ARCADIS
Infrastructure · Water · Environment · Buildings

Imagine the result

Part 201 Excavation and Monitoring Work Plan

Former GM Employee Development Center Site
65 East University Drive
Pontiac, Michigan 48342
Former MDEQ UST Facility ID: 0-0015260

Prepared for MDEQ
on behalf of RACER Trust

November 29, 2011

ARCADIS

Allyn Begnoche
Staff Geologist

Brad Saunders, P.E.
Project Manager

Jason Lagowski, P.G., C.P.
Resource Manager 2

Part 201 Excavation and Monitoring Work Plan

Former GM Employee Development Center

Prepared for:
MDEQ

Prepared by:
ARCADIS on behalf of RACER Trust
10559 Citation Drive
Suite 100
Brighton
Michigan 48116
Tel 810.229.8594
Fax 810.229.8837

Our Ref.:
B0064486.2011

Date:
November 29, 2011

This document is intended only for the use of the individual or entity for which it was prepared and may contain information that is privileged, confidential and exempt from disclosure under applicable law. Any dissemination, distribution or copying of this document is strictly prohibited.

ARCADIS

Table of Contents

1. Introduction **1**

2. Background **2**

2.1 Historic and Current Site Use 2

2.2 Regional Topography 2

2.3 Regional Geology 3

2.4 Site Geology 3

2.5 Regional Hydrogeology 3

2.6 Site Hydrogeology 4

3. Previous Site Investigations **5**

4. Recent Site Investigations **8**

5. Results **10**

5.1 Soil Analytical Data 10

5.2 Groundwater Analytical Data 11

6. Excavation Activities **12**

6.1 Excavation 12

6.1.1 Well Abandonment and Pre-Excavation Sampling 13

6.1.2 Field Screening and Verification Sample Collection and Analysis 13

6.1.3 Monitoring Well Installation 14

6.1.4 Groundwater Monitoring and Sampling 15

6.1.5 Quality Assurance/Quality Control 15

7. Schedule **17**

8. References **18**

ARCADIS

Table of Contents

Tables

Table 1 – Groundwater Level and Elevation Data

Table 2a – Soil Analytical Data – Soil Borings

Table 2b – Soil Analytical Data – Monitoring Wells

Table 2c – Soil Analytical Data – Effective Solubility Screening Levels Comparison

Table 3 – Groundwater Analytical Data

Figures

Figure 1 – Site Location Map

Figure 2 – Site Map

Figure 3 – Groundwater Elevation & Flow Map – July 28, 2008

Figure 4 – Groundwater Elevation & Flow Map – December 1, 2010

Figure 5 – Soil Analytical Map

Figure 6 –Groundwater Analytical Map

Figure 7 – Proposed Excavation Limits Map

Figure 8 – Proposed Monitoring Well Locations Map

Appendices

Appendix A – Soil Boring and Well Construction Logs

ARCADIS

1. Introduction

ARCADIS has prepared this Part 201 work plan on behalf of Revitalizing Auto Communities Environmental Response Trust (RACER) for the Former General Motors (GM) Employee Development Center (EDC) [the Site] located at 65 East University Drive in Pontiac, Michigan (Site) (see **Figures 1** and **2**).

The principal objective of this work plan is to provide a plan to protect public health, welfare and the environment, with the intent of pursuing closure of the Site under Part 201 of the Michigan Natural Resources and Environmental Protection Act (NREPA). This work plan entails a combination of soil excavation, limited perched impacted groundwater removal, groundwater monitoring and associated reporting.

2. Background

The Site is located in the southeastern ¼ of Section 29, Township 28 North, Range 5 East on the Pontiac North, Michigan 7.5-minute Quadrangle (see **Figure 1**). The Site occupies approximately 3.7 acres consisting of three parcels, and is located at 65 East University Drive in Pontiac, Michigan (see **Figure 2**). The Site is located in an area composed of commercial and residential developments.

2.1 Historic and Current Site Use

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 in the early to mid 1950s and the former Site building was constructed as an automobile dealership (referred to as the "Pontiac Store") owned and operated by Pontiac Motor Division from the early to mid 1950s to 1978. The former Site Building consisted of 40,459 square feet, and was a single story building with a basement beneath a portion of it. In 1978, the Site Building was utilized by GM's Truck and Bus Division as an engineering center for the construction of prototype vehicles and associated engineering development activities. Activities at the Site ceased in 1992 and the Site Building was remodeled in 1994 for use as a training and employee development center. The Site Building operated as a training and employee development center from 1994 through January 2007. The Site Building was unoccupied from January 2007 until July 2010 when it was demolished. During demolition activities, the basement was backfilled to grade and the Site Building features were removed to grade with exception to the concrete and tile floor area.

The Site currently consists of vacant land (see **Figure 2**), and is zoned C-3 for Central Business and Thoroughfare Frontage Business.

2.2 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.

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. The Augusta Relief Drain and other local utility corridors may influence the on-Site flow direction

2.3 Regional Geology

Information regarding the regional geology in the Site vicinity was obtained from the Geocheck® Addendum to the EDR Radius Map Report and previous investigations. The Site is located approximately 918 feet above mean sea level. The topographic gradient in the area surrounding the Site slopes gradually to the southeast.

EDR regional data indicates that the surface soil texture in the area of the Site 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.

2.4 Site Geology

Soils at the Site consist primarily of light reddish brown to grayish brown clay with trace to little 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. The lithology is characterized in the soil boring logs included in **Appendix A**.

2.5 Regional Hydrogeology

Information regarding the regional hydrogeology of the Site vicinity was obtained from the Geocheck Addendum to the EDR Radius Map Report and previous investigations. AQUIFLOW information was available within 1 mile of the Site. The EDR GeoCheck Addendum provided information on several data sets of hydrogeologic information available within one mile of the Site. According to three AQUIFLOW points, the depth to a sustained groundwater table in the vicinity of the Site is approximately 36 to 46 feet below ground level. Based on the area topography and nearby surface water bodies, the groundwater flow direction is likely to the southeast.

2.6 Site Hydrogeology

Based on groundwater levels collected on November 1, 2011, shallow perched groundwater was generally encountered at depths between 1.45 to 11.0 feet below ground surface (bgs). The monitoring wells at the Site were surveyed by Atwell-Hicks on February 12, 2008 and J.C. Andrus on November 1, 2010. During the July 28, 2008 and the November 1, 2010 gauging data, the shallow groundwater flow direction was determined to be radial from an apparent groundwater mound in the vicinity of the former gasoline UST area. Monitoring well construction logs are included in **Appendix A**. Groundwater elevations are shown on **Table 1**. The approximate groundwater flow direction for July 28, 2008 and November 1, 2010 is shown on **Figure 3** and **4**, respectively.

Based on borings completed to date, the perched groundwater zone is present due to the presence of a low permeable clay layer present 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. No groundwater remediation activities have occurred at the Site to date.

3. Previous Site Investigations

The Site formerly had two underground storage tanks (USTs) which consisted of a 1,000-gallon used oil UST (Tank #1) and a1,000-gallon gasoline UST (Tank #2). 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 Site building as depicted on **Figure 2**. According to GM Site personnel, the UST contained unleaded gasoline at the time of removal; however, historical UST registration documentation does not specify whether the UST contained unleaded or leaded gasoline. According to a *Leaking Underground Storage Tank Release Closure Report* prepared by Conestoga-Rovers & Associates, Inc. (CRA) on December 22, 1995, the former gasoline UST was abandoned and filled with sand in 1980. In December 1990, Inland Waters removed the two 1,000-gallon USTs and an 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 background levels, which were applicable at the time CRA's report was written. 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).

On April 7, 1992, Enkon Environmental Services, Inc. (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 20X Drinking Water Cleanup Criteria, which were applicable at the time Enkon's report was written.

On January 7, 1993, Pickering Environmental Consultants, Inc. (PECI) performed a subsurface investigation in the vicinity of the former used oil/spill UST. Benzene and ethylbenzene were detected in one of the soil samples at a concentration exceeding Michigan Act 307 Type B 20X Drinking Water Cleanup Criteria, which were applicable at the time PECI's report was written.

On March 16 and 17, 1995, CRA performed a subsurface investigation in the vicinity of the two former USTs. Except for arsenic, no parameters were detected above the Michigan Tier 1 Residential Direct Contact Criteria for soil or the Risk Based Screening Levels (RBSLs), which were applicable at the time CRA's report was written, in the soil samples. 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 current 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 database on the Internet, the release case (Release ID C-1142-91) was closed by the MDEQ on December 22, 1995. Although LUST case C-1142-91 was closed by the MDEQ, closure activities associated with the former USTs were focused in the area of the tanks and not the piping or dispenser associated with the gasoline UST.

In November and December 2006, ARCADIS performed a due diligence subsurface soil and groundwater investigation of the Site. Twenty-five soil borings (B-1 through B-25) were completed, and 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 continuously, starting at the ground surface, at 2-foot intervals by utilizing DPT. Soil samples were collected from each soil boring location and one of the monitoring wells based on field observations. 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 the potential sources of contamination. Soil analytical results are included in **Table 2a** (Soil Boring Locations), **Table 2b** (Monitoring Well Locations), and **Table 2c** (Effective Solubility Comparison), and depicted on **Figure 5**. Soil boring logs are included as **Appendix A**.

During the subsurface soil investigation, a groundwater grab sample was collected from twenty-one of the twenty-five soil boring locations (B-1 through B-21). Groundwater grab samples were collected by installing a temporary 2-inch diameter polyvinyl chloride (PVC) well screen in the open borehole. Groundwater was purged out of the temporary wells until the groundwater turbidity became visibly clear. A groundwater grab sample was then collected and placed in appropriate sample jars and shipped to a certified laboratory for analysis of constituents selected based on the potential sources of contamination. Boreholes were backfilled with bentonite chips and the surface sealed with concrete. Groundwater analytical results are included as **Table 3**.

Based on the results of the subsurface soil investigation, Monitoring Wells MW-2 through MW-5 and Extraction Well EW-1 were installed. The monitoring wells were constructed with 10-foot, 2-inch diameter PVC well screens. The extraction well was installed with a 4-inch diameter PVC well screen. Monitoring wells were installed with the well screen straddling the water table and were installed with flush-mount well

protectors. Monitoring well and extraction well construction logs are included as **Appendix A**. The monitoring and extraction wells were developed until field parameters (temperature, specific conductivity, pH, and temperature) stabilized. Groundwater samples were collected using low-flow groundwater sampling procedures. Groundwater analytical results are included as **Table 3** and depicted on **Figure 6**.

Evidence of gasoline contamination was detected and confirmed via 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 was confirmed via 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, and per correspondence with Jim Lucas in the MDEQ Storage Tank Unit, at that time ARCADIS requested transfer of the Site from Part 213 into the Part 201 voluntary cleanup program. A work plan to delineate soil and groundwater contamination was submitted as part of the IAR.

4. Recent Site Investigations

Since the submittal of the IAR, ARCADIS has completed additional subsurface investigations at the Site.

- 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. The field screening activities consisted of visually inspecting the soil samples for the presence of free product, 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 selected soil samples. Soils were collected continuously, starting at the ground surface, at 2-foot intervals by utilizing direct push techniques (DPT). Up to two soil samples were collected from each soil boring location based on field observations. 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 Part 213 guidance for unleaded gasoline releases and other findings of the initial investigations.

  Eleven temporary wells (TW-26 through TW-31, 34, 35, 37, 44, and 45) were also 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 at the Site. Groundwater grab samples were collected from each of the temporary wells by installing a temporary 2-inch diameter PVC well screen in the open borehole. Groundwater was purged out of the temporary wells until the groundwater turbidity became visibly clear. A groundwater grab sample was then collected and placed in appropriate sample jars and shipped to a certified laboratory for analysis of constituents selected based on both Part 213 guidance for unleaded gasoline releases and other findings of the initial investigations. Boreholes were backfilled with bentonite chips and the surface sealed with concrete.

  In addition, fifteen monitoring wells (MW-6 through MW-18) were installed throughout the Site to further assess the groundwater plume. Monitoring wells were constructed with 10-foot, 2-inch diameter PVC well screens. Extraction Well EW-2 was installed with a 4-inch diameter PVC well screen. The monitoring wells and extraction well were installed with the well screen straddling the water table and were installed with flush-mount well protectors.

Soil boring, monitoring well, and extraction well locations are depicted on **Figure 2** and the soil boring logs are included in **Appendix A**.

- On February 14, 2008, ARCADIS completed soil borings B-46 through 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 free product, 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, 2-inch diameter PVC well screens. The monitoring wells and extraction well were installed with the well screen straddling the water table and were installed with flush-mount well protectors. Monitoring Well locations are depicted on **Figure 2** and the soil boring logs are included in **Appendix A**.

- Additionally, groundwater sampling events were conducted in December 2006, July 2008, and November 2010. Groundwater samples were collected using low-flow groundwater sampling procedures. Groundwater samples were submitted to Merit Laboratories of Lansing, Michigan. Based on both Part 213 guidance for unleaded gasoline releases and other findings of the initial investigations, samples were analyzed for volatile organic compounds (VOCs) in accordance with United States Environmental Protection Agency (USEPA) Method 8260, semi-volatile organic compounds (SVOCs) in accordance with USEPA Method 8270, and lead in accordance with USEPA Method 6010. Groundwater analytical results are included as **Table 3** and depicted on **Figure 6**.

5. Results

5.1 Soil Analytical Data

During site investigation activities completed at the Site, a total of 33 soil borings were advanced at the Site. Soil samples were continuously logged and field screened with a PID. Soil samples were collected from soil boring locations based upon visual and field-screening results, and were submitted for laboratory analysis. As described above, analytical parameters were selected initially based on potential sources of pollution, and after based on Part 201/213 guidance for unleaded gasoline releases and the findings of initial investigations. Soil samples were submitted to Merit Laboratories of Lansing, Michigan for analysis of VOCs in accordance with USEPA Method 8260, SVOCs in accordance with USEPA Method 8270, and lead in accordance with USEPA Method 6010. Soil boring descriptions and field-screening results are presented on the soil boring logs included in **Appendix A**. Soil boring and monitoring well locations are depicted on **Figure 2**, **Figure 5** and **Figure 7**. The soil analytical data (**Tables 1a through** 1c and **Figure 5**) collected indicate the following:

- Soil samples collected from soil borings B-12, B-14, B-15, B-16, B-20, B-27, B-34, B-35, B-37, and Monitoring Well MW-15 exceed Part 201 Non-Residential Drinking Water Protection and/or GSI Criteria for one or more analytes.

- Soil samples collected from soil borings B-26, Monitoring Wells MW-6 and MW-7, and Extraction Well EW-2 exceed Part 201 Non-Residential Drinking Water Protection, GSI, and Volatilization to Indoor Air (VIA) Criteria for one or more analytes.

- Soil sample collected from soil boring B-28 exceed Part 201 Non-Residential Drinking Water Protection, GSI, VIA, Groundwater Contact Protection, Direct Contact Criteria, and Soil Saturation Concentration Screening Levels (Csat) for one or more analytes.

- Analytical results of soil samples collected from soil borings B-6, B-7, B-14, B-15, B-16, B-26, B-27, B-28, B-35, Monitoring Wells MW-3, MW-6, MW-7, MW-15, and Extraction Well EW-2 indicate concentrations of several analytes exceed their respective effective solubility values, which reportedly indicates a potential presence of free-phase contaminants (see **Table 1c**).

5.2 Groundwater Analytical Data

Groundwater monitoring and sampling activities were completed in December 2006, July 2008, and November 2010. The following monitoring wells are currently located at the Site: MW-1 through MW-20, EW-1, and EW-2. These monitoring wells were installed in response to release number C-0328-06, dated November 14, 2006. The monitoring wells are being used for groundwater monitoring and passive free-product recovery purposes at the Site. During groundwater monitoring events, the monitoring and extraction wells are gauge using an electronic water measuring tape to measure the static groundwater elevations and an interface probe to measure depth to product and product thickness in those wells that have contained free-phase product. Groundwater samples collected from the existing monitoring wells prior to 2004 were collected using a disposable bailer. Groundwater samples collected from 2006 to 2010 were collected using low-flow sampling techniques in compliance with the MDEQ Operational Memorandum #2, Sampling and Analysis Guidance, dated October 22, 2004. As described above, analytical parameters were selected initially based on potential sources of pollution, and after based on Part 213 guidance for unleaded gasoline releases and the findings of initial investigations. Groundwater samples collected were submitted to Merit Laboratories of Lansing, Michigan for analysis of VOCs in accordance with USEPA Method 8260, SVOCs in accordance with USEPA Method 8270, and dissolved lead in accordance with USEPA Method 6010. Monitoring well construction logs are included on the soil boring logs presented in **Appendix A**. Monitoring and extraction well locations are depicted on **Figure 2**, **Figure 3**, **Figure 4**, and **Figure 6**. The groundwater analytical data (**Table** 3 and **Figure 6**) collected indicate the following:

- Groundwater samples collected from Monitoring Wells MW-5 and MW-12 exceed Part 201 Non-Residential Drinking Water Protection Criteria for trichloroethene.

- Groundwater samples collected from MW-3, MW-7, and MW-15 exceed Part 201 Non-Residential Drinking Water Protection and Groundwater Surface Water Interface (GSI) Criteria for one or more analytes.

- Groundwater samples collected from Monitoring Wells MW-6 and MW-8 exceeds the Part 201 Non-Residential Drinking Water Protection, GSI, and Volatilization to Indoor Air (VIA) Criteria for one or more analytes.

6. Excavation Activities

The results of the field-screening and analytical data suggest the presence of residual free-phase impacts in the vadose zone. Consequently, ARCADIS has developed the following work plan to excavate the residual free-phase contaminants, if present in the area of soil borings B-6, B-7, B-14, B-15, B-16, B-26, B-27, B-28, B-35, Monitoring Wells MW-3, MW-6, MW-7, MW-15, and Extraction Well EW-2. The approximate location and extent of the proposed excavation is shown on **Figure 7**. The location and extent is defined as approximate given that actual bounds will depend on field screening and the results of confirmatory soil sampling.

6.1 Excavation

The planned excavation will extend from approximately soil boring B-35 eastward to Monitoring Well MW-15, and from approximately soil boring B-16 southward to soil boring B-28 (see **Figure 7**). Based on the results of previous and recent investigation activities conducted at the site, ARCADIS estimates that the area of the excavation will be approximately 7,000 square feet, with a planned average depth of 8 feet below grade. The actual extent and depth of the excavation will be based on field-screening consisting of visual and olfactory observations, PID readings, and Oil-N-Soil shake tests. Based on previous investigation results, the depth of the excavation will vary and may extend into the groundwater table when warranted.

A licensed contractor will perform excavation and wastewater management activities. Planned excavation activities will result in an estimated volume of soils for disposal of approximately 2,074 cubic yards (in-place volume). During the excavation activities, several subsurface features including abandoned hydraulic lifts, trench drains, and inactive or abandoned utilities are expected to be encountered. Removed structures will be segregated as necessary and characterized prior to recycling and/or disposal. In addition, impacted perched groundwater and any precipitation infiltration will be pumped from the excavation and stored pending characterization. Licensed waste haulers will be utilized for transportation of wastes, wastewater, and recyclable materials for recycling and/or disposal as appropriate.

The excavation will be backfilled with clean Class II sand brought to the site. Prior to any backfill being delivered to the property, a sample of the backfill (clean Class II sand) will be collected by the contractor for a full analytical test. Upon approval that the fill is clean, the excavation will be backfilled to existing grade with the clean Class II sand and compacted with a hydraulic hoe pac attachment. Following compaction,

asphalt paving and sidewalks that are damaged or removed as part of excavation activities shall be replaced to match existing appearance and thickness.

