS
- OBSERVED STORM SEWER FLOW DIRECTION
- Area of Affected Road ROW

0 30' 60'
GRAPHIC SCALE

NOTES:

1. BASE MAP INFORMATION SUPPLIED BY ATWELL HICKS PLANIMETRIC, SOIL BORING AND MONITORING WELL SURVEY OF A PARCEL OF LAND, DATED 12-13-06 & 2-13-08.
2. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). COORDINATES ARE ON THE MICHIGAN STATE PLANE COORDINATE SYSTEM.
3. MONITORING WELL, SOIL BORING AND MANHOLE LOCATIONS WERE SURVEYED BY ATWELL HICKS ON DECEMBER 11, 2006 * FEBRUARY 12, 2008, & JC ANDRUS ON NOVEMBER 1, 2010, JANUARY 29, 2013, & OCTOBER 2014.
4. UNDERGROUND UTILITY INFORMATION INCLUDING GAS LINE DEPTH SUPPLIED BY GENERAL MOTORS CORPORATION, FROM A FIGURE ENTITLED "PLOT PLAN", DATED 12-14-51, AT A SCALE OF 1/16"=1'-0".
5. UTILITY DEPTHS FOR STORM SEWER PROVIDED BY ATWELL HICKS. UTILITY DEPTHS FOR WATER AND SANITARY SEWER PROVIDED BY CITY OF PONTIAC ENGINEERING DIVISION. UTILITY DEPTH FOR AUGUSTA RELIEF DRAIN PROVIDED BY OAKLAND COUNTY DRAIN COMMISIONER.
6. AUGUSTA RELIEF DRAIN PIPES ARE ASSUMED TO BE SIDE BY SIDE.
7. BGL = BELOW GROUND LEVEL

RACER TRUST
EMPLOYEE DEVELOPMENT CENTER
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

SITE MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 2

CITY:BRIGHTON DIV/GROUP:85 DB:ADF LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF* PAGESETUP: ---
G:\ENVCAD\Lansing-MI\ACT\80064486\2015\00003\64486B15.dwg LAYOUT: 2 SAVED: 3/28/2016 11:16 AM ACADVER: 19.1S (LMS TECH)
XREFS: IMAGES: PROJECTNAME: ---
10s1215ZB SMI03P01140619090430_Page_1.tiff
64486x04

May 5,2016

Dear Customer:

The following is the proof-of-delivery for tracking number **776266757825**.

Delivery Information:

Status:	Delivered	**Delivered to:**	Receptionist/Front Desk
Signed for by:	D.BUTKAS	**Delivery location:**	1 PUBLIC WORKS DR WATERFORD, MI 48328
Service type:	FedEx Priority Overnight	**Delivery date:**	May 5, 2016 10:12
Special Handling:	Deliver Weekday		

Shipping Information:

Tracking number:	776266757825	**Ship date:**	May 4, 2016
		Weight:	0.5 lbs/0.2 kg

Recipient:
James Wineka
Water REsource Commission
1 Public Works Drive
Building 95 West
WATERFORD, MI 48328 US

Shipper:
Cindy Jeffers
Arcadis
28550 Cabot Drive
Suite 500
Novi, MI 48377 US

Reference B0064486.2016.00001
Purchase order number: Pontiac EDC
Invoice number NIP

Thank you for choosing FedEx.

Arcadis of Michigan, LLC

28550 Cabot Drive

Suite 500

Novi, Michigan 48377

Tel 248 994 2240

Fax 248 994 2241

www.arcadis.com