6.1.1 Well Abandonment and Pre-Excavation Sampling

Based on the planned excavation area, ARCADIS will mobilize to the Site and properly abandon Monitoring Wells MW-3, MW-6, and MW-7 and Extraction Wells EW-1 and EW-2 prior to excavation activities. In addition, ARCADIS will install five soil borings to evaluate the potential presence of metals (MI 10 Metals) and PCB impacts to on-site soils and to further characterize the soils for waste profiling. The locations will be spaced across the planned excavation area in areas where other contaminants are historically known to exist at elevated concentrations which exceed applicable MDEQ cleanup criteria. To the extent that additional contaminants are found to exceed MDEQ cleanup criteria, those contaminants will be added to the analytical parameter list for soil confirmation/verification samples during the excavation activities and future groundwater monitoring activities.

6.1.2 Field Screening and Verification Sample Collection and Analysis

ARCADIS will utilize a number of field-screening methods to guide excavation activities consisting of visual and olfactory observations, use of a PID, and Oil-N-Soil shake tests. In addition, results from soil verification samples collected for expedited analytical turnaround time will be used to guide day to day activities.

Soil verification sampling will be conducted in accordance with the MDEQ *Sampling Strategies and Statistics Training Materials for Part 201 Cleanup Criteria* as discussed below. Soil verification samples will be collected from the floor of the excavation (even if groundwater is encountered) for comparison to cleanup criteria and/or effective solubility guidelines as appropriate. Soil verification samples will also be collected from the sidewalls of the excavation. Based on the anticipated size of the excavation, ARCADIS estimates a minimum of sixteen (16) soil verification samples will be collected from the excavation sidewalls and a minimum of seven (7) soil verification samples will be collected from the floor of the excavation. The actual number of soil verification samples collected from the sidewalls and floor of the excavation will depend on the final size and shape of the excavation.

The soil verification samples will be collected in laboratory-supplied containers, placed in a cooler containing ice, and submitted to Merit Laboratories of Lansing, Michigan along with chain-of-custody documentation for the analysis of VOCs in accordance with

USEPA Method 8260, SVOCs in accordance with USEPA Method 8270, total lead in accordance with USEPA Method 6010. Select soil verification samples will also be analyzed for MI 10 Metals and/or PCBs pending the results of pre-excavation soil boring analysis detailed in Section 6.1.1. Analytical methods for the MI 10 metals and PCBs are USEPA Method 6000/7000 and USEPA Method 8082A/8270C, respectively. Analytical results from the soil verification samples will be compared effective solubility guidelines and Part 201 Non-Residential Criteria as appropriate.

6.1.3 Monitoring Well Installation

ARCADIS will reinstall replacement monitoring wells as necessary to monitor groundwater quality following the excavation. ARCADIS will oversee a drilling subcontractor during the installation of an estimated seven permanent monitoring wells (see **Figure 8**). The locations of these wells have been selected to assess post-soil remediation groundwater quality within the excavation zone and along the Augusta Relief Drain east of the planned excavation area. The monitoring wells will be constructed based on the observed water table, as well as the construction of previous monitoring wells in the area. The wells will be installed using a Geoprobe® drill rig equipped with hollow-stem augers. The monitoring wells will be constructed using 2-inch-diameter, flush joint, schedule 40 PVC risers with 10-foot 0.010-inch slotted PVC well screens to span across the groundwater table and allow for fluctuations in the water table. A sand pack will extend from the bottom of the monitoring well to approximately 1 to 2-foot above the top of the screen. The remainder of the borehole will be filled with bentonite grout to prevent surface infiltration.

The new monitoring wells will be developed prior to collecting samples or gauging information. The monitoring well will be purged using a submersible pump or disposable bailer for water extraction until one of the following conditions is met:

- A minimum of ten (10) well volumes of groundwater have been excavated from the well; or

- The well has been purged dry a minimum of three (3) times.

The water produced during development will be containerized in Michigan Department of Transportation (MDOT) approved 55-gallon drums.

The following data will be recorded as part of well development:

- The static water level measured from the top of the well casing, before and after development is complete;
- The calculated quantity of fluid standing in the well prior to development;
- The total depth of the well before and after development, to determine if siltation has occurred inside the well;
- The physical characteristics of water removed, including changes in color, turbidity, and odor, that occur during development;
- The development technique used; and
- Quantity of water removed during well development.

All reusable equipment will be decontaminated prior to starting the development task and after each use prior to using it at the next well.

6.1.4 Groundwater Monitoring and Sampling

ARCADIS will incorporate the new monitoring wells into a semi-annual groundwater monitoring program. Monitoring wells will be sampled to assess the effectiveness of the remedial actions and evaluate dissolved-phase groundwater conditions. Groundwater samples will be collected in laboratory-supplied containers, placed in a cooler containing ice, and submitted to Merit Laboratories of Lansing, Michigan for analysis of VOCs in accordance with USEPA Method 8260, SVOCs in accordance with USEPA Method 8270, dissolved lead in accordance with USEPA Method 6010, and potentially other dissolved MI 10 metals and/or PCBs pending the results of pre-excavation soil boring analysis.

Sampling will be conducted via low-flow techniques using a peristaltic pump combined with a flow-through cell utilizing a multi-parameter field meter. Purge water generated during monitoring well sampling will be will be containerized in MDOT approved 55-gallon drums.

6.1.5 Quality Assurance/Quality Control

Quality assurance/quality control (QA/QC) samples will be collected during the excavation and groundwater monitoring activities. Duplicate and trip blank samples will

be analyzed to assess the quality of the data resulting from the field sampling program. A brief discussion of the purpose, frequency, and mode of collection for the QC samples follows:

- **Duplicates:** Duplicate samples are analyzed to check for sampling and analytical reproducibility. The general frequency will be one field duplicate for every 10 samples collected, plus one field duplicate for each incremental batch of samples fewer than 10. All duplicates will be submitted to the laboratory as "blind" samples (i.e., the sampling location and times will be recorded in the field logbook but not on the chain-of-custody form).

- **Matrix Spike/Matrix Spike Duplicates (MS/MSD):** MS/MSD results from the spiked sample(s) are used as a measure of the potential bias and precision of the results from the unspiked field samples and, therefore, as a measure of the applicability of the methods employed to the sample matrix. Site-specific MS/MSD samples will be collected once per sampling event.

- **Trip Blanks:** Trip blanks are used to assess whether crossover of constituents between samples occurs during sample shipment and storage. One laboratory-supplied trip blank, consisting of high-grade deionized water (i.e., laboratory "purge" water) will be included along with each shipment of samples to be analyzed for VOCs only.

7. Schedule

The remedial activities are anticipated to take 4-8 weeks to complete and will begin upon approval of the Excavation and Monitoring Work Plan. Based on the results of the excavation and groundwater sampling events, all data will be presented in a Remedial Action Plan or a Closure Report in accordance with Part 201 Regulations.

8. 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

Tables

TABLE 1

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

GROUNDWATER LEVEL AND ELEVATION DATA

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	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	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
MW-2	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
MW-3	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
MW-4	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

TABLE 1

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

GROUNDWATER LEVEL AND ELEVATION DATA

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	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
MW-6	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
MW-7	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
MW-8	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
MW-9	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
MW-10	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

TABLE 1

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

GROUNDWATER LEVEL AND ELEVATION DATA

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-11	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
MW-12	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
MW-13	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
MW-14	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
MW-15	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
MW-16	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

TABLE 1

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

GROUNDWATER LEVEL AND ELEVATION DATA

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-17	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
MW-18	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
MW-19	917.38	12/2/2010	NP	4.21	NP	913.17
MW-20	917.44	12/2/2010	NP	7.15	NP	910.29

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, and November 1, 2010 .

NM = Well was not measured
NP = No product
* = Groundwater elevation was corrected for the presence of free product where applicable.

TABLE 2a

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

SOIL ANALYTICAL DATA - BORING LOCATIONS

Sample ID:	Units	Michigan Department of Environmental Quality Part 201/213 Non-Residential Soil Cleanup Criteria and Risk Based Screening Levels					B-1	B-2	B-3	B-4	B-5	B-6	B-7	B-8	B-9	B-10	B-11	B-12
							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
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
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'
Analytical Parameter		**Drinking Water Protection**	**Groundwater Surface Water Interface**	**Indoor Air**	**Ambient Air**	**Direct Contact Criteria**												
TPH (EPA Method 418.1)	mg/kg	none	none	none	none	none	23	55	26	55	22	27	26	<11	16	16	22	22
PAHs (EPA Method 8310)																		
1-Methylnaphthalene	ug/kg	none	none	none	none	none	NA	NA	NA	NA	NA	<22	<4.2	<3.6	19	NA	NA	NA
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	1.8E+06	2.6E+07	NA	NA	NA	NA	NA	<22	<4.2	<3.6	35	NA	NA	NA
Acenaphthene	ug/kg	8.8E+05	8,700	3.5E+08	9.7E+07	1.3E+08	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA
Acenaphthylene	ug/kg	17,000	ID	3.0E+06	2.7E+06	5.2E+06	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA
Anthracene	ug/kg	41,000	ID	1.0E+09	1.6E+09	7.3E+08	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA
Benz(a)anthracene	ug/kg	NLL	NLL	NLV	NLV	80,000	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA
Benzo(a)pyrene	ug/kg	NLL	NLL	NLV	NLV	8,000	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA
Benzo(b)fluoranthene	ug/kg	NLL	NLL	NLV	NLV	80,000	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA
Benzo(g,h,i)perylene	ug/kg	NLL	NLL	NLV	NLV	7.0E+06	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA
Benzo(k)fluoranthene	ug/kg	NLL	NLL	NLV	NLV	8.0E+05	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA
Chrysene	ug/kg	NLL	NLL	ID	ID	8.0E+06	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA
Dibenzo(a,h)anthracene	ug/kg	NLL	NLL	NLV	NLV	8,000	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA
Fluoranthene	ug/kg	7.3E+05	5,500	1.0E+09	8.9E+08	1.3E+08	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA
Fluorene	ug/kg	8.9E+05	5,300	1.0E+09	1.5E+08	8.7E+07	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA
Indeno(1,2,3-cd)pyrene	ug/kg	NLL	NLL	NLV	NLV	80,000	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA
Naphthalene	ug/kg	1.0E+05	730	4.7E+05	3.0E+05	5.2E+07	NA	NA	NA	NA	NA	<22	<4.2	<3.6	86	NA	NA	NA
Phenanthrene	ug/kg	1.6E+05	2,100	5.1E+06	1.9E+05	5.2E+06	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA
Pyrene	ug/kg	4.8E+05	ID	1.0E+09 (D)	7.8E+08	8.4E+07	NA	NA	NA	NA	NA	<22	<4.2	<3.6	<3.5	NA	NA	NA
Other Target PAHs	ug/kg	various	various	various	various	various	NA	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	NA
VOCs (EPA Method 8260B)																		
1,1,1-Trichloroethane	ug/kg	4,000	1,800	4.6E+05	4.6E+05	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
1,1,2,2-Tetrachloroethane	ug/kg	700	1,600 (X)	23,000	34,000	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
1,1,2-Trichloroethane	ug/kg	100	6,600 (X)	24,000	57,000	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
1,1-Dichloroethane	ug/kg	50,000	15,000	4.3E+05	2.5E+06	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
1,1-Dichloroethene	ug/kg	140	2,600	330	3,700	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
1,2,3-Trimethylbenzene	ug/kg	none	none	none	none	none	NA	NA	NA	NA	NA	<5.5	<6.4	<5.5	<5.3	<5.5	<5.6	<5.4
1,2,4-Trimethylbenzene	ug/kg	2,100	570	1.1E+05	2.5E+07	1.10E+05	NA	NA	NA	NA	NA	6.6	<6.4	<5.5	6.4	NA	NA	NA
1,2-Dichloroethane	ug/kg	100	7,200 (X)	2,100	6,200	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
1,2-Dichloropropane	ug/kg	100	4,600 (X)	7,400	30,000	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
1,3,5-Trimethylbenzene	ug/kg	1,800	1,100	94,000	1.9E+07	94,000	NA	NA	NA	NA	NA	<5.5	<6.4	<5.5	8.5	NA	NA	NA
2-Butanone	ug/kg	7.6E+05	44,000	2.7E+07	3.5E+07	2.7E+07	<23	<22	<21	<22	<22	<22	<26	<22	<21	<22	<22	<22
2-Hexanone	ug/kg	58,000	ID	1.8E+06	1.3E+06	2.5E+06	<11	<11	<10	<11	<11	<11	<13	<11	<11	<11	<11	<11
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	1.8E+06	2.6E+07	<11	<11	<10	<11	<11	<11	<13	<11	<11	<11	<11	<11
4-Methyl-2-pentanone	ug/kg	1.5E+05	ID	2.7E+06	5.3E+07	2.7E+06	<11	<11	<10	<11	<11	<11	<13	<11	<11	<11	<11	<11
Acetone	ug/kg	42,000	34,000	1.1E+08	1.6E+08	7.3E+07	<110	<110	<100	<110	<110	<110	<130	<110	<110	<110	<110	<110
Benzene	ug/kg	100	4,000 (X)	8,400	45,000	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
Bromodichloromethane	ug/kg	1,600 (W)	ID	6,400	31,000	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
Bromoform	ug/kg	1,600 (W)	ID	7.7E+05	3.1E+06	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
Bromomethane	ug/kg	580	700	1,600	13,000	1.0E+06	<11	<11	<10	<11	<11	<11	<13	<11	<11	<11	<11	<11
n-Butylbenzene	ug/kg	4,600	ID	ID	ID	8.00E+06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	ug/kg	4,600	ID	ID	ID	8.00E+06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	ug/kg	46,000	ID	1.4E+05	1.6E+06	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
Carbon tetrachloride	ug/kg	100	900 (X)	990	12,000	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
Chlorobenzene	ug/kg	2,000	500	2.2E+05	9.2E+05	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
Chloroethane	ug/kg	34,000	22,000 (X)	9.5E+05	3.6E+07	9.5E+05	<11	<11	<10	<11	<5.4	<11	<13	<11	<11	<11	<11	<11
Chloroform	ug/kg	1,600 (W)	7,000	38,000	1.5E+05	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
Chloromethane	ug/kg	22,000	ID	10,000	1.2E+05	1.1E+06	<11	<11	<10	<11	<11	<11	<13	<11	<11	<11	<11	<11
Dibromochloromethane	ug/kg	4,600	ID	21,000	80,000	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
Ethylbenzene	ug/kg	1,500	360	1.4E+05	2.4E+06	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
p-Isopropyltoluene	ug/kg	2.6E+06	3,200	3.9E+06	2.0E+06	3.9E+05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	ug/kg	4,600	ID	ID	ID	8.0E+06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene chloride	ug/kg	100	30,000 (X)	2.4E+05	7.0E+05	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
Naphthalene	ug/kg	1.0E+05	730	4.7E+05	3.0E+05	5.2E+07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	ug/kg	2,700	2,100 (X)	5.2E+05	3.3E+05	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
Tetrachloroethene	ug/kg	100	1,200 (X)	60,000	6.0E+05	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
Toluene	ug/kg	16,000	5,400	2.5E+05	3.3E+06	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
Trichloroethene	ug/kg	100	4,000 (X)	37,000	2.6E+05	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
Vinyl chloride	ug/kg	40	260 (X)	2,800	29,000	34,000	<11	<11	<10	<11	<11	<11	<13	<11	<11	<11	<11	<11
cis-1,2-Dichloroethene	ug/kg	1,400	12,000	41,000	2.10E+05	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
cis-1,3-Dichloropropene	ug/kg	none	none	none	none	none	<5.7	<5.5	<5.2	<5.5	<5.4	<5.5	<6.4	<5.5	<5.3	<5.5	<5.6	<5.4
m,p-Xylene	ug/kg	none	none	none	none	none	< 5.7	< 5.5	< 5.2	< 5.5	< 5.4	20	<6.4	<5.5	98	<5.5	< 5.6	< 5.4
o-Xylene	ug/kg	none	none	none	none	none	< 5.7	< 5.5	< 5.2	< 5.5	< 5.4	<5.5	<6.4	<5.5	<5.3	<5.5	< 5.6	< 5.4
trans-1,2-Dichloroethene	ug/kg	2,000	30,000 (X)	43,000	3.30E+05	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
trans-1,3-Dichloropropene	ug/kg	none	none	none	none	none	< 5.7	<5.5	<5.2	<5.5	<5.4	<5.5	<6.4	<5.5	<5.3	<5.5	<5.6	<5.4
Xylenes, Total	ug/kg	5,600	820	1.5E+05	5.4E+07	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
1,2-Dichloroethene (total)	ug/kg	100	7,200 (X)	11,000	21,000	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
Other Target VOCs	ug/kg	various	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	<5.3	ND	ND	ND
MTBE (EPA Method 8021B)	ug/kg	800	1.4E+05	5.9E+06 (C)	3.0E+07	5.9E+06	NA	NA	NA	NA	NA	<1.1	<2.6	<1.1	<1.1	NA	NA	NA
Total Metals (EPA Method 6010B)																		
Lead	mg/kg	700	(G,X)	NLV	NLV	900 (DD)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PCBs (EPA Method 8082)																		
PCBs, Total	ug/kg	NLL	NLL	1.6E+07	8.1E+05	(T)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes: See Last Page

TABLE 2a

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

SOIL ANALYTICAL DATA - BORING LOCATIONS

Sample ID:	Units	Michigan Department of Environmental Quality Part 201/213 Non-Residential Soil Cleanup Criteria and Risk Based Screening Levels					B-13	B-14	B-15	B-16	B-17	B-18	B-19	B-20	B-21	B-22	B-23	B-24	B-25	B-26
							Outside NW Corner of Building - Dyno Pit / Oil-Sand Separator	Outside NW Corner of Building - Trench & Dyno Pit	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
Date Collected:							11/6/2006	11/6/2006	11/6/2006	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
Sample Depth (feet bgl):							18-20'	5-7'	6-8'	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'
Analytical Parameter		**Drinking Water Protection**	**Groundwater Surface Water Interface**	**Indoor Air**	**Ambient Air**	**Direct Contact Criteria**														
TPH (EPA Method 418.1)	mg/kg	none	none	none	none	none	23	**1,000**	**710**	**250**	19	12	**2,000**	12	18	**210**	12	<12	11	NA
PAHs (EPA Method 8310)																				
1-Methylnaphthalene	ug/kg	none	none	none	none	none	NA	57	400	15,000	NA	NA	18	NA	<4.1	<23	<4	<3.9	<3.7	<300
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	1.8E+06	2.6E+07	NA	110	760	**29,000**	NA	NA	29	NA	<4.1	26	<4	<3.9	<3.7	<300
Acenaphthene	ug/kg	8.8E+05	8,700	3.5E+08	9.7E+07	1.3E+08	NA	15	< 12	170	NA	NA	< 18	NA	<4.1	<23	<4	<3.9	<3.7	<300
Acenaphthylene	ug/kg	17,000	ID	3.0E+06	2.7E+06	5.2E+06	NA	< 12	< 12	1,100	NA	NA	< 18	NA	<4.1	<23	<4	<3.9	<3.7	<300
Anthracene	ug/kg	41,000	ID	1.0E+09	1.6E+09	7.3E+08	NA	15	< 12	< 11	NA	NA	< 18	NA	<4.1	<23	<4	<3.9	<3.7	<300
Benz(a)anthracene	ug/kg	NLL	NLL	NLV	NLV	80,000	NA	58	< 12	< 11	NA	NA	< 18	NA	<4.1	<23	<4	<3.9	<3.7	<300
Benzo(a)pyrene	ug/kg	NLL	NLL	NLV	NLV	8,000	NA	62	20	< 11	NA	NA	< 18	NA	<4.1	36	<4	<3.9	<3.7	<300
Benzo(b)fluoranthene	ug/kg	NLL	NLL	NLV	NLV	80,000	NA	34	< 12	< 11	NA	NA	< 18	NA	<4.1	27	<4	<3.9	<3.7	<300
Benzo(g,h,i)perylene	ug/kg	NLL	NLL	NLV	NLV	7.0E+06	NA	59	38	< 11	NA	NA	< 18	NA	<4.1	65	<4	<3.9	<3.7	<300
Benzo(k)fluoranthene	ug/kg	NLL	NLL	NLV	NLV	8.0E+05	NA	22	< 12	< 11	NA	NA	< 18	NA	<4.1	<23	<4	<3.9	<3.7	<300
Chrysene	ug/kg	NLL	NLL	ID	ID	8.0E+06	NA	51	20	< 11	NA	NA	< 18	NA	<4.1	34	<4	<3.9	<3.7	<300
Dibenzo(a,h)anthracene	ug/kg	NLL	NLL	NLV	NLV	8,000	NA	17	< 12	< 11	NA	NA	< 18	NA	<4.1	<23	<4	<3.9	<3.7	<300
Fluoranthene	ug/kg	7.3E+05	5,500	1.0E+09	8.9E+08	1.3E+08	NA	85	20	11	NA	NA	< 18	NA	<4.1	51	<4	<3.9	<3.7	<300
Fluorene	ug/kg	8.9E+05	5,300	1.0E+09	1.5E+08	8.7E+07	NA	< 12	< 12	61	NA	NA	< 18	NA	<4.1	<23	<4	<3.9	<3.7	<300
Indeno(1,2,3-cd)pyrene	ug/kg	NLL	NLL	NLV	NLV	80,000	NA	36	13	< 11	NA	NA	< 18	NA	<4.1	34	<4	<3.9	<3.7	<300
Naphthalene	ug/kg	1.0E+05	730	4.7E+05	3.0E+05	5.2E+07	NA	52	**780**	**12,000**	NA	NA	110	NA	<4.1	<23	<4	<3.9	<3.7	<300
Phenanthrene	ug/kg	1.6E+05	2,100	5.1E+06	1.9E+05	5.2E+06	NA	87	51	82	NA	NA	< 18	NA	<4.1	35	<4	<3.9	<3.7	<300
Pyrene	ug/kg	4.8E+05	ID	1.0E+09 (D)	7.8E+08	8.4E+07	NA	100	42	50	NA	NA	< 18	NA	<4.1	94	<4	<3.9	<3.7	<300
Other Target PAHs	ug/kg	various	various	various	various	various	NA	ND	ND	ND	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND
VOCs (EPA Method 8260B)																				
1,1,1-Trichloroethane	ug/kg	4,000	1,800	4.6E+05	4.6E+05	4.6E+05	<5.6	<6	<6.2	<5.7	<6.3	<6.1	<5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60
1,1,2,2-Tetrachloroethane	ug/kg	700	1,600 (X)	23,000	34,000	2.4E+05	<5.6	<6	<6.2	<5.7	<6.3	<6.1	<5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60
1,1,2-Trichloroethane	ug/kg	100	6,600 (X)	24,000	57,000	8.4E+05	<5.6	<6	<6.2	<5.7	<6.3	<6.1	<5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60
1,1-Dichloroethane	ug/kg	50,000	15,000	4.3E+05	2.5E+06	8.9E+05	<5.6	<6	<6.2	<5.7	<6.3	<6.1	<5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60
1,1-Dichloroethene	ug/kg	140	2,600	330	3,700	5.7E+05	<5.6	<6	<6.2	<5.7	<6.3	<6.1	<5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60
1,2,3-Trimethylbenzene	ug/kg	none	none	none	none	none	<5.6	<6	<6.2	<5.7	<6.3	<6.1	<5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<100
1,2,4-Trimethylbenzene	ug/kg	2,100	570	1.1E+05	2.5E+07	1.10E+05	NA	NA	NA	NA	NA	NA	NA	NA	<6.2	<5.7	<6	<5.9	<5.6	<100
1,2-Dichloroethane	ug/kg	100	7,200 (X)	2,100	6,200	91,000	<5.6	<6	<6.2	<5.7	<6.3	<6.1	<5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60
1,2-Dichloropropane	ug/kg	100	4,600 (X)	7,400	30,000	5.5E+05	<5.6	<6	<6.2	<5.7	<6.3	<6.1	<5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60
1,3,5-Trimethylbenzene	ug/kg	1,800	1,100	94,000	1.9E+07	94,000	NA	NA	NA	NA	NA	NA	NA	NA	<6.2	<5.7	<6	<5.9	<5.6	<100
2-Butanone	ug/kg	7.6E+05	44,000	2.7E+07	3.5E+07	2.7E+07	<23	<24	<25	<23	<25	<24	<21	<24	<25	<23	<24	<24	<22	<900
2-Hexanone	ug/kg	58,000	ID	1.8E+06	1.3E+06	2.5E+06	<11	<12	<12	<11	<13	<12	<11	<12	<12	<11	<12	<12	<11	<3000
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	1.8E+06	2.6E+07	<11	<12	<12	<11	<13	<12	<11	<12	<12	<11	<12	<12	<11	<400
4-Methyl-2-pentanone	ug/kg	1.5E+05	ID	2.7E+06	5.3E+07	2.7E+06	<11	<12	<12	<11	<13	<12	<11	<12	<12	<11	<12	<12	<11	<3000
Acetone	ug/kg	42,000	34,000	1.1E+08	1.6E+08	7.3E+07	<110	<120	<120	<110	<130	<120	<110	<120	<120	<110	<120	<120	<110	<1000
Benzene	ug/kg	100	4,000 (X)	8,400	45,000	4.0E+05	< 5.6	< 6	< 6.2	< 5.7	44	< 6.1	< 5.3	**220**	62	<5.7	<6	<5.9	<5.6	<60
Bromodichloromethane	ug/kg	1,600 (W)	ID	6,400	31,000	4.9E+05	<5.6	<6	<6.2	<5.7	<6.3	<6.1	<5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<100
Bromoform	ug/kg	1,600 (W)	ID	7.7E+05	3.1E+06	8.7E+05	<5.6	<6	<6.2	<5.7	<6.3	<6.1	<5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<100
Bromomethane	ug/kg	580	700	1,600	13,000	1.0E+06	<11	<12	<12	<11	<13	<12	<11	<12	<12	<11	<12	<12	<11	<200
n-Butylbenzene	ug/kg	4,600	ID	ID	ID	8.00E+06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<60
sec-Butylbenzene	ug/kg	4,600	ID	ID	ID	8.00E+06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<60
Carbon disulfide	ug/kg	46,000	ID	1.4E+05	1.6E+06	2.8E+05 (C,DD)	< 5.6	< 6	< 6.2	5.7	< 6.3	< 6.1	< 5.3	< 6	<6.2	<5.7	<6	<5.9	<5.6	<300
Carbon tetrachloride	ug/kg	100	900 (X)	990	12,000	3.9E+05	<5.6	<6	<6.2	<5.7	<6.3	<6.1	< 5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60
Chlorobenzene	ug/kg	2,000	500	2.2E+05	9.2E+05	2.6E+05	<5.6	<6	<6.2	<5.7	<6.3	<6.1	< 5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60
Chloroethane	ug/kg	34,000	22,000 (X)	9.5E+05	3.6E+07	9.5E+05	<11	<12	<12	<11	<13	<12	<11	<12	<12	<11	<12	<12	<11	<300
Chloroform	ug/kg	1,600 (W)	7,000	38,000	1.5E+05	1.5E+06	<5.6	<6	<6.2	<5.7	<6.3	<6.1	< 5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60
Chloromethane	ug/kg	22,000	ID	10,000	1.2E+05	1.1E+06	<11	<12	<12	<11	<13	<12	<11	<12	<12	<11	<12	<12	<11	<300
Dibromochloromethane	ug/kg	4,600	ID	21,000	80,000	5.0E+05	<5.6	<6	<6.2	<5.7	<6.3	<6.1	< 5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<100
Ethylbenzene	ug/kg	1,500	360	1.4E+05	2.4E+06	1.4E+05	< 5.6	**3,500**	**20,000**	**34,000**	8.8	< 6.1	< 5.3	30	<6.2	<5.7	<6	<5.9	<5.6	<60
p-Isopropyltoluene	ug/kg	2.6E+06	3,200	3.9E+06	2.0E+06	3.9E+05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<100
n-Propylbenzene	ug/kg	4,600	ID	ID	ID	8.0E+06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<100
Methylene chloride	ug/kg	100	30,000 (X)	2.4E+05	7.0E+05	2.3E+06	7.9	9.6	6.2	< 5.7	< 6.3	< 6.1	< 5.3	< 6	8.6	9.2	8.4	9.5	10	<100
Naphthalene	ug/kg	1.0E+05	730	4.7E+05	3.0E+05	5.2E+07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<400
Styrene	ug/kg	2,700	2,100 (X)	5.2E+05	3.3E+05	5.2E+05	<5.6	<6	<6.2	<5.7	<6.3	<6.1	< 5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60
Tetrachloroethene	ug/kg	100	1,200 (X)	60,000	6.0E+05	88,000	< 5.6	33	< 6.2	< 5.7	< 6.3	< 6.1	< 5.3	< 6	<6.2	<5.7	<6	<5.9	<5.6	<60
Toluene	ug/kg	16,000	5,400	2.5E+05	3.3E+06	2.5E+05	< 5.6	14	**21,000**	1,900 J	13	< 6.1	< 5.3	< 6	<6.2	<5.7	<6	<5.9	<5.6	<100
Trichloroethene	ug/kg	100	4,000 (X)	37,000	2.6E+05	5.0E+05	< 5.6	< 6	14	< 5.7	< 6.3	35	< 5.3	**140**	<6.2	<5.7	<6	<5.9	<5.6	<60
Vinyl chloride	ug/kg	40	260 (X)	2,800	29,000	34,000	<11	<12	<12	<11	<13	<12	<11	<12	<12	<11	<12	<12	<5.6	<60
cis-1,2-Dichloroethene	ug/kg	1,400	12,000	41,000	2.10E+05	6.4E+05	< 5.6	< 6	< 6.2	< 5.7	< 6.3	< 6.1	< 5.3	86	<6.2	<5.7	<6	<5.9	<5.6	<60
cis-1,3-Dichloropropene	ug/kg	none	none	none	none	none	<5.6	<6	<6.2	<5.7	<6.3	<6.1	< 5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60
m,p-Xylene	ug/kg	none	none	none	none	none	< 5.6	8,000	65,000	93,000	28	< 6.1	< 5.3	< 6	<6.2	5.7	<6	<5.9	<5.6	<100
o-Xylene	ug/kg	none	none	none	none	none	< 5.6	220	20,000	10,000	7.6	< 6.1	< 5.3	< 6	<6.2	<5.7	<6	<5.9	<5.6	<60
trans-1,2-Dichloroethene	ug/kg	2,000	30,000 (X)	43,000	3.30E+05	1.4E+06	<5.6	<6	<6.2	<5.7	<6.3	< 6.1	< 5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60
trans-1,3-Dichloropropene	ug/kg	none	none	none	none	none	<5.6	<6	<6.2	<5.7	<6.3	< 6.1	< 5.3	<6	<6.2	<5.7	<6	<5.9	<5.6	<60
Xylenes, Total	ug/kg	5,600	820	1.5E+05	5.4E+07	1.5E+05	< 5.6	**8,220**	**85,000**	**103,000**	35.6	< 6.1	< 5.3	< 6	<6.2	5.7	<6	<5.9	<5.6	<160
1,2-Dichloroethene (total)	ug/kg	100	7,200 (X)	11,000	21,000	4.2E+05	< 5.6	< 6	< 6.2	< 5.7	< 6.3	< 6.1	< 5.3	86	<6.2	<5.7	<6	<5.9	<5.6	NA
Other Target VOCs	ug/kg	various	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	5.9E+06 (C)	3.0E+07	5.9E+06	NA	340	**4,200**	**4,200**	NA	NA	NA	NA	<1.2	<1.1	<1.2	<1.2	<1.1	<200
Total Metals (EPA Method 6010B)																				
Lead	mg/kg	700	(G,X)	NLV	NLV	900 (DD)	NS	9.82	11.5	< 5.72	NS	NS	NS	NS	NS	NS	NS	NS	NS	7.0
PCBs (EPA Method 8082)																				NA
PCBs, Total	ug/kg	NLL	NLL	1.6E+07	8.1E+05	(T)	NS	<33	<500	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	

Notes: See Last Page

TABLE 2a

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

SOIL ANALYTICAL DATA - BORING LOCATIONS

Sample ID:	Units	Michigan Department of Environmental Quality Part 201/213 Non-Residential Soil Cleanup Criteria and Risk Based Screening Levels					B-26	B-27	B-27	B-28	B-28	B-29	B-29	B-30	B-30	B-31	B-31	B-32	B-32	B-33
							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	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:							9/11/2007	9/11/2007	9/11/2007	9/11/2007	9/11/2007	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	Indoor Air	Ambient Air	Direct Contact Criteria	6-8'	0-2'	3.5-5.5'	0-2'	8-10'	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)	mg/kg	none	none	none	none	none	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (EPA Method 8310)																				
1-Methylnaphthalene	ug/kg	none	none	none	none	none	<300	1,200	700	<300	2,600	<300	<300	<300	<300	<300	<300	<300	<300	<300
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	1.8E+06	2.6E+07	<300	2,700	1,600	<300	**4,600**	<300	<300	<300	<300	<300	<300	<300	<300	<300
Acenaphthene	ug/kg	8.8E+05	8,700	3.5E+08	9.7E+07	1.3E+08	<300	<300	<300	<300	<400	<300	<300	<300	<300	<300	<300	<300	<300	<300
Acenaphthylene	ug/kg	17,000	ID	3.0E+06	2.7E+06	5.2E+06	<300	<300	<300	<300	<400	<300	<300	<300	<300	<300	<300	<300	<300	<300
Anthracene	ug/kg	41,000	ID	1.0E+09	1.6E+09	7.3E+08	<300	<300	<300	<300	<400	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benz(a)anthracene	ug/kg	NLL	NLL	NLV	NLV	80,000	<300	<300	<300	<300	<400	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(a)pyrene	ug/kg	NLL	NLL	NLV	NLV	8,000	<300	<300	<300	<300	<400	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(b)fluoranthene	ug/kg	NLL	NLL	NLV	NLV	80,000	<300	<300	<300	<300	<400	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(g,h,i)perylene	ug/kg	NLL	NLL	NLV	NLV	7.0E+06	<300	<300	<300	<300	<400	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(k)fluoranthene	ug/kg	NLL	NLL	NLV	NLV	8.0E+05	<300	<300	<300	<300	<400	<300	<300	<300	<300	<300	<300	<300	<300	<300
Chrysene	ug/kg	NLL	NLL	ID	ID	8.0E+06	<300	<300	<300	<300	<400	<300	<300	<300	<300	<300	<300	<300	<300	<300
Dibenzo(a,h)anthracene	ug/kg	NLL	NLL	NLV	NLV	8,000	<300	<300	<300	<300	<400	<300	<300	<300	<300	<300	<300	<300	<300	<300
Fluoranthene	ug/kg	7.3E+05	5,500	1.0E+09	8.9E+08	1.3E+08	<300	<300	<300	<300	<400	<300	<300	<300	<300	<300	<300	<300	<300	<300
Fluorene	ug/kg	8.9E+05	5,300	1.0E+09	1.5E+08	8.7E+07	<300	<300	<300	<300	<400	<300	<300	<300	<300	<300	<300	<300	<300	<300
Indeno(1,2,3-cd)pyrene	ug/kg	NLL	NLL	NLV	NLV	80,000	<300	<300	<300	<300	<400	<300	<300	<300	<300	<300	<300	<300	<300	<300
Naphthalene	ug/kg	1.0E+05	730	4.7E+05	3.0E+05	5.2E+07	<300	**1,600**	**1,200**	<300	**3,900**	<300	<300	<300	<300	<300	<300	<300	<300	<300
Phenanthrene	ug/kg	1.6E+05	2,100	5.1E+06	1.9E+05	5.2E+06	<300	<300	<300	<300	<400	<300	<300	<300	<300	<300	<300	<300	<300	<300
Pyrene	ug/kg	4.8E+05	ID	1.0E+09 (D)	7.8E+08	8.4E+07	<300	<300	<300	<300	<400	<300	<300	<300	<300	<300	<300	<300	<300	<300
Other Target PAHs	ug/kg	various	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	1,800	4.6E+05	4.6E+05	4.6E+05	<60	<1000	<600	<50	<1000	<60	<60	<60	<50	<50	<50	<50	<50	<50
1,1,2,2-Tetrachloroethane	ug/kg	700	1,600 (X)	23,000	34,000	2.4E+05	<60	<1000	<600	<50	<1000	<60	<60	<60	<50	<50	<50	<50	<50	<50
1,1,2-Trichloroethane	ug/kg	100	6,600 (X)	24,000	57,000	8.4E+05	<60	<2000	<600	<50	<3000	<60	<60	<60	<50	<50	<50	<50	<50	<50
1,1-Dichloroethane	ug/kg	50,000	15,000	4.3E+05	2.5E+06	8.9E+05	<60	<1000	<600	<50	<1000	<60	<60	<60	<50	<50	<50	<50	<50	<50
1,1-Dichloroethene	ug/kg	140	2,600	330	3,700	5.7E+05	<60	<1000	<600	<50	<1000	<60	<60	<60	<50	<50	<50	<50	<50	<50
1,2,3-Trimethylbenzene	ug/kg	none	none	none	none	none	400	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	1.1E+05	2.5E+07	1.10E+05	<100	**35,000**	**62,000**	500	**200,000**	<100	<100	<100	<100	<100	<100	<100	<100	<100
1,2-Dichloroethane	ug/kg	100	7,200 (X)	2,100	6,200	91,000	<60	<1000	<600	<50	<1000	<60	<60	<60	<50	<50	<50	<50	<50	<50
1,2-Dichloropropane	ug/kg	100	4,600 (X)	7,400	30,000	5.5E+05	<60	<1000	<600	<50	<1000	<60	<60	<60	<50	<50	<50	<50	<50	<50
1,3,5-Trimethylbenzene	ug/kg	1,800	1,100	94,000	1.9E+07	94,000	<100	**13,000**	**26,000**	200	**75,000**	<100	<100	<100	<100	<100	<100	<100	<100	<100
2-Butanone	ug/kg	7.6E+05	44,000	2.7E+07	3.5E+07	2.7E+07	<900	<20000	<14000	<800	<20000	<900	<800	<900	<800	<800	<800	<800	<800	<800
2-Hexanone	ug/kg	58,000	ID	1.8E+06	1.3E+06	2.5E+06	<3000	<60000	<30000	<3000	<50000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	1.8E+06	2.6E+07	<400	<400	**6,000**	<400	**14,000**	<400	<400	<400	<400	<400	<400	<400	<400	<400
4-Methyl-2-pentanone	ug/kg	1.5E+05	ID	2.7E+06	5.3E+07	2.7E+06	<3000	<60000	<30000	<3000	<50000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000
Acetone	ug/kg	42,000	34,000	1.1E+08	1.6E+08	7.3E+07	<1000	<20000	<10000	<1000	<20000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000
Benzene	ug/kg	100	4,000 (X)	8,400	45,000	4.0E+05	**8,100**	**1,000**	**1,200**	<50	**2,000**	<60	<60	<60	<50	<50	<50	<50	<50	<50
Bromodichloromethane	ug/kg	1,600 (W)	ID	6,400	31,000	4.9E+05	<100	<2000	<1000	<100	<2000	<100	<100	<100	<100	<100	<100	<100	<100	<100
Bromoform	ug/kg	1,600 (W)	ID	7.7E+05	3.1E+06	8.7E+05	<100	<2000	<1000	<100	<2000	<100	<100	<100	<100	<100	<100	<100	<100	<100
Bromomethane	ug/kg	580	700	1,600	13,000	1.0E+06	<200	<5000	<2000	<200	<4000	<200	<200	<200	<200	<200	<200	<200	<200	<200
n-Butylbenzene	ug/kg	4,600	ID	ID	ID	8.00E+06	120	2,000	**6,900**	<50	**22,000**	<60	<60	<60	<50	<50	<50	<50	<50	<50
sec-Butylbenzene	ug/kg	4,600	ID	ID	ID	8.00E+06	<60	<1000	1,400	<50	4,000	<60	<60	<60	<50	<50	<50	<50	<50	<50
Carbon disulfide	ug/kg	46,000	ID	1.4E+05	1.6E+06	2.8E+05 (C,DD)	<300	<6000	<3000	<300	<5000	<300	<300	<300	<300	<300	<300	<300	<300	<300
Carbon tetrachloride	ug/kg	100	900 (X)	990	12,000	3.9E+05	<60	<1000	<600	<50	<1000	<60	<60	<60	<50	<50	<50	<50	<50	<50
Chlorobenzene	ug/kg	2,000	500	2.2E+05	9.2E+05	2.6E+05	<60	<1000	<600	<50	<1000	<60	<60	<60	<50	<50	<50	<50	<50	<50
Chloroethane	ug/kg	34,000	22,000 (X)	9.5E+05	3.6E+07	9.5E+05	<300	<6000	<3000	<300	<5000	<300	<300	<300	<300	<300	<300	<300	<300	<300
Chloroform	ug/kg	1,600 (W)	7,000	38,000	1.5E+05	1.5E+06	<60	<1000	<600	<50	<1000	<60	<60	<60	<50	<50	<50	<50	<50	<50
Chloromethane	ug/kg	22,000	ID	10,000	1.2E+05	1.1E+06	<300	<6000	<3000	<300	<5000	<300	<300	<300	<300	<300	<300	<300	<300	<300
Dibromochloromethane	ug/kg	4,600	ID	21,000	80,000	5.0E+05	<100	<2000	<1000	<100	<2000	<100	<100	<100	<100	<100	<100	<100	<100	<100
Ethylbenzene	ug/kg	1,500	360	1.4E+05	2.4E+06	1.4E+05	**2,500**	**32,000**	**36,100**	**460**	**63,000**	<60	<60	<60	<50	<50	<50	<50	<50	<50
p-Isopropyltoluene	ug/kg	2.6E+06	3,200	3.9E+06	2.0E+06	3.9E+05	<100	<2000	<1000	<100	<2000	<100	<100	<100	<100	<100	<100	<100	<100	<50
n-Propylbenzene	ug/kg	4,600	ID	ID	ID	8.0E+06	300	**9,000**	**19,000**	100	**22,000**	<100	<100	<100	<100	<100	<100	<100	<100	<100
Methylene chloride	ug/kg	100	30,000 (X)	2.4E+05	7.0E+05	2.3E+06	<100	<2000	<1000	<100	<2000	<100	<100	<100	<100	<100	<100	<100	<100	<100
Naphthalene	ug/kg	1.0E+05	730	4.7E+05	3.0E+05	5.2E+07	<400	<400	**5,000**	<400	**18,000**	<400	<400	<400	<400	<400	<400	<400	<400	<400
Styrene	ug/kg	2,700	2,100 (X)	5.2E+05	3.3E+05	5.2E+05	<60	<1000	<800	<50	<5000	<60	<60	<60	<50	<50	<50	<50	<50	<50
Tetrachloroethene	ug/kg	100	1,200 (X)	60,000	6.0E+05	88,000	<60	<1000	<600	<50	<1000	<60	<60	**170**	<50	<50	<50	<50	<50	<50
Toluene	ug/kg	16,000	5,400	2.5E+05	3.3E+06	2.5E+05	<100	<2000	2,000	<100	**104,000**	<100	<100	<100	<100	<100	<100	<100	<100	<100
Trichloroethene	ug/kg	100	4,000 (X)	37,000	2.6E+05	5.0E+05	<60	<1000	<600	<50	<1000	<60	<60	<60	<50	<50	<50	<50	70	<50
Vinyl chloride	ug/kg	40	260 (X)	2,800	29,000	34,000	<60	<1000	<600	<50	<1000	<60	<60	<60	<50	<50	<50	<50	<50	<50
cis-1,2-Dichloroethene	ug/kg	1,400	12,000	41,000	2.10E+05	6.4E+05	<60	<1000	<600	<50	<1000	<60	<60	<60	<50	<50	<50	<50	<50	<50
cis-1,3-Dichloropropene	ug/kg	none	none	none	none	none	<60	<1000	<600	<50	<1000	<60	<60	<60	<50	<50	<50	<50	<50	<50
m,p-Xylene	ug/kg	none	none	none	none	none	4,300	116,000	98,000	1500	291,000	<100	<100	<100	<100	<100	<100	<100	<100	<100
o-Xylene	ug/kg	none	none	none	none	none	640	15,000	20,900	240	149,000	<60	<60	<60	<50	<50	<50	<50	<50	<50
trans-1,2-Dichloroethene	ug/kg	2,000	30,000 (X)	43,000	3.30E+05	1.4E+06	<60	<1000	<600	<50	<1000	<60	<60	<60	<50	<50	<50	<50	<50	<50
trans-1,3-Dichloropropene	ug/kg	none	none	none	none	none	<60	<1000	<600	<50	<1000	<60	<60	<60	<50	<50	<50	<50	<50	<50
Xylenes, Total	ug/kg	5,600	820	1.5E+05	5.4E+07	1.5E+05	**4,940**	**131,000**	**118,900**	**1,740**	**440,000**	<160	<160	<160	<150	<150	<150	<150	<150	<150
1,2-Dichloroethene (total)	ug/kg	100	7,200 (X)	11,000	21,000	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	various	ND	ND	4,000	ND	7,000	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE (EPA Method 8021B)	ug/kg	800	1.4E+05	5.9E+06 (C)	3.0E+07	5.9E+06	<200	<5000	<2000	<200	<4000	<200	<200	<200	<200	<200	<200	<200	<200	<200
Total Metals (EPA Method 6010B)																				
Lead	mg/kg	700	(G,X)	NLV	NLV	900 (DD)	9.0	7.0	4.1	18.8	3.1	8.1	3.0	9.7	3.8	16.1	1.1	4.9	2.6	10.7
PCBs (EPA Method 8082)							NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs, Total	ug/kg	NLL	NLL	1.6E+07	8.1E+05	(T)														

Notes: See Last Page

TABLE 2a

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

SOIL ANALYTICAL DATA - BORING LOCATIONS

Sample ID:	Units	Michigan Department of Environmental Quality Part 201/213 Non-Residential Soil Cleanup Criteria and Risk Based Screening Levels					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
							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
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
Sample Depth (feet bgl):							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'	?
Analytical Parameter		**Drinking Water Protection**	**Groundwater Surface Water Interface**	**Indoor Air**	**Ambient Air**	**Direct Contact Criteria**														
TPH (EPA Method 418.1)	mg/kg	none	none	none	none	none	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NA	NA
PAHs (EPA Method 8310)																				
1-Methylnaphthalene	ug/kg	none	none	none	none	none	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	1.8E+06	2.6E+07	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA
Acenaphthene	ug/kg	8.8E+05	8,700	3.5E+08	9.7E+07	1.3E+08	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA
Acenaphthylene	ug/kg	17,000	ID	3.0E+06	2.7E+06	5.2E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA
Anthracene	ug/kg	41,000	ID	1.0E+09	1.6E+09	7.3E+08	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA
Benz(a)anthracene	ug/kg	NLL	NLL	NLV	NLV	80,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA
Benzo(a)pyrene	ug/kg	NLL	NLL	NLV	NLV	8,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA
Benzo(b)fluoranthene	ug/kg	NLL	NLL	NLV	NLV	80,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA
Benzo(g,h,i)perylene	ug/kg	NLL	NLL	NLV	NLV	7.0E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA
Benzo(k)fluoranthene	ug/kg	NLL	NLL	NLV	NLV	8.0E+05	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA
Chrysene	ug/kg	NLL	NLL	ID	ID	8.0E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA
Dibenzo(a,h)anthracene	ug/kg	NLL	NLL	NLV	NLV	8,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA
Fluoranthene	ug/kg	7.3E+05	5,500	1.0E+09	8.9E+08	1.3E+08	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA
Fluorene	ug/kg	8.9E+05	5,300	1.0E+09	1.5E+08	8.7E+07	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA
Indeno(1,2,3-cd)pyrene	ug/kg	NLL	NLL	NLV	NLV	80,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA
Naphthalene	ug/kg	1.0E+05	730	4.7E+05	3.0E+05	5.2E+07	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA
Phenanthrene	ug/kg	1.6E+05	2,100	5.1E+06	1.9E+05	5.2E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA
Pyrene	ug/kg	4.8E+05	ID	1.0E+09 (D)	7.8E+08	8.4E+07	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA
Other Target PAHs	ug/kg	various	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NA	NA
VOCs (EPA Method 8260B)																				
1,1,1-Trichloroethane	ug/kg	4,000	1,800	4.6E+05	4.6E+05	4.6E+05	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA
1,1,2,2-Tetrachloroethane	ug/kg	700	1,600 (X)	23,000	34,000	2.4E+05	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA
1,1,2-Trichloroethane	ug/kg	100	6,600 (X)	24,000	57,000	8.4E+05	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA
1,1-Dichloroethane	ug/kg	50,000	15,000	4.3E+05	2.5E+06	8.9E+05	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA
1,1-Dichloroethene	ug/kg	140	2,600	330	3,700	5.7E+05	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA
1,2,3-Trimethylbenzene	ug/kg	none	none	none	none	none	<100	<100	100	<100	<100	<100	<100	<100	<100	<100	NS	NS	NA	NA
1,2,4-Trimethylbenzene	ug/kg	2,100	570	1.1E+05	2.5E+07	1.10E+05	<100	200	400	<100	<100	<100	<100	<100	<100	<100	NS	NS	NA	NA
1,2-Dichloroethane	ug/kg	100	7,200 (X)	2,100	6,200	91,000	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA
1,2-Dichloropropane	ug/kg	100	4,600 (X)	7,400	30,000	5.5E+05	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA
1,3,5-Trimethylbenzene	ug/kg	1,800	1,100	94,000	1.9E+07	94,000	<100	<100	200	<100	<100	<100	<100	<100	<100	<100	NS	NS	NA	NA
2-Butanone	ug/kg	7.6E+05	44,000	2.7E+07	3.5E+07	2.7E+07	<800	<800	<800	<900	<900	<800	<800	<900	<800	<900	NS	NS	NA	NA
2-Hexanone	ug/kg	58,000	ID	1.8E+06	1.3E+06	2.5E+06	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	NS	NS	NA	NA
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	1.8E+06	2.6E+07	<400	<400	<400	<400	<400	<400	<400	<400	<400	<400	NS	NS	NA	NA
4-Methyl-2-pentanone	ug/kg	1.5E+05	ID	2.7E+06	5.3E+07	2.7E+06	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	NS	NS	NA	NA
Acetone	ug/kg	42,000	34,000	1.1E+08	1.6E+08	7.3E+07	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	NS	NS	NA	NA
Benzene	ug/kg	100	4,000 (X)	8,400	45,000	4.0E+05	<50	<60	<50	<60	<60	**960**	<50	<60	<50	**440**	NS	NS	NA	NA
Bromodichloromethane	ug/kg	1,600 (W)	ID	6,400	31,000	4.9E+05	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	NS	NS	NA	NA
Bromoform	ug/kg	1,600 (W)	ID	7.7E+05	3.1E+06	8.7E+05	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	NS	NS	NA	NA
Bromomethane	ug/kg	580	700	1,600	13,000	1.0E+06	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	NS	NS	NA	NA
n-Butylbenzene	ug/kg	4,600	ID	ID	ID	8.00E+06	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA
sec-Butylbenzene	ug/kg	4,600	ID	ID	ID	8.00E+06	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA
Carbon disulfide	ug/kg	46,000	ID	1.4E+05	1.6E+06	2.8E+05 (C,DD)	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA
Carbon tetrachloride	ug/kg	100	900 (X)	990	12,000	3.9E+05	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA
Chlorobenzene	ug/kg	2,000	500	2.2E+05	9.2E+05	2.6E+05	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA
Chloroethane	ug/kg	34,000	22,000 (X)	9.5E+05	3.6E+07	9.5E+05	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA
Chloroform	ug/kg	1,600 (W)	7,000	38,000	1.5E+05	1.5E+06	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA
Chloromethane	ug/kg	22,000	ID	10,000	1.2E+05	1.1E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	NS	NS	NA	NA
Dibromochloromethane	ug/kg	4,600	ID	21,000	80,000	5.0E+05	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	NS	NS	NA	NA
Ethylbenzene	ug/kg	1,500	360	1.4E+05	2.4E+06	1.4E+05	<50	<60	360	<60	<60	**1960**	<50	<60	<50	<60	NS	NS	NA	NA
p-Isopropyltoluene	ug/kg	2.6E+06	3,200	3.9E+06	2.0E+06	3.9E+05	<50	<100	300	<100	<100	<100	<100	<100	<100	<100	NS	NS	NA	NA
n-Propylbenzene	ug/kg	4,600	ID	ID	ID	8.0E+06	<100	<100	100	<100	<100	<100	<100	<100	<107	<108	NS	NS	NA	NA
Methylene chloride	ug/kg	100	30,000 (X)	2.4E+05	7.0E+05	2.3E+06	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	NS	NS	NA	NA
Naphthalene	ug/kg	1.0E+05	730	4.7E+05	3.0E+05	5.2E+07	<400	<400	<400	<400	<400	<400	<400	<400	<400	<400	NS	NS	NA	NA
Styrene	ug/kg	2,700	2,100 (X)	5.2E+05	3.3E+05	5.2E+05	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA
Tetrachloroethene	ug/kg	100	1,200 (X)	60,000	6.0E+05	88,000	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA
Toluene	ug/kg	16,000	5,400	2.5E+05	3.3E+06	2.5E+05	<100	<100	500	<100	<100	**6100**	<100	<100	<100	<100	NS	NS	NA	NA
Trichloroethene	ug/kg	100	4,000 (X)	37,000	2.6E+05	5.0E+05	<100	<60	**3,580**	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA
Vinyl chloride	ug/kg	40	260 (X)	2,800	29,000	34,000	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA
cis-1,2-Dichloroethene	ug/kg	1,400	12,000	41,000	2.10E+05	6.4E+05	<50	<60	1,010	<60	<60	<50	<50	<60	<50	90	NS	NS	NA	NA
cis-1,3-Dichloropropene	ug/kg	none	none	none	none	none	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA
m,p-Xylene	ug/kg	none	none	none	none	none	<100	<100	1,700	<100	<100	5,500	<100	<100	<100	<100	NS	NS	NA	NA
o-Xylene	ug/kg	none	none	none	none	none	<50	<60	880	<60	<60	2,510	<50	<60	<50	<60	NS	NS	NA	NA
trans-1,2-Dichloroethene	ug/kg	2,000	30,000 (X)	43,000	3.30E+05	1.4E+06	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA
trans-1,3-Dichloropropene	ug/kg	none	none	none	none	none	<50	<60	<50	<60	<60	<50	<50	<60	<50	<60	NS	NS	NA	NA
Xylenes, Total	ug/kg	5,600	820	1.5E+05	5.4E+07	1.5E+05	<150	<160	**2,580**	<160	<160	**8,010**	<150	<160	<150	<160	NS	NS	NA	NA
1,2-Dichloroethene (total)	ug/kg	100	7,200 (X)	11,000	21,000	4.2E+05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NA	NA
Other Target VOCs	ug/kg	various	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NA	NA
MTBE (EPA Method 8021B)	ug/kg	800	1.4E+05	5.9E+06 (C)	3.0E+07	5.9E+06	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	NS	NS	NA	NA
Total Metals (EPA Method 6010B)																				
Lead	mg/kg	700	(G,X)	NLV	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
PCBs (EPA Method 8082)							NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NA	NA
PCBs, Total	ug/kg	NLL	NLL	1.6E+07	8.1E+05	(T)														

Notes: See Last Page

TABLE 2a

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

SOIL ANALYTICAL DATA - BORING LOCATIONS

Sample ID:	Units	Michigan Department of Environmental Quality Part 201/213 Non-Residential Soil Cleanup Criteria and Risk Based Screening Levels					B-41	B-41	B-41	B-42	B-43	B-44	B-44	B-45	DUPE-4 (B-45)	B-45	B-46	B-47
							Outside - In Corner of Building East of Auditorium and South of Building Wall	Outside - In Corner of Building East of Auditorium and South of Building Wall	Outside - In Corner of Building East of Auditorium and South of Building Wall	Outside - Outside Gate on Southern Sidewalk, South of Auditorium	Outside - Eastern Parking Lot, West of B-40	Inside - East Side of Building, Classroom North of Freight Elevator, Along North Wall	Inside - East Side of Building, Classroom North of Freight Elevator, Along North Wall	Inside - Large Classroom West of Freight Elevator, Along North Wall		Inside - Large Classroom West of Freight Elevator, Along North Wall	Inside - Basement, Along North Wall	Inside - Basement, Southeastern Corner
Date Collected:							9/18/2007	9/18/2007	9/18/2007	9/19/2007	9/20/2007	9/24/2007	9/24/2007	9/24/2007	9/24/2007	9/24/2007	2/14/2008	2/14/2008
Sample Depth (feet bgl):							0-2'	6-8'	12-14'	NS	NS	0-2'	8-10'	0-2'	0-2'	10-12'	NS	NS
Analytical Parameter		**Drinking Water Protection**	**Groundwater Surface Water Interface**	**Indoor Air**	**Ambient Air**	**Direct Contact Criteria**												
TPH (EPA Method 418.1)	mg/kg	none	none	none	none	none	NA	NA	NA	NS	NS	NA	NA	NA	NA	NA	NS	NS
PAHs (EPA Method 8310)																		
1-Methylnaphthalene	ug/kg	none	none	none	none	none	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	1.8E+06	2.6E+07	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS
Acenaphthene	ug/kg	8.8E+05	8,700	3.5E+08	9.7E+07	1.3E+08	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS
Acenaphthylene	ug/kg	17,000	ID	3.0E+06	2.7E+06	5.2E+06	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS
Anthracene	ug/kg	41,000	ID	1.0E+09	1.6E+09	7.3E+08	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS
Benz(a)anthracene	ug/kg	NLL	NLL	NLV	NLV	80,000	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS
Benzo(a)pyrene	ug/kg	NLL	NLL	NLV	NLV	8,000	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS
Benzo(b)fluoranthene	ug/kg	NLL	NLL	NLV	NLV	80,000	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS
Benzo(g,h,i)perylene	ug/kg	NLL	NLL	NLV	NLV	7.0E+06	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS
Benzo(k)fluoranthene	ug/kg	NLL	NLL	NLV	NLV	8.0E+05	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS
Chrysene	ug/kg	NLL	NLL	ID	ID	8.0E+06	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS
Dibenzo(a,h)anthracene	ug/kg	NLL	NLL	NLV	NLV	8,000	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS
Fluoranthene	ug/kg	7.3E+05	5,500	1.0E+09	8.9E+08	1.3E+08	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS
Fluorene	ug/kg	8.9E+05	5,300	1.0E+09	1.5E+08	8.7E+07	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS
Indeno(1,2,3-cd)pyrene	ug/kg	NLL	NLL	NLV	NLV	80,000	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS
Naphthalene	ug/kg	1.0E+05	730	4.7E+05	3.0E+05	5.2E+07	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS
Phenanthrene	ug/kg	1.6E+05	2,100	5.1E+06	1.9E+05	5.2E+06	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS
Pyrene	ug/kg	4.8E+05	ID	1.0E+09 (D)	7.8E+08	8.4E+07	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS
Other Target PAHs	ug/kg	various	various	various	various	various	NA	NA	NA	NS	NS	ND	ND	ND	ND	ND	NS	NS
VOCs (EPA Method 8260B)																		
1,1,1-Trichloroethane	ug/kg	4,000	1,800	4.6E+05	4.6E+05	4.6E+05	NA	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS
1,1,2,2-Tetrachloroethane	ug/kg	700	1,600 (X)	23,000	34,000	2.4E+05	NA	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS
1,1,2-Trichloroethane	ug/kg	100	6,600 (X)	24,000	57,000	8.4E+05	NA	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS
1,1-Dichloroethane	ug/kg	50,000	15,000	4.3E+05	2.5E+06	8.9E+05	NA	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS
1,1-Dichloroethene	ug/kg	140	2,600	330	3,700	5.7E+05	NA	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS
1,2,3-Trimethylbenzene	ug/kg	none	none	none	none	none	NA	NA	NA			<100	<100	<100	<100	<100		
1,2,4-Trimethylbenzene	ug/kg	2,100	570	1.1E+05	2.5E+07	1.10E+05	NA	NA	NA	NS	NS	<100	<100	<100	<100	<100	NS	NS
1,2-Dichloroethane	ug/kg	100	7,200 (X)	2,100	6,200	91,000	NA	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS
1,2-Dichloropropane	ug/kg	100	4,600 (X)	7,400	30,000	5.5E+05	NA	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS
1,3,5-Trimethylbenzene	ug/kg	1,800	1,100	94,000	1.9E+07	94,000	NA	NA	NA	NS	NS	<100	<100	<100	<100	<100	NS	NS
2-Butanone	ug/kg	7.6E+05	44,000	2.7E+07	3.5E+07	2.7E+07	NA	NA	NA	NS	NS	<800	<800	<800	<800	<800	NS	NS
2-Hexanone	ug/kg	58,000	ID	1.8E+06	1.3E+06	2.5E+06	NA	NA	NA	NS	NS	<3000	<3000	<3000	<3000	<3000	NS	NS
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	1.8E+06	2.6E+07	NA	NA	NA	NS	NS	<400	<400	<400	<400	<400	NS	NS
4-Methyl-2-pentanone	ug/kg	1.5E+05	ID	2.7E+06	5.3E+07	2.7E+06	NA	NA	NA	NS	NS	<3000	<3000	<3000	<3000	<3000	NS	NS
Acetone	ug/kg	42,000	34,000	1.1E+08	1.6E+08	7.3E+07	NA	NA	NA	NS	NS	<1000	<1000	<1000	<1000	<1000	NS	NS
Benzene	ug/kg	100	4,000 (X)	8,400	45,000	4.0E+05	NA	NA	NA	NS	NS	<50	<60	<50	<60	60	NS	NS
Bromodichloromethane	ug/kg	1,600 (W)	ID	6,400	31,000	4.9E+05	NA	NA	NA	NS	NS	<100	<100	<100	<100	<100	NS	NS
Bromoform	ug/kg	1,600 (W)	ID	7.7E+05	3.1E+06	8.7E+05	NA	NA	NA	NS	NS	<100	<100	<100	<100	<100	NS	NS
Bromomethane	ug/kg	580	700	1,600	13,000	1.0E+06	NA	NA	NA	NS	NS	<200	<200	<200	<200	<200	NS	NS
n-Butylbenzene	ug/kg	4,600	ID	ID	ID	8.00E+06	NA	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS
sec-Butylbenzene	ug/kg	4,600	ID	ID	ID	8.00E+06	NA	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS
Carbon disulfide	ug/kg	46,000	ID	1.4E+05	1.6E+06	2.8E+05 (C,DD)	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS
Carbon tetrachloride	ug/kg	100	900 (X)	990	12,000	3.9E+05	NA	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS
Chlorobenzene	ug/kg	2,000	500	2.2E+05	9.2E+05	2.6E+05	NA	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS
Chloroethane	ug/kg	34,000	22,000 (X)	9.5E+05	3.6E+07	9.5E+05	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS
Chloroform	ug/kg	1,600 (W)	7,000	38,000	1.5E+05	1.5E+06	NA	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS
Chloromethane	ug/kg	22,000	ID	10,000	1.2E+05	1.1E+06	NA	NA	NA	NS	NS	<300	<300	<300	<300	<300	NS	NS
Dibromochloromethane	ug/kg	4,600	ID	21,000	80,000	5.0E+05	NA	NA	NA	NS	NS	<100	<100	<100	<100	<100	NS	NS
Ethylbenzene	ug/kg	1,500	360	1.4E+05	2.4E+06	1.4E+05	NA	NA	NA	NS	NS	<50	<60	<50	<60	60	NS	NS
p-Isopropyltoluene	ug/kg	2.6E+06	3,200	3.9E+06	2.0E+06	3.9E+05	NA	NA	NA	NS	NS	<100	<100	<100	<100	<100	NS	NS
n-Propylbenzene	ug/kg	4,600	ID	ID	ID	8.0E+06	NA	NA	NA	NS	NS	<100	<100	<100	<100	<100	NS	NS
Methylene chloride	ug/kg	100	30,000 (X)	2.4E+05	7.0E+05	2.3E+06	NA	NA	NA	NS	NS	<100	<100	<100	<100	<100	NS	NS
Naphthalene	ug/kg	1.0E+05	730	4.7E+05	3.0E+05	5.2E+07	NA	NA	NA	NS	NS	<400	<400	<400	<400	<400	NS	NS
Styrene	ug/kg	2,700	2,100 (X)	5.2E+05	3.3E+05	5.2E+05	NA	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS
Tetrachloroethene	ug/kg	100	1,200 (X)	60,000	6.0E+05	88,000	NA	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS
Toluene	ug/kg	16,000	5,400	2.5E+05	3.3E+06	2.5E+05	NA	NA	NA	NS	NS	<100	<100	<100	<100	200	NS	NS
Trichloroethene	ug/kg	100	4,000 (X)	37,000	2.6E+05	5.0E+05	NA	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS
Vinyl chloride	ug/kg	40	260 (X)	2,800	29,000	34,000	NA	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS
cis-1,2-Dichloroethene	ug/kg	1,400	12,000	41,000	2.10E+05	6.4E+05	NA	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS
cis-1,3-Dichloropropene	ug/kg	none	none	none	none	none	NA	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS
m,p-Xylene	ug/kg	none	none	none	none	none	NA	NA	NA	NS	NS	<100	<100	<100	<100	<100	NS	NS
o-Xylene	ug/kg	none	none	none	none	none	NA	NA	NA	NS	NS	<50	<60	<50	<60	90	NS	NS
trans-1,2-Dichloroethene	ug/kg	2,000	30,000 (X)	43,000	3.30E+05	1.4E+06	NA	NA	NA	NS	NS	<50	<60	<50	<60	200	NS	NS
trans-1,3-Dichloropropene	ug/kg	none	none	none	none	none	NA	NA	NA	NS	NS	<50	<60	<50	<60	<50	NS	NS
Xylenes, Total	ug/kg	5,600	820	1.5E+05	5.4E+07	1.5E+05	NA	NA	NA	NS	NS	<150	<160	<150	<160	290	NS	NS
1,2-Dichloroethene (total)	ug/kg	100	7,200 (X)	11,000	21,000	4.2E+05	NA	NA	NA	NS	NS	NA	NA	NA	NA	NA	NS	NS
Other Target VOCs	ug/kg	various	various	various	various	various	NA	NA	NA	NS	NS	ND	ND	ND	ND	ND	NS	NS
MTBE (EPA Method 8021B)	ug/kg	800	1.4E+05	5.9E+06 (C)	3.0E+07	5.9E+06	NA	NA	NA	NS	NS	<200	<200	<200	<200	<200	NS	NS
Total Metals (EPA Method 6010B)																		
Lead	mg/kg	700	(G,X)	NLV	NLV	900 (DD)	NA	NA	NA	NS	NS	16.2	6.2	15.6	19.7	2.9	NS	NS
PCBs (EPA Method 8082)							NA	NA	NA	NS	NS	NA	NA	NA	NA	NA	NS	NS
PCBs, Total	ug/kg	NLL	NLL	1.6E+07	8.1E+05	(T)												

Notes: See Last Page

TABLE 2b

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

SOIL ANALYTICAL DATA - MONITORING WELL LOCATIONS

Sample ID:	Units	Michigan Department of Environmental Quality Part 201/213 Non-Residential Soil Cleanup Criteria and Risk Based Screening Levels					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	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 - 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	9/14/2007
Sample Depth (feet bgl):								0-2'	0-2'	3-5'	0-2'	3-5'	?	0-2'	?	0-2'	0-2'	6-8'	0-2'
Analytical Parameter		Drinking Water Protection	Groundwater Surface Water Interface	Indoor Air	Ambient Air	Direct Contact Criteria													
TPH (EPA Method 418.1)	mg/kg	none	none	none	none	none	NA	NA	NA	NA	18	17	NA	NA	NA	NA	NA	NA	NA
PAHs (EPA Method 8310)																			
1-Methylnaphthalene	ug/kg	none	none	none	none	none	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	400	<300
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	1.8E+06	2.6E+07	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	1,000	<300
Acenaphthene	ug/kg	8.8E+05	8,700	3.5E+08	9.7E+07	1.3E+08	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	<300
Acenaphthylene	ug/kg	17,000	ID	3.0E+06	2.7E+06	5.2E+06	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	<300
Anthracene	ug/kg	41,000	ID	1.0E+09	1.6E+09	7.3E+08	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	<300
Benz(a)anthracene	ug/kg	NLL	NLL	NLV	NLV	80,000	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	<300
Benzo(a)pyrene	ug/kg	NLL	NLL	NLV	NLV	8,000	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	<300
Benzo(b)fluoranthene	ug/kg	NLL	NLL	NLV	NLV	80,000	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	<300
Benzo(g,h,i)perylene	ug/kg	NLL	NLL	NLV	NLV	7.0E+06	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	<300
Benzo(k)fluoranthene	ug/kg	NLL	NLL	NLV	NLV	8.0E+05	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	<300
Chrysene	ug/kg	NLL	NLL	ID	ID	8.0E+06	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	<300
Dibenzo(a,h)anthracene	ug/kg	NLL	NLL	NLV	NLV	8,000	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	<300
Fluoranthene	ug/kg	7.3E+05	5,500	1.0E+09	8.9E+08	1.3E+08	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	<300
Fluorene	ug/kg	8.9E+05	5,300	1.0E+09	1.5E+08	8.7E+07	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	<300
Indeno(1,2,3-cd)pyrene	ug/kg	NLL	NLL	NLV	NLV	80,000	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	<300
Naphthalene	ug/kg	1.0E+05	730	4.7E+05	3.0E+05	5.2E+07	NA	<300	<300	400	<4	<3.7	NA	NA	NA	<300	<300	600	<300
Phenanthrene	ug/kg	1.6E+05	2,100	5.1E+06	1.9E+05	5.2E+06	NA	<300	<300	<300	5.3	<3.7	NA	NA	NA	<300	<300	<300	<300
Pyrene	ug/kg	4.8E+05	ID	1.0E+09 (D)	7.8E+08	8.4E+07	NA	<300	<300	<300	<4	<3.7	NA	NA	NA	<300	<300	<300	<300
Other Target PAHs	ug/kg	various	various	various	various	various	NA	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	ND	ND
VOCs (EPA Method 8260B)																			
1,1,1-Trichloroethane	ug/kg	4,000	1800	4.6E+05	4.6E+05	4.6E+05	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	<60
1,1,2,2-Tetrachloroethane	ug/kg	700	1,600 (X)	23,000	34,000	2.4E+05	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	<60
1,1,2-Trichloroethane	ug/kg	100	6,600 (X)	24,000	57,000	8.4E+05	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	<60
1,1-Dichloroethane	ug/kg	50,000	15,000	4.3E+05	2.5E+06	8.9E+05	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	<60
1,1-Dichloroethene	ug/kg	140	2,600	330	3,700	5.7E+05	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	<60
1,2,3-Trimethylbenzene	ug/kg	none	none	none	none	none	NA	<100	<100	1,300	NA	NA	NA	NA	NA	<100	<100	2,000	<100
1,2,4-Trimethylbenzene	ug/kg	2,100	570	1.1E+05	2.5E+07	1.10E+05	NA	<100	<100	**5,800**	<6.1	<5.6	NA	NA	NA	<100	<100	**9,000**	<100
1,2-Dichloroethane	ug/kg	100	7,200 (X)	2,100	6,200	91,000	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	<60
1,2-Dichloropropane	ug/kg	100	4,600 (X)	7,400	30,000	5.5E+05	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	<60
1,3,5-Trimethylbenzene	ug/kg	1,800	1,100	94,000	1.9E+07	94,000	NA	<100	<100	**1,500**	<6.1	<5.6	NA	NA	NA	<100	<100	**3,000**	<100
n-Butylbenzene	ug/kg	4,600	ID	ID	ID	8.00E+06	NA	<60	<60	120	NA	NA	NA	NA	NA	<60	<60	900	<60
sec-Butylbenzene	ug/kg	4,600	ID	ID	ID	8.00E+06	NA	<60	<60	<60	NA	NA	NA	NA	NA	<60	<60	<600	<60
2-Butanone	ug/kg	7.6E+05	44,000	2.7E+07	3.5E+07	2.7E+07	NA	<900	<900	<900	<25	<22	NA	NA	NA	<900	<900	<9000	<900
2-Hexanone	ug/kg	58,000	ID	1.8E+06	1.3E+06	2.5E+06	NA	<3000	<3000	<3000	<12	<11	NA	NA	NA	<3000	<3000	<30000	<3000
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	1.8E+06	2.6E+07	NA	<400	<400	<400	NA	NA	NA	NA	NA	<400	<400	<4000	<400
4-Methyl-2-pentanone	ug/kg	1.5E+05	ID	2.7E+06	5.3E+07	2.7E+06	NA	<3000	<3000	<3000	<12	<11	NA	NA	NA	<3000	<3000	<30000	<3000
Acetone	ug/kg	42,000	34,000	1.1E+08	1.6E+08	7.3E+07	NA	<1000	<1000	<1000	<120	<110	NA	NA	NA	<1000	<1000	<10000	<1000
Benzene	ug/kg	100	4,000 (X)	8,400	45,000	4.0E+05	NA	<60	<60	**7,900**	<6.1	<5.6	NA	NA	NA	<60	<60	**14,900**	<60
Bromodichloromethane	ug/kg	1,600 (W)	ID	6,400	31,000	4.9E+05	NA	<100	<100	<100	<6.1	<5.6	NA	NA	NA	<100	<100	<1000	<100
Bromoform	ug/kg	1,600 (W)	ID	7.7E+05	3.1E+06	8.7E+05	NA	<100	<100	<100	<6.1	<5.6	NA	NA	NA	<100	<100	<1000	<100
Bromomethane	ug/kg	580	700	1,600	13,000	1.0E+06	NA	<200	<200	<200	<12	<11	NA	NA	NA	<200	<200	<2000	<200
Carbon disulfide	ug/kg	46,000	ID	1.4E+05	1.6E+06	2.8E+05 (C,DD)	NA	<300	<300	<300	<6.1	<5.6	NA	NA	NA	<300	<300	<3000	<300
Carbon tetrachloride	ug/kg	100	900 (X)	990	12,000	3.9E+05	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	<60
Chlorobenzene	ug/kg	2,000	500	2.2E+05	9.2E+05	2.6E+05	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	<60
Chloroethane	ug/kg	34,000	22,000 (X)	9.5E+05	3.6E+07	9.5E+05	NA	<300	<300	<300	<12	<11	NA	NA	NA	<300	<300	<3000	<300
Chloroform	ug/kg	1,600 (W)	7,000	38,000	1.5E+05	1.5E+06	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	<60
Chloromethane	ug/kg	22,000	ID	10,000	1.2E+05	1.1E+06	NA	<300	<300	<300	<12	<5.6	NA	NA	NA	<300	<300	<3000	<300
Dibromochloromethane	ug/kg	4,600	ID	21,000	80,000	5.0E+05	NA	<100	<100	<100	<6.1	<5.6	NA	NA	NA	<100	<100	<1000	<100
Ethylbenzene	ug/kg	1,500	360	1.4E+05	2.4E+06	1.4E+05	NA	<60	<60	**6,880**	<6.1	<5.6	NA	NA	NA	<60	<60	**9,500**	<60
Isopropylbenzene	ug/kg	2.6E+06	3,200	3.9E+06	2.0E+06	3.9E+05	NA	<300	<300	300	NA	NA	NA	NA	NA	<300	<300	<3000	<300
Naphthalene	ug/kg	1.0E+05	730	4.7E+05	3.5E+05	5.2E+07	NA	<400	<400	**800**	NA	NA	NA	NA	NA	<400	<400	<4000	<400
n-Propylbenzene	ug/kg	4,600	ID	ID	ID	8.0E+06	NA	<100	<100	1,200	NA	NA	NA	NA	NA	<100	<100	2,000	<100
Methylene chloride	ug/kg	100	30,000 (X)	2.4E+05	7.0E+05	2.3E+06	NA	<100	<100	<100	<6.1	<5.6	NA	NA	NA	<100	<100	<1000	<100
Styrene	ug/kg	2,700	2,100 (X)	5.2E+05	3.3E+05	5.2E+05	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	<60
Tetrachloroethene	ug/kg	100	1,200 (X)	60,000	6.0E+05	88,000	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	<60
Toluene	ug/kg	16,000	5,400	2.5E+05	3.3E+06	2.5E+05	NA	<100	<100	**12,000**	<6.1	<5.6	NA	NA	NA	<100	<100	**37,000**	<100
Trichloroethene	ug/kg	100	4,000 (X)	37,000	2.6E+05	5.0E+05	NA	100	80	**560**	<6.1	<5.6	NA	NA	NA	<60	<60	<600	<60
Vinyl chloride	ug/kg	40	260 (X)	2,800	29,000	34,000	NA	<60	<60	<60	<12	<5.6	NA	NA	NA	<60	<60	**800**	<60
cis-1,2-Dichloroethene	ug/kg	1,400	12,000	41,000	2.10E+05	6.4E+05	NA	<60	<60	100	<6.1	<5.6	NA	NA	NA	<60	<60	**1,700**	<60
cis-1,3-Dichloropropene	ug/kg	none	none	none	none	none	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	<60
m,p-Xylene	ug/kg	none	none	none	none	none	NA	<100	<100	12,900	<6.1	<5.6	NA	NA	NA	100	<100	31,000	<100
o-Xylene	ug/kg	none	none	none	none	none	NA	<60	<60	840	<6.1	<5.6	NA	NA	NA	<60	<60	10,700	<60
trans-1,2-Dichloroethene	ug/kg	2,000	30,000 (X)	43,000	3.30E+05	1.4E+06	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	<60
trans-1,3-Dichloropropene	ug/kg	none	none	none	none	none	NA	<60	<60	<60	<6.1	<5.6	NA	NA	NA	<60	<60	<600	<60
Xylenes, Total	ug/kg	5,600	820	1.5E+05	5.4E+07	1.5E+05	NA	<160	<160	**13,740**	<12.2	<11.2	NA	NA	NA	<160	<160	**41,700**	<160
1,2-Dichloroethene (total)	ug/kg	100	7,200 (X)	11,000	21,000	4.2E+05	NA	NA	NA	NA	<6.1	<5.6	NA	NA	NA	NA	NA	NA	NA
Other Target VOCs	ug/kg	various	various	various	various	various	NA	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	ND	ND
MTBE (EPA Method 8021B)	ug/kg	800	1.4E+05	5.9E+06 (C)	3.0E+07	5.9E+06	NA	<200	<200	<200	<1.2	<1.1	NA	NA	NA	<200	<200	<30000	<200
Total Metals (EPA Method 6010B)							NA						NA	NA	NA				
Lead	mg/kg	700	(G,X)	NLV	NLV	900 (DD)	NA	6.0	8.0	11.7	NS	NS	NA	NA	NA	7.1	7.8	4.5	268.0
PCBs (EPA Method 8082)																			
PCBs, Total	ug/kg	NLL	NLL	1.6E+07	8.1E+05	(T)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: See Last Page

TABLE 2b

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

SOIL ANALYTICAL DATA - MONITORING WELL LOCATIONS

Sample ID:	Units	Michigan Department of Environmental Quality Part 201/213 Non-Residential Soil Cleanup Criteria and Risk Based Screening Levels					MW-7 Inside - Southern End of Eastern Garage	MW-8 Inside - Southern End of Western Garage	MW-8 Inside - Southern End of Western Garage	MW-9 Outside - Outside Gate on Southern Sidewalk, East of Building	MW-9 Outside - Outside Gate on Southern Sidewalk, East of Building	MW-10 Outside - Eastern Parking Lot, East of MW-16	MW-10 Outside - Eastern Parking Lot, East of MW-16	MW-11 Outside - Outside Gate on Western Sidewalk, Near Hydrant on Building Wall	MW-11 Outside - Outside Gate on Western Sidewalk, Near Hydrant on Building Wall	MW-12 Outside - East side of Building, North of Freight Elevator Door	MW-12 Outside - East side of Building, North of Freight Elevator Door	MW-13 Outside - Northern End of Parking Lot Along Mill Street Fence, East of MW-14 and Gate	MW-13 Outside - Northern End of Parking Lot Along Mill Street Fence, East of MW-14 and Gate
Date Collected:							9/14/2007	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
Sample Depth (feet bgl):							5-7'	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'
Analytical Parameter		Drinking Water Protection	Groundwater Surface Water Interface	Indoor Air	Ambient Air	Direct Contact Criteria													
TPH (EPA Method 418.1)	mg/kg	none	none	none	none	none	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (EPA Method 8310)																			
1-Methylnaphthalene	ug/kg	none	none	none	none	none	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	1.8E+06	2.6E+07	500	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Acenaphthene	ug/kg	8.8E+05	8,700	3.5E+08	9.7E+07	1.3E+08	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Acenaphthylene	ug/kg	17,000	ID	3.0E+06	2.7E+06	5.2E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Anthracene	ug/kg	41,000	ID	1.0E+09	1.6E+09	7.3E+08	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benz(a)anthracene	ug/kg	NLL	NLL	NLV	NLV	80,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(a)pyrene	ug/kg	NLL	NLL	NLV	NLV	8,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(b)fluoranthene	ug/kg	NLL	NLL	NLV	NLV	80,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(g,h,i)perylene	ug/kg	NLL	NLL	NLV	NLV	7.0E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Benzo(k)fluoranthene	ug/kg	NLL	NLL	NLV	NLV	8.0E+05	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Chrysene	ug/kg	NLL	NLL	ID	ID	8.0E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Dibenzo(a,h)anthracene	ug/kg	NLL	NLL	NLV	NLV	8,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Fluoranthene	ug/kg	7.3E+05	5,500	1.0E+09	8.9E+08	1.3E+08	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Fluorene	ug/kg	8.9E+05	5,300	1.0E+09	1.5E+08	8.7E+07	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Indeno(1,2,3-cd)pyrene	ug/kg	NLL	NLL	NLV	NLV	80,000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Naphthalene	ug/kg	1.0E+05	730	4.7E+05	3.0E+05	5.2E+07	500	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Phenanthrene	ug/kg	1.6E+05	2,100	5.1E+06	1.9E+05	5.2E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Pyrene	ug/kg	4.8E+05	ID	1.0E+09 (D)	7.8E+08	8.4E+07	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Other Target PAHs	ug/kg	various	various	various	various	various	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	4.6E+05	4.6E+05	4.6E+05	<60	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
1,1,2,2-Tetrachloroethane	ug/kg	700	1,600 (X)	23,000	34,000	2.4E+05	<60	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
1,1,2-Trichloroethane	ug/kg	100	6,600 (X)	24,000	57,000	8.4E+05	<60	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
1,1-Dichloroethane	ug/kg	50,000	15,000	4.3E+05	2.5E+06	8.9E+05	<60	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
1,1-Dichloroethene	ug/kg	140	2,600	330	3,700	5.7E+05	<60	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
1,2,3-Trimethylbenzene	ug/kg	none	none	none	none	none	2,200	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<200
1,2,4-Trimethylbenzene	ug/kg	2,100	570	1.1E+05	2.5E+07	1.10E+05	**7,600**	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<200
1,2-Dichloroethane	ug/kg	100	7,200 (X)	2,100	6,200	91,000	<60	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
1,2-Dichloropropane	ug/kg	100	4,600 (X)	7,400	30,000	5.5E+05	<60	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
1,3,5-Trimethylbenzene	ug/kg	1,800	1,100	94,000	1.9E+07	94,000	**3,000**	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<200
n-Butylbenzene	ug/kg	4,600	ID	ID	ID	8.00E+06	850	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
sec-Butylbenzene	ug/kg	4,600	ID	ID	ID	8.00E+06	170	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
2-Butanone	ug/kg	7.6E+05	44,000	2.7E+07	3.5E+07	2.7E+07	<900	<900	<800	<900	<800	<800	<800	<800	<800	<800	<800	<900	<1000
2-Hexanone	ug/kg	58,000	ID	1.8E+06	1.3E+06	2.5E+06	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<4000
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	1.8E+06	2.6E+07	1,100	<400	<300	<400	<300	<300	<400	<400	<300	<300	<300	<400	<500
4-Methyl-2-pentanone	ug/kg	1.5E+05	ID	2.7E+06	5.3E+07	2.7E+06	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<3000	<4000
Acetone	ug/kg	42,000	34,000	1.1E+08	1.6E+08	7.3E+07	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<2000
Benzene	ug/kg	100	4,000 (X)	8,400	45,000	4.0E+05	**7,720**	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
Bromodichloromethane	ug/kg	1,600 (W)	ID	6,400	31,000	4.9E+05	<300	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<200
Bromoform	ug/kg	1,600 (W)	ID	7.7E+05	3.1E+06	8.7E+05	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<200
Bromomethane	ug/kg	580	700	1,600	13,000	1.0E+06	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<300
Carbon disulfide	ug/kg	46,000	ID	1.4E+05	1.6E+06	2.8E+05 (C,DD)	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<400
Carbon tetrachloride	ug/kg	100	900 (X)	990	12,000	3.9E+05	<60	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
Chlorobenzene	ug/kg	2,000	500	2.2E+05	9.2E+05	2.6E+05	<60	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
Chloroethane	ug/kg	34,000	22,000 (X)	9.5E+05	3.6E+07	9.5E+05	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<400
Chloroform	ug/kg	1,600 (W)	7,000	38,000	1.5E+05	1.5E+06	<60	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
Chloromethane	ug/kg	22,000	ID	10,000	1.2E+05	1.1E+06	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<400
Dibromochloromethane	ug/kg	4,600	ID	21,000	80,000	5.0E+05	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<200
Ethylbenzene	ug/kg	1,500	360	1.4E+05	2.4E+06	1.4E+05	**8,530**	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
Isopropylbenzene	ug/kg	2.6E+06	3,200	3.9E+06	2.0E+06	3.9E+05	600	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<400
Naphthalene	ug/kg	1.0E+05	730	4.7E+05	3.5E+05	5.2E+07	**1,500**	<400	<300	<400	<300	<300	<400	<400	<300	<300	<300	<400	<500
n-Propylbenzene	ug/kg	4,600	ID	ID	ID	8.0E+06	2,100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<200
Methylene chloride	ug/kg	100	30,000 (X)	2.4E+05	7.0E+05	2.3E+06	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<200
Styrene	ug/kg	2,700	2,100 (X)	5.2E+05	3.3E+05	5.2E+05	<60	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
Tetrachloroethene	ug/kg	100	1,200 (X)	60,000	6.0E+05	88,000	<60	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
Toluene	ug/kg	16,000	5,400	2.5E+05	3.3E+06	2.5E+05	**6,300**	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<200
Trichloroethene	ug/kg	100	4,000 (X)	37,000	2.6E+05	5.0E+05	<60	<60	<50	<60	<50	<50	<50	<50	<50	**330**	**1,120**	<60	<80
Vinyl chloride	ug/kg	40	260 (X)	2,800	29,000	34,000	<60	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
cis-1,2-Dichloroethene	ug/kg	1,400	12,000	41,000	2.10E+05	6.4E+05	<60	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
cis-1,3-Dichloropropene	ug/kg	none	none	none	none	none	<60	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
m,p-Xylene	ug/kg	none	none	none	none	none	21,000	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<200
o-Xylene	ug/kg	none	none	none	none	none	3,510	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
trans-1,2-Dichloroethene	ug/kg	2,000	30,000 (X)	43,000	3.30E+05	1.4E+06	<60	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
trans-1,3-Dichloropropene	ug/kg	none	none	none	none	none	<60	<60	<50	<60	<50	<50	<50	<50	<50	<50	<50	<60	<80
Xylenes, Total	ug/kg	5,600	820	1.5E+05	5.4E+07	1.5E+05	**24,510**	<160	<150	<160	<150	<150	<150	<150	<150	<150	<150	<160	<280
1,2-Dichloroethene (total)	ug/kg	100	7,200 (X)	11,000	21,000	4.2E+05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other Target VOCs	ug/kg	various	various	various	various	various	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE (EPA Method 8021B)	ug/kg	800	1.4E+05	5.9E+06 (C)	3.0E+07	5.9E+06	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<300
Total Metals (EPA Method 6010B)																			
Lead	mg/kg	700	(G,X)	NLV	NLV	900 (DD)	278.0	10.4	2.5	6.5	6.7	5.2	4.1	5.6	3.7	4.3	4.7	44.7	33.4
PCBs (EPA Method 8082)																			
PCBs, Total	ug/kg	NLL	NLL	1.6E+07	8.1E+05	(T)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: See Last Page

TABLE 2b

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

SOIL ANALYTICAL DATA - MONITORING WELL LOCATIONS

Sample ID:	Units	Michigan Department of Environmental Quality Part 201/213 Non-Residential Soil Cleanup Criteria and Risk Based Screening Levels					MW-14 Outside - Northern End of Parking Lot Along Mill Street Fence, West of MW-13	MW-14 Outside - Northern End of Parking Lot Along Mill Street Fence, West of MW-14	MW-15 Outside - Parking Lot East of Building, Off Northeast Corner of Building, West of MW-16	MW-15 Outside - Parking Lot East of Building, Off Northeast Corner of Building, West of MW-16	MW-16 Outside - Parking Lot East of Building, Off Northeast Corner of Building, East of MW-15	MW-16 Outside - Parking Lot East of Building, Off Northeast Corner of Building, East of MW-15	MW-17 Outside - Parking Lot East of Building, Off Southeast Corner of Building, West of MW-18	MW-18 Outside - Parking Lot East of Building, Off Southeast Corner of Building, East of MW-17	MW-18 Outside - Parking Lot East of Building, Off Southeast Corner of Building, East of MW-17	MW-19 Outside - City of Pontiac Property Located West of the Site	MW-20 Outside - City of Pontiac Property Located West of the Site
Date Collected:							10/2/2007	10/2/2007	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
Sample Depth (feet bgl):							0-2'	7-9'	0-2'	4.5-6.5'	0-2'	3-5'	NC	0-2'	5.5-7.5'	4-5'	4.5-5.5'
Analytical Parameter		**Drinking Water Protection**	**Groundwater Surface Water Interface**	**Indoor Air**	**Ambient Air**	**Direct Contact Criteria**											
TPH (EPA Method 418.1)	mg/kg	none	none	none	none	none	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (EPA Method 8310)																	
1-Methylnaphthalene	ug/kg	none	none	none	none	none	<300	<300	<300	<300	<300	<300	NS	<300	<300	NA	NA
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	1.8E+06	2.6E+07	<300	<300	<300	<300	<300	<300	NS	<300	<300	<300	<300
Acenaphthene	ug/kg	8.8E+05	8,700	3.5E+08	9.7E+07	1.3E+08	<300	<300	<300	<300	<300	<300	NS	<300	<300	<300	<300
Acenaphthylene	ug/kg	17,000	ID	3.0E+06	2.7E+06	5.2E+06	<300	<300	<300	<300	<300	<300	NS	<300	<300	<300	<300
Anthracene	ug/kg	41,000	ID	1.0E+09	1.6E+09	7.3E+08	<300	<300	<300	<300	<300	<300	NS	<300	<300	<300	<300
Benz(a)anthracene	ug/kg	NLL	NLL	NLV	NLV	80,000	<300	<300	<300	<300	<300	<300	NS	<300	<300	<300	<300
Benzo(a)pyrene	ug/kg	NLL	NLL	NLV	NLV	8,000	<300	<300	<300	<300	<300	<300	NS	<300	<300	<300	<300
Benzo(b)fluoranthene	ug/kg	NLL	NLL	NLV	NLV	80,000	<300	<300	<300	<300	<300	<300	NS	<300	<300	<300	<300
Benzo(g,h,i)perylene	ug/kg	NLL	NLL	NLV	NLV	7.0E+06	<300	<300	<300	<300	<300	<300	NS	<300	<300	<300	<300
Benzo(k)fluoranthene	ug/kg	NLL	NLL	NLV	NLV	8.0E+05	<300	<300	<300	<300	<300	<300	NS	<300	<300	<300	<300
Chrysene	ug/kg	NLL	NLL	ID	ID	8.0E+06	<300	<300	<300	<300	<300	<300	NS	<300	<300	<300	<300
Dibenzo(a,h)anthracene	ug/kg	NLL	NLL	NLV	NLV	8,000	<300	<300	<300	<300	<300	<300	NS	<300	<300	<300	<300
Fluoranthene	ug/kg	7.3E+05	5,500	1.0E+09	8.9E+08	1.3E+08	<300	<300	<300	<300	<300	<300	NS	<300	<300	<300	<300
Fluorene	ug/kg	8.9E+05	5,300	1.0E+09	1.5E+08	8.7E+07	<300	<300	<300	<300	<300	<300	NS	<300	<300	<300	<300
Indeno(1,2,3-cd)pyrene	ug/kg	NLL	NLL	NLV	NLV	80,000	<300	<300	<300	<300	<300	<300	NS	<300	<300	<300	<300
Naphthalene	ug/kg	1.0E+05	730	4.7E+05	3.0E+05	5.2E+07	<300	<300	<300	<300	<300	<300	NS	<300	<300	<300	<300
Phenanthrene	ug/kg	1.6E+05	2,100	5.1E+06	1.9E+05	5.2E+06	<300	<300	<300	<300	<300	<300	NS	<300	<300	<300	<300
Pyrene	ug/kg	4.8E+05	ID	1.0E+09 (D)	7.8E+08	8.4E+07	<300	<300	<300	<300	<300	<300	NS	<300	<300	<300	<300
Other Target PAHs	ug/kg	various	various	various	various	various	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND
VOCs (EPA Method 8260B)													NS				
1,1,1-Trichloroethane	ug/kg	4,000	1800	4.6E+05	4.6E+05	4.6E+05	<60	<50	<60	<60	<50	<50	NS	<50	<50	<70	<70
1,1,2,2-Tetrachloroethane	ug/kg	700	1,600 (X)	23,000	34,000	2.4E+05	<60	<50	<60	<60	<50	<50	NS	<50	<50	<70	<70
1,1,2-Trichloroethane	ug/kg	100	6,600 (X)	24,000	57,000	8.4E+05	<60	<50	<60	<250	<50	<50	NS	<50	<50	<70	<70
1,1-Dichloroethane	ug/kg	50,000	15,000	4.3E+05	2.5E+06	8.9E+05	<60	<50	<60	<60	<50	<50	NS	<50	<50	<70	<70
1,1-Dichloroethene	ug/kg	140	2,600	330	3,700	5.7E+05	<60	<50	<60	<60	<50	<50	NS	<50	<50	<70	<70
1,2,3-Trimethylbenzene	ug/kg	none	none	none	none	none	<100	<100	<100	2,100	<100	<100	NS	<100	<100	<100	<100
1,2,4-Trimethylbenzene	ug/kg	2,100	570	1.1E+05	2.5E+07	1.10E+05	<100	<100	<100	**9,800**	<100	<100	NS	<100	<100	<100	<100
1,2-Dichloroethane	ug/kg	100	7,200 (X)	2,100	6,200	91,000	<60	<50	<60	<60	<50	<50	NS	<50	<50	<70	<70
1,2-Dichloropropane	ug/kg	100	4,600 (X)	7,400	30,000	5.5E+05	<60	<50	<60	<80	<50	<50	NS	<50	<50	<70	<70
1,3,5-Trimethylbenzene	ug/kg	1,800	1,100	94,000	1.9E+07	94,000	<100	<100	<100	**3,100**	<100	<100	NS	<100	<100	<100	<100
n-Butylbenzene	ug/kg	4,600	ID	ID	ID	8.00E+06	<60	<50	<60	1,160	<50	<50	NS	<50	<50	<70	<70
sec-Butylbenzene	ug/kg	4,600	ID	ID	ID	8.00E+06	<60	<50	<60	210	<50	<50	NS	<50	<50	<70	<70
2-Butanone	ug/kg	7.6E+05	44,000	2.7E+07	3.5E+07	2.7E+07	<900	<800	<900	<900	<800	<800	NS	<800	<800	<1000	<1000
2-Hexanone	ug/kg	58,000	ID	1.8E+06	1.3E+06	2.5E+06	<3000	<3000	<3000	<3000	<3000	<3000	NS	<3000	<3000	<3000	<4000
2-Methylnaphthalene	ug/kg	1.7E+05	4,200	4.9E+06	1.8E+06	2.6E+07	<400	<400	<400	1,600	<400	<400	NS	<400	<400	<500	<500
4-Methyl-2-pentanone	ug/kg	1.5E+05	ID	2.7E+06	5.3E+07	2.7E+06	<3000	<3000	<3000	<3000	<3000	<3000	NS	<3000	<3000	<3000	<4000
Acetone	ug/kg	42,000	34,000	1.1E+08	1.6E+08	7.3E+07	<1000	<1000	<1000	<5000	<1000	<1000	NS	<1000	<1000	<1000	<1000
Benzene	ug/kg	100	4,000 (X)	8,400	45,000	4.0E+05	<60	<50	<60	<60	<50	<50	NS	<50	<50	<70	<70
Bromodichloromethane	ug/kg	1,600 (W)	ID	6,400	31,000	4.9E+05	<100	<100	<100	<200	<100	<100	NS	<100	<100	<100	<100
Bromoform	ug/kg	1,600 (W)	ID	7.7E+05	3.1E+06	8.7E+05	<100	<100	<100	<100	<100	<100	NS	<100	<100	<100	<100
Bromomethane	ug/kg	580	700	1,600	13,000	1.0E+06	<200	<200	<200	<200	<200	<200	NS	<200	<200	<300	<300
Carbon disulfide	ug/kg	46,000	ID	1.4E+05	1.6E+06	2.8E+05 (C,DD)	<300	<300	<300	<300	<300	<300	NS	<300	<300	<300	<400
Carbon tetrachloride	ug/kg	100	900 (X)	990	12,000	3.9E+05	<60	<50	<60	<60	<50	<50	NS	<50	<50	<70	<70
Chlorobenzene	ug/kg	2,000	500	2.2E+05	9.2E+05	2.6E+05	<60	<50	<60	<60	<50	<50	NS	<50	<50	<70	<70
Chloroethane	ug/kg	34,000	22,000 (X)	9.5E+05	3.6E+07	9.5E+05	<300	<300	<300	<300	<300	<300	NS	<300	<300	<300	<400
Chloroform	ug/kg	1,600 (W)	7,000	38,000	1.5E+05	1.5E+06	<60	<50	<60	<140	<50	<50	NS	<50	<50	<70	<70
Chloromethane	ug/kg	22,000	ID	10,000	1.2E+05	1.1E+06	<300	<300	<300	<300	<300	<300	NS	<300	<300	<300	<400
Dibromochloromethane	ug/kg	4,600	ID	21,000	80,000	5.0E+05	<100	<100	<100	<100	<100	<100	NS	<100	<100	<100	<100
Ethylbenzene	ug/kg	1,500	360	1.4E+05	2.4E+06	1.4E+05	<60	<50	<60	**7,280**	<50	<50	NS	<50	<50	<70	<70
Isopropylbenzene	ug/kg	2.6E+06	3,200	3.9E+06	2.0E+06	3.9E+05	<300	<300	<300	500	<300	<300	NS	<300	<300	<300	<400
Naphthalene	ug/kg	1.0E+05	730	4.7E+05	3.5E+05	5.2E+07	<400	<400	<400	**1,700**	<400	<400	NS	<400	<400	<500	<500
n-Propylbenzene	ug/kg	4,600	ID	ID	ID	8.0E+06	<300	<100	<100	2,400	<100	<100	NS	<100	<100	<100	<100
Methylene chloride	ug/kg	100	30,000 (X)	2.4E+05	7.0E+05	2.3E+06	<100	<100	<100	<100	<100	<100	NS	<100	<100	<100	<100
Styrene	ug/kg	2,700	2,100 (X)	5.2E+05	3.3E+05	5.2E+05	<60	<50	<60	<60	<50	<50	NS	<50	<50	<70	<70
Tetrachloroethene	ug/kg	100	1,200 (X)	60,000	6.0E+05	88,000	<60	<50	<60	<60	<50	<50	NS	<50	<50	<70	<70
Toluene	ug/kg	16,000	5,400	2.5E+05	3.3E+06	2.5E+05	<100	<100	<100	100	<100	<100	NS	<100	<100	<100	<100
Trichloroethene	ug/kg	100	4,000 (X)	37,000	2.6E+05	5.0E+05	<60	<50	<60	<60	<50	<50	NS	<50	<50	<70	<70
Vinyl chloride	ug/kg	40	260 (X)	2,800	29,000	34,000	<60	<50	<60	<60	<50	<50	NS	<50	<50	<70	<70
cis-1,2-Dichloroethene	ug/kg	1,400	12,000	41,000	2.10E+05	6.4E+05	<60	<50	<60	<60	<50	<50	NS	<50	<50	<70	<70
cis-1,3-Dichloropropene	ug/kg	none	none	none	none	none	<60	<50	<60	<60	<50	<50	NS	<50	<50	<70	<70
m,p-Xylene	ug/kg	none	none	none	none	none	<100	<100	<100	12,900	<100	<100	NS	<100	<100	<100	<100
o-Xylene	ug/kg	none	none	none	none	none	<60	<50	<60	830	<50	<50	NS	<50	<50	<70	<70
trans-1,2-Dichloroethene	ug/kg	2,000	30,000 (X)	43,000	3.30E+05	1.4E+06	<60	<50	<60	<60	<50	<50	NS	<50	<50	<70	<70
trans-1,3-Dichloropropene	ug/kg	none	none	none	none	none	<60	<50	<60	<60	<50	<50	NS	<50	<50	<70	<70
Xylenes, Total	ug/kg	5,600	820	1.5E+05	5.4E+07	1.5E+05	<160	<150	<160	**13,730**	<150	<150	NS	<150	<150	<170	<170
1,2-Dichloroethene (total)	ug/kg	100	7,200 (X)	11,000	21,000	4.2E+05	NA	NA	NA	NA	NA	NA	NS	NA	NA	NA	NA
Other Target VOCs	ug/kg	various	various	various	various	various	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND
MTBE (EPA Method 8021B)	ug/kg	800	1.4E+05	5.9E+06 (C)	3.0E+07	5.9E+06	<200	<200	<200	<200	<200	<200	NS	<200	<200	<300	<300
Total Metals (EPA Method 6010B)																	
Lead	mg/kg	700	(G,X)	NLV	NLV	900 (DD)	148	34.7	4.7	5.9	4.4	3.8	NS	4.2	3.9	2.2	7.7
PCBs (EPA Method 8082)																	
PCBs, Total	ug/kg	NLL	NLL	1.6E+07	8.1E+05	(T)	NA	NA	NA	NA	NA	NA	NS	NA	NA	NA	NA

Notes: See Last Page

TABLE 2a and 2b NOTES

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MI

Notes:

Exceedances: Cleanup Criteria and Risk Based Screening Level Exceedances are bold .
Samples with TPH results greater than 100 mg/kg are bold.
Samples with TPH results greater than 100 mg/kg were analyzed for PAHs.

bgl: below ground level

J: Estimated value between method detection limit and practical quantitation limit.

NS: Not sampled.

ND / <: Not detected / <detection limit

NA: Not analyzed.

Soil Cleanup Criteria: - Part 201 (Environmental Remediation) and Part 213 (Leaking Underground Storage Tanks) of the Michigan Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451 (Revised March 25, 2011). 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.

{G} = 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 indicated with an asterisk. For HDV with an asterisk, the generic GSI criteria GSI criterion is the lesser of the HDV, the WV, and the calculated FCV (see formula 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 20XGSI and GSI soil-water partition values using the GSI criteria developed with the procedure described in this footnote.

{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.

{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.

TABLE 2c

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

SOIL ANALYTICAL DATA - EFFECTIVE SOLUBILITY SCREENING LEVELS COMPARISON

Sample ID:	Units	Effective Solubility Screening Levels for Weathered Gasoline	B-1	B-2	B-3	B-4	B-5	B-6	B-7	B-8	B-9	B-10	B-11	B-12
			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
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
Sample Depth (feet bgl):		Sand (Most Conservative Screening Levels)	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'
Analytical Parameter														
PAHs (EPA Method 8310)														
2-Methylnaphthalene	ug/kg	301	NA	NA	NA	NA	NA	<22	<4.2	<3.6	35	NA	NA	NA
Naphthalene	ug/kg	3,890	NA	NA	NA	NA	NA	<22	<4.2	<3.6	86	NA	NA	NA
VOCs (EPA Method 8260B)														
1,2,4-Trimethylbenzene	ug/kg	2,770	NA	NA	NA	NA	NA	6.6	<6.4	<5.5	6.4	NA	NA	NA
1,3,5-Trimethylbenzene	ug/kg	2,350	NA	NA	NA	NA	NA	<5.5	<6.4	<5.5	8.5	NA	NA	NA
2-Methylnaphthalene	ug/kg	301	<11	<11	<10	<11	<11	<11	<13	<11	<11	<11	<11	<11
Benzene	ug/kg	4,110	< 5.7	< 5.5	< 5.2	< 5.5	< 5.4	41	750	<5.5	<5.3	<5.5	< 5.6	< 5.4
Ethylbenzene	ug/kg	135	< 5.7	< 5.5	< 5.2	< 5.5	< 5.4	6.6	<6.4	<5.5	15	<5.5	< 5.6	< 5.4
Naphthalene	ug/kg	3,890	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	ug/kg	8,340	< 5.7	< 5.5	< 5.2	< 5.5	< 5.4	20	<6.4	<5.5	<5.3	<5.5	< 5.6	< 5.4
Xylenes, Total	ug/kg	12,000	< 5.7	< 5.5	< 5.2	< 5.5	< 5.4	20	<6.4	<5.5	98	<5.5	< 5.6	< 5.4

Notes:
Exceedances: Cleanup Criteria and Risk Based Screening Level Exceedances are bold .
Samples with TPH results greater than 100 mg/kg are bold.
Samples with TPH results greater than 100 mg/kg were analyzed for PAHs.
bgl: below ground level
J: Estimated value between method detection limit and practical quantitation limit.
NS: Not sampled.
ND / <: Not detected / <detection limit
NA: Not analyzed.

TABLE 2c

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

SOIL ANALYTICAL DATA - EFFECTIVE SOLUBILITY SCREENING LEVELS COMPARISON

Sample ID:	Units	Effective Solubility Screening Levels for Weathered Gasoline	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	B-21 Inside Northwest Portion of Building - Release Delineation	B-22 Outside North-NW Corner of Building - Release Delineation	B-23 Outside North of B-16 and Former Gas Dispenser - Release Delineation	B-24 Outside - NNW of B-15 - Release Delineation
Date Collected:		Sand (Most Conservative Screening Levels)	11/6/2006	11/6/2006	11/6/2006	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
Sample Depth (feet bgl):			18-20'	5-7'	6-8'	4-5'	4-6'	1-2'	0.5-1.5'	3.5-4.5'	2-4'	1-3'	2-4'	2-4'
Analytical Parameter														
PAHs (EPA Method 8310)														
2-Methylnaphthalene	ug/kg	301	NA	110	760	**29,000**	NA	NA	29	NA	<4.1	26	<4	<3.9
Naphthalene	ug/kg	3,890	NA	52	**780**	**12,000**	NA	NA	110	NA	<4.1	<23	<4	<3.9
VOCs (EPA Method 8260B)														
1,2,4-Trimethylbenzene	ug/kg	2,770	NA	NA	NA	NA	NA	NA	NA	NA	<6.2	<5.7	<6	<5.9
1,3,5-Trimethylbenzene	ug/kg	2,350	NA	NA	NA	NA	NA	NA	NA	NA	<6.2	<5.7	<6	<5.9
2-Methylnaphthalene	ug/kg	301	<11	<12	<12	<11	<13	<12	<11	<12	<12	<11	<12	<12
Benzene	ug/kg	4,110	< 5.6	< 6	< 6.2	< 5.7	44	< 6.1	< 5.3	220	62	<5.7	<6	<5.9
Ethylbenzene	ug/kg	135	< 5.6	**3,500**	**20,000**	**34,000**	8.8	< 6.1	< 5.3	30	<6.2	<5.7	<6	<5.9
Naphthalene	ug/kg	3,890	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	ug/kg	8,340	< 5.6	14	**21,000**	1,900 J	13	< 6.1	< 5.3	< 6	<6.2	<5.7	<6	<5.9
Xylenes, Total	ug/kg	12,000	< 5.6	8,220	**85,000**	**103,000**	35.6	< 6.1	< 5.3	< 6	<6.2	5.7	<6	<5.9

Notes:
Exceedances: Cleanup Criteria and Risk Based Screening Level Exceedances are bold
Samples with TPH results greater than 100 mg/kg are bold.
Samples with TPH results greater than 100 mg/kg were analyzed for PA
bgl: below ground level
J: Estimated value between method detection limit and practical quantitati
NS: Not sampled.
ND / <: Not detected / <detection limit
NA: Not analyzed.

TABLE 2c

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

SOIL ANALYTICAL DATA - EFFECTIVE SOLUBILITY SCREENING LEVELS COMPARISON

Sample ID:	Units	Effective Solubility Screening Levels for Weathered Gasoline	B-25	B-26	B-26	B-27	B-27	B-28	B-28	B-29	B-29	B-30	B-30	B-31
			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	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	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
Date Collected:			11/30/2006	9/11/2007	9/11/2007	9/11/2007	9/11/2007	9/11/2007	9/11/2007	9/11/2007	9/11/2007	9/12/2007	9/12/2007	9/12/2007
Sample Depth (feet bgl):		Sand (Most Conservative Screening Levels)	2-4'	0-2'	6-8'	0-2'	3.5-5.5'	0-2'	8-10'	0-2'	3.5-5.5'	0-2'	6-8'	0-2'
Analytical Parameter														
PAHs (EPA Method 8310)														
2-Methylnaphthalene	ug/kg	301	<3.7	<300	<300	**2,700**	**1,600**	<300	**4,600**	<300	<300	<300	<300	<300
Naphthalene	ug/kg	3,890	<3.7	<300	<300	1,600	1,200	<300	**3,900**	<300	<300	<300	<300	<300
VOCs (EPA Method 8260B)														
1,2,4-Trimethylbenzene	ug/kg	2,770	<5.6	<100	<100	**35,000**	**62,000**	500	**200,000**	<100	<100	<100	<100	<100
1,3,5-Trimethylbenzene	ug/kg	2,350	<5.6	<100	<100	**13,000**	**26,000**	200	**75,000**	<100	<100	<100	<100	<100
2-Methylnaphthalene	ug/kg	301	<11	<400	<400	<400	**6,000**	<400	**14,000**	<400	<400	<400	<400	<400
Benzene	ug/kg	4,110	<5.6	<60	**8,100**	1,000	1,200	<50	2,000	<60	<60	<60	<50	<50
Ethylbenzene	ug/kg	135	<5.6	<60	**2,500**	**32,000**	**36,100**	**460**	**63,000**	<60	<60	<60	<50	<50
Naphthalene	ug/kg	3,890	NA	<400	<400	<400	**5,000**	<400	**18,000**	<400	<400	<400	<400	<400
Toluene	ug/kg	8,340	<5.6	<100	<100	<2000	2,000	<100	**104,000**	<100	<100	<100	<100	<100
Xylenes, Total	ug/kg	12,000	<5.6	<160	4,940	**131,000**	**118,900**	1,740	**440,000**	<160	<160	<160	<150	<150

Notes:
Exceedances: Cleanup Criteria and Risk Based Screening Level Exceedances are bold
Samples with TPH results greater than 100 mg/kg are bold.
Samples with TPH results greater than 100 mg/kg were analyzed for PA
bgl: below ground level
J: Estimated value between method detection limit and practical quantitati
NS: Not sampled.
ND / <: Not detected / <detection limit
NA: Not analyzed.

TABLE 2c

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

SOIL ANALYTICAL DATA - EFFECTIVE SOLUBILITY SCREENING LEVELS COMPARISON

Sample ID:	Units	Effective Solubility Screening Levels for Weathered Gasoline	B-31	B-32	B-32	B-33	B-33	B-34	B-34	B-35	DUPE-2 (B-35)	B-35	B-36	B-36
			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	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
Date Collected:			9/12/2007	9/12/2007	9/12/2007	9/12/2007	9/12/2007	9/13/2007	9/13/2007	9/14/2007	9/14/2007	9/14/2007	9/14/2007	9/14/2007
Sample Depth (feet bgl):			3.3-5.3'	0-2'	8.8-10.8'	0-2'	8.5-10.5'	0-2'	8-10'	0-2'	0-2'	6.8-8.8'	0-2'	6-8'
Analytical Parameter		**Sand (Most Conservative Screening Levels)**												
PAHs (EPA Method 8310)														
2-Methylnaphthalene	ug/kg	301	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Naphthalene	ug/kg	3,890	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
VOCs (EPA Method 8260B)														
1,2,4-Trimethylbenzene	ug/kg	2,770	<100	<100	<100	<100	<100	200	400	<100	<100	<100	<100	<100
1,3,5-Trimethylbenzene	ug/kg	2,350	<100	<100	<100	<100	<100	<100	200	<100	<100	<100	<100	<100
2-Methylnaphthalene	ug/kg	301	<400	<400	<400	<400	<400	<400	<400	<400	<400	<400	<400	<400
Benzene	ug/kg	4,110	<50	<50	<50	<50	<50	<60	<50	<60	<60	960	<50	<60
Ethylbenzene	ug/kg	135	<50	<50	<50	<50	<50	<60	360	<60	<60	**1960**	<50	<60
Naphthalene	ug/kg	3,890	<400	<400	<400	<400	<400	<400	<400	<400	<400	<400	<400	<400
Toluene	ug/kg	8,340	<100	<100	<100	<100	<100	<100	500	<100	<100	6100	<100	<100
Xylenes, Total	ug/kg	12,000	<150	<150	<150	<150	<150	<160	2,580	<160	<160	8,010	<150	<160

Notes:
Exceedances: Cleanup Criteria and Risk Based Screening Level Exceedances are bold
Samples with TPH results greater than 100 mg/kg are bold.
Samples with TPH results greater than 100 mg/kg were analyzed for PA
bgl: below ground level
J: Estimated value between method detection limit and practical quantitati
NS: Not sampled.
ND / <: Not detected / <detection limit
NA: Not analyzed.

TABLE 2c

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

SOIL ANALYTICAL DATA - EFFECTIVE SOLUBILITY SCREENING LEVELS COMPARISON

Sample ID:	Units	Effective Solubility Screening Levels for Weathered Gasoline	B-37	B-37	B-38	B-39	B-40	B-40	B-41	B-41	B-41	B-42	B-43
			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	Outside - In Corner of Building East of Auditorium and South of Building Wall	Outside - In Corner of Building East of Auditorium and South of Building Wall	Outside - Outside Gate on Southern Sidewalk, South of Auditorium	Outside - Eastern Parking Lot, West of B-40
Date Collected:			9/17/2007	9/17/2007	9/17/2007	9/17/2007	9/18/2007	9/18/2007	9/18/2007	9/18/2007	9/18/2007	9/19/2007	9/20/2007
Sample Depth (feet bgl):		Sand (Most Conservative Screening Levels)	0-2'	8-10'	NS	NS	0-2'	?	0-2'	6-8'	12-14'	NS	NS
Analytical Parameter													
PAHs (EPA Method 8310)													
2-Methylnaphthalene	ug/kg	301	<300	<300	NS	NS	NA	NA	NA	NA	NA	NS	NS
Naphthalene	ug/kg	3,890	<300	<300	NS	NS	NA	NA	NA	NA	NA	NS	NS
VOCs (EPA Method 8260B)													
1,2,4-Trimethylbenzene	ug/kg	2,770	<100	<100	NS	NS	NA	NA	NA	NA	NA	NS	NS
1,3,5-Trimethylbenzene	ug/kg	2,350	<100	<100	NS	NS	NA	NA	NA	NA	NA	NS	NS
2-Methylnaphthalene	ug/kg	301	<400	<400	NS	NS	NA	NA	NA	NA	NA	NS	NS
Benzene	ug/kg	4,110	<50	440	NS	NS	NA	NA	NA	NA	NA	NS	NS
Ethylbenzene	ug/kg	135	<50	<60	NS	NS	NA	NA	NA	NA	NA	NS	NS
Naphthalene	ug/kg	3,890	<400	<400	NS	NS	NA	NA	NA	NA	NA	NS	NS
Toluene	ug/kg	8,340	<100	<100	NS	NS	NA	NA	NA	NA	NA	NS	NS
Xylenes, Total	ug/kg	12,000	<150	<160	NS	NS	NA	NA	NA	NA	NA	NS	NS

Notes:
Exceedances: Cleanup Criteria and Risk Based Screening Level Exceedances are bold
Samples with TPH results greater than 100 mg/kg are bold.
Samples with TPH results greater than 100 mg/kg were analyzed for PA
bgl: below ground level
J: Estimated value between method detection limit and practical quantitati
NS: Not sampled.
ND / <: Not detected / <detection limit
NA: Not analyzed.

TABLE 2c

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

SOIL ANALYTICAL DATA - EFFECTIVE SOLUBILITY SCREENING LEVELS COMPARISON

Sample ID:	Units	Effective Solubility Screening Levels for Weathered Gasoline	B-44	B-44	B-45	DUPE-4 (B-45)	B-45	B-46	B-47	EW-1	EW-2	DUPE-3 (EW-2)	EW-2	MW-2
			Inside - East Side of Building, Classroom North of Freight Elevator, Along North Wall	Inside - East Side of Building, Classroom North of Freight Elevator, Along North Wall	Inside - Large Classroom West of Freight Elevator, Along North Wall		Inside - Large Classroom West of Freight Elevator, Along North Wall	Inside - Basement, Along North Wall	Inside - Basement, Southeastern Corner	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
Date Collected:			9/24/2007	9/24/2007	9/24/2007	9/24/2007	9/24/2007	2/14/2008	2/14/2008	12/1/2006	9/19/2007	9/19/2007	9/19/2007	12/1/2006
Sample Depth (feet bgl):		Sand (Most Conservative Screening Levels)	0-2'	8-10'	0-2'	0-2'	10-12'	NS	NS		0-2'	0-2'	3-5'	0-2'
Analytical Parameter														
PAHs (EPA Method 8310)														
2-Methylnaphthalene	ug/kg	301	<300	<300	<300	<300	<300	NS	NS	NA	<300	<300	<300	<4
Naphthalene	ug/kg	3,890	<300	<300	<300	<300	<300	NS	NS	NA	<300	<300	400	<4
VOCs (EPA Method 8260B)														
1,2,4-Trimethylbenzene	ug/kg	2,770	<100	<100	<100	<100	<100	NS	NS	NA	<100	<100	**5,800**	<6.1
1,3,5-Trimethylbenzene	ug/kg	2,350	<100	<100	<100	<100	<100	NS	NS	NA	<100	<100	1,500	<6.1
2-Methylnaphthalene	ug/kg	301	<400	<400	<400	<400	<400	NS	NS	NA	<400	<400	<400	NA
Benzene	ug/kg	4,110	<50	<60	<50	<60	60	NS	NS	NA	<60	<60	**7,900**	<6.1
Ethylbenzene	ug/kg	135	<50	<60	<50	<60	60	NS	NS	NA	<60	<60	**6,880**	<6.1
Naphthalene	ug/kg	3,890	<400	<400	<400	<400	<400	NS	NS	NA	<400	<400	800	NA
Toluene	ug/kg	8,340	<100	<100	<100	<100	200	NS	NS	NA	<100	<100	**12,000**	<6.1
Xylenes, Total	ug/kg	12,000	<150	<160	<150	<160	290	NS	NS	NA	<160	<160	**13,740**	<12.2

Notes:
Exceedances: Cleanup Criteria and Risk Based Screening Level Exceedances are bold
Samples with TPH results greater than 100 mg/kg are bold.
Samples with TPH results greater than 100 mg/kg were analyzed for PA
bgl: below ground level
J: Estimated value between method detection limit and practical quantitati
NS: Not sampled.
ND / <: Not detected / <detection limit
NA: Not analyzed.

TABLE 2c

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

SOIL ANALYTICAL DATA - EFFECTIVE SOLUBILITY SCREENING LEVELS COMPARISON

Sample ID:	Units	Effective Solubility Screening Levels for Weathered Gasoline	MW-2	MW-3	MW-4	MW-5	MW-6	DUPE-1(MW-6)	MW-6	MW-7	MW-7	MW-8	MW-8	MW-9
			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 - Southern End of Eastern Garage	Inside - Southern End of Eastern Garage	Inside - Southern End of Western Garage	Inside - Southern End of Western Garage	Outside - Outside Gate on Southern Sidewalk, East of Building
Date Collected:			12/1/2006	12/1/2006	12/1/2006	12/1/2006	9/13/2007	9/13/2007	9/13/2007	9/14/2007	9/14/2007	9/17/2007	9/17/2007	9/19/2007
Sample Depth (feet bgl):		Sand (Most Conservative Screening Levels)	3-5'		0-2'		0-2'	0-2'	6-8'	0-2'	5-7'	0-2'	8.5-10.5'	0-2'
Analytical Parameter														
PAHs (EPA Method 8310)														
2-Methylnaphthalene	ug/kg	301	<3.7	NA	NA	NA	<300	<300	**1,000**	<300	**500**	<300	<300	<300
Naphthalene	ug/kg	3,890	<3.7	NA	NA	NA	<300	<300	600	<300	500	<300	<300	<300
VOCs (EPA Method 8260B)														
1,2,4-Trimethylbenzene	ug/kg	2,770	<5.6	NA	NA	NA	<100	<100	**9,000**	<100	**7,600**	<100	<100	<100
1,3,5-Trimethylbenzene	ug/kg	2,350	<5.6	NA	NA	NA	<100	<100	**3,000**	<100	**3,000**	<100	<100	<100
2-Methylnaphthalene	ug/kg	301	NA	NA	NA	NA	<400	<400	<4000	<400	1,100	<400	<300	<400
Benzene	ug/kg	4,110	<5.6	NA	NA	NA	<60	<60	**14,900**	<60	**7,720**	<60	<50	<60
Ethylbenzene	ug/kg	135	<5.6	NA	NA	NA	<60	<60	**9,500**	<60	**8,530**	<60	<50	<60
Naphthalene	ug/kg	3,890	NA	NA	NA	NA	<400	<400	<4000	<400	1,500	<400	<300	<400
Toluene	ug/kg	8,340	<5.6	NA	NA	NA	<100	<100	**37,000**	<100	6,300	<100	<100	<100
Xylenes, Total	ug/kg	12,000	<11.2	NA	NA	NA	<160	<160	**41,700**	<160	**24,510**	<160	<150	<160

Notes:
Exceedances: Cleanup Criteria and Risk Based Screening Level Exceedances are bold
Samples with TPH results greater than 100 mg/kg are bold.
Samples with TPH results greater than 100 mg/kg were analyzed for PA
bgl: below ground level
J: Estimated value between method detection limit and practical quantitati
NS: Not sampled.
ND / <: Not detected / <detection limit
NA: Not analyzed.

TABLE 2c

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

SOIL ANALYTICAL DATA - EFFECTIVE SOLUBILITY SCREENING LEVELS COMPARISON

Sample ID:	Units	Effective Solubility Screening Levels for Weathered Gasoline	MW-9	MW-10	MW-10	MW-11	MW-11	MW-12	MW-12	MW-13	MW-13	MW-14	MW-14	MW-15
			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 - 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	Outside - Parking Lot East of Building, Off Northeast Corner of Building, West of MW-16
Date Collected:			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	10/3/2007
Sample Depth (feet bgl):		Sand (Most Conservative Screening Levels)	3-5'	0-2'	7.75-9.75'	0-2'	13-15'	0-2'	9-11'	0-2'	8-10'	0-2'	7-9'	0-2'
Analytical Parameter														
PAHs (EPA Method 8310)														
2-Methylnaphthalene	ug/kg	301	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
Naphthalene	ug/kg	3,890	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
VOCs (EPA Method 8260B)														
1,2,4-Trimethylbenzene	ug/kg	2,770	<100	<100	<100	<100	<100	<100	<100	<100	<200	<100	<100	<100
1,3,5-Trimethylbenzene	ug/kg	2,350	<100	<100	<100	<100	<100	<100	<100	<100	<200	<100	<100	<100
2-Methylnaphthalene	ug/kg	301	<300	<300	<400	<400	<300	<300	<300	<400	<500	<400	<400	<400
Benzene	ug/kg	4,110	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50	<60
Ethylbenzene	ug/kg	135	<50	<50	<50	<50	<50	<50	<50	<60	<80	<60	<50	<60
Naphthalene	ug/kg	3,890	<300	<300	<400	<400	<300	<300	<300	<400	<500	<400	<400	<400
Toluene	ug/kg	8,340	<100	<100	<100	<100	<100	<100	<100	<100	<200	<100	<100	<100
Xylenes, Total	ug/kg	12,000	<150	<150	<150	<150	<150	<150	<150	<160	<280	<160	<150	<160

Notes:
Exceedances: Cleanup Criteria and Risk Based Screening Level Exceedances are bold
Samples with TPH results greater than 100 mg/kg are bold.
Samples with TPH results greater than 100 mg/kg were analyzed for PA
bgl: below ground level
J: Estimated value between method detection limit and practical quantitati
NS: Not sampled.
ND / <: Not detected / <detection limit
NA: Not analyzed.

TABLE 2c

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

SOIL ANALYTICAL DATA - EFFECTIVE SOLUBILITY SCREENING LEVELS COMPARISON

Sample ID:	Units	Effective Solubility Screening Levels for Weathered Gasoline	MW-15	MW-16	MW-16	MW-17	MW-18	MW-18	MW-19	MW-20
			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
Date Collected:			10/3/2007	10/3/2007	10/3/2007	10/3/2007	10/3/2007	10/3/2007	11/17/2010	11/17/2010
Sample Depth (feet bgl):		Sand (Most Conservative Screening Levels)	4.5-6.5'	0-2'	3-5'	NC	0-2'	5.5-7.5'	4-5'	4.5-5.5'
Analytical Parameter										
PAHs (EPA Method 8310)										
2-Methylnaphthalene	ug/kg	301	<300	<300	<300	NS	<300	<300	<300	<300
Naphthalene	ug/kg	3,890	<300	<300	<300	NS	<300	<300	<300	<300
VOCs (EPA Method 8260B)						NS				
1,2,4-Trimethylbenzene	ug/kg	2,770	**9,800**	<100	<100	NS	<100	<100	<100	<100
1,3,5-Trimethylbenzene	ug/kg	2,350	**3,100**	<100	<100	NS	<100	<100	<100	<100
2-Methylnaphthalene	ug/kg	301	**1,600**	<400	<400	NS	<400	<400	<500	<500
Benzene	ug/kg	4,110	<60	<50	<50	NS	<50	<50	<70	<70
Ethylbenzene	ug/kg	135	**7,280**	<50	<50	NS	<50	<50	<70	<70
Naphthalene	ug/kg	3,890	1,700	<400	<400	NS	<400	<400	<500	<500
Toluene	ug/kg	8,340	100	<100	<100	NS	<100	<100	<100	<100
Xylenes, Total	ug/kg	12,000	**13,730**	<150	<150	NS	<150	<150	<170	<170

Notes:
Exceedances: Cleanup Criteria and Risk Based Screening Level Exceedances are bold
Samples with TPH results greater than 100 mg/kg are bold.
Samples with TPH results greater than 100 mg/kg were analyzed for PA
bgl: below ground level
J: Estimated value between method detection limit and practical quantitati
NS: Not sampled.
ND / <: Not detected / <detection limit
NA: Not analyzed.

TABLE 3

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

GROUNDWATER ANALYTICAL DATA

Sample ID:	Units	Michigan Groundwater Cleanup Criteria and Risk Based Screening Levels					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
		Non-Residential Drinking Water Protection Criteria & RBSLs	Groundwater Surface Water Interface Criteria & RBSLs	Non-Residential Groundwater Volatilization to Indoor Air Inhalation Criteria & RBSLs	Groundwater Contact Criteria & RBSLs	Flammability and Explosivity Screening Level																		
Date Collected:							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
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
Analytical Parameter																								
TPH (EPA Method 418.1)	mg/L	none	none	none	none	none	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**
Semivolatile Hydrocarbons (EPA Method 8015B)																								
Gasoline Range Organics	mg/L	none	none	none	none	none	NS **	NS	NS**	NS	NS*	NS***	NS	NS****	NS	NS*	NS**	NS	NS*	NS	NS	NS	NS	NS
Diesel Range Organics	mg/L	none	none	none	none	none	NS **	NS	NS**	NS	NS*	NS***	NS	NS****	NS	NS*	NS**	NS	NS*	NS	NS	NS	NS	NS
Fuel Oil	mg/L	none	none	none	none	none	NS **	NS	NS**	NS	NS*	NS***	NS	NS****	NS	NS*	NS**	NS	NS*	NS	NS	NS	NS	NS
Hydraulic Fluid	mg/L	none	none	none	none	none	NS **	NS	NS**	NS	NS*	NS***	NS	NS****	NS	NS*	NS**	NS	NS*	NS	NS	NS	NS	NS
Kerosene	mg/L	none	none	none	none	none	NS **	NS	NS**	NS	NS*	NS***	NS	NS****	NS	NS*	NS**	NS	NS*	NS	NS	NS	NS	NS
Mineral Spirits	mg/L	none	none	none	none	none	NS **	NS	NS**	NS	NS*	NS***	NS	NS****	NS	NS*	NS**	NS	NS*	NS	NS	NS	NS	NS
Motor Oil	mg/L	none	none	none	none	none	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	none	none	none	none	none	NS **	NA	NS **	NA	NS *	NS***	20	NS****	14	NS *	NS **	NA	NS *	26	27	210	< 0.13	1.1
2-Methylnaphthalene	ug/L	750	19	25,000 (S)	25,000 (S)	ID	NS **	NA	NS **	NA	NS *	NS***	**35**	NS****	**23**	NS *	NS **	NA	NS *	**19**	**24**	**270**	< 0.13	1.1
Acenaphthene	ug/L	3,800	38	4,200 (S)	4,200 (S)	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
Acenaphthylene	ug/L	150	ID	3,900 (S)	3,900 (S)	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
Anthracene	ug/L	43 (S)	ID	43 (S)	43 (S)	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
Benz(a)anthracene	ug/L	8.5	ID	NLV	9.4 (S,AA)	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
Benzo(a)pyrene	ug/L	5.0 (A)	ID	NLV	1.0 (M,AA); 0.64	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
Benzo(b)fluoranthene	ug/L	1.5 (S, AA)	ID	ID	1.5 (S,AA)	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
Benzo(g,h,i)perylene	ug/L	1.0 (M); 0.26 (S)	NA	NLV	1.0 (M,AA); 0.26	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
Benzo(k)fluoranthene	ug/L	1.0 (M); 0.8 (S)	NA	NLV	1.0 (M,AA); 0.8 (S)	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
Chrysene	ug/L	1.6 (S)	ID	ID	1.6 (S,AA)	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
Dibenzo(a,h)anthracene	ug/L	2.0 (M); 0.85	ID	NLV	2.0 (M,AA); 0.31	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
Fluoranthene	ug/L	210 (S)	1.6	210 (S)	210 (S)	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
Fluorene	ug/L	2,000 (S)	12	2,000 (S)	2,000 (S)	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
Indeno(1,2,3-cd)pyrene	ug/L	2.0 (M); 0.022 (S)	ID	NLV	2.0 (M, AA); 0.022	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
Naphthalene	ug/L	1,500	11	31,000 (S)	31,000 (S)	NA	NS **	NA	NS **	NA	NS *	NS***	**100**	NS****	**36**	NS *	NS **	NA	NS *	**27**	**34**	**320**	**45**	< 0.1
Phenanthrene	ug/L	150	2.0 (M); 1.4	1,000 (S)	1,000 (S)	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
Pyrene	ug/L	140 (S)	ID	140 (S)	140 (S)	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
Other Target PAHs	ug/L	various	various	various	various	various	NS **	NA	NS **	NA	NS *	NS***	ND	NS****	ND	NS *	NS **	NA	NS *	ND	ND	ND	ND	ND
VOCs (EPA Method 8260)																								
1,1,1-Trichloroethane	ug/L	200 (A)	200	1.3E+06 (S)	1.3E+06 (S)	ID	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	ug/L	35	78 (X)	77,000	4,700	ID	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	ug/L	5.0 (A)	330 (X)	1.10E+05	21,000	NA	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5
1,1-Dichloroethane	ug/L	2,500	740	2.30E+06	2.40E+06	3.80E+05	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5
1,1-Dichloroethene	ug/L	7.0 (A)	65 (X)	1,300	11,000	97,000	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5
1,2,4-Trimethylbenzene	ug/L	63 (E)	17	56,000 (S)	56,000 (S)	56,000 (S)	NS**	NA	NS**	NA	NS*	NS***	**970**	<5	**1200**	NS*	NS**	NA	NS*	NA	NA	NA	NA	NA
1,2-Dichloroethane	ug/L	5.0 (A)	360 (X)	59,000	19,000	2.50E+06	NS **	< 5	NS **	< 5	NS *	NS***	5	< 5	<5	NS *	NS **	< 5	NS *	< 5	< 5	**39**	**8**	< 5
1,2-Dichloropropane	ug/L	5.0 (A)	290 (X)	36,000	16,000	5.50E+05	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5
1,3,5-Trimethylbenzene	ug/L	72 (E)	45	61,000 (S)	61,000 (S)	ID	NS**	NA	NS**	NA	NS*	NS***	**310**	<5	**370 J**	NS*	NS**	NA	NS*	NA	NA	NA	NA	NA
2-Butanone	ug/L	38,000	2,200	2.4E+08 (S)	2.4E+08 (S)	ID	NS **	<20	NS **	<20	NS *	NS***	<20	<20	<20	NS *	NS **	<20	NS *	<20	<20	<20	<20	<20
2-Hexanone	ug/L	2,900	NA	8.70E+06	5.20E+06	NA	NS **	<10	NS **	<10	NS *	NS***	<10	<10	<10	NS *	NS **	<10	NS *	<10	<10	<10	<10	<10
4-Methyl-2-pentanone	ug/L	5,200	ID	2.0E+07 (S)	1.30E+07	ID	NS **	<10	NS **	<10	NS *	NS***	<10	<10	<10	NS *	NS **	<10	NS *	<10	<10	<10	<10	<10
Acetone	ug/L	2,100	1,700	1.0E+09 (D,S)	3.10E+07	1.50E+07	NS **	<100	NS **	<100	NS *	NS***	<100	<100	<100	NS *	NS **	<100	NS *	<100	<100	<100	<100	<100
Benzene	ug/L	5.0 (A)	200 (X)	35,000	11,000	68,000	NS **	< 5	NS **	< 5	NS *	NS***	**420**	< 5	**7200**	NS *	NS **	< 5	NS *	37	**180**	**730**	**1,400**	< 5
Bromochloromethane	ug/L	none	none	none	none	none	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5
Bromoform	ug/L	80 (A,W)	ID	3.10E+06	1.40E+05	ID	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5
Bromomethane	ug/L	29	35	9,000	70,000	ID	NS **	<10	NS **	<10	NS *	NS***	<10	<10	<10	NS *	NS **	<10	NS *	<10	<10	<10	<10	<10
n-Butylbenzene	ug/L	230	ID	ID	5,900	ID	NS**	NA	NS **	NA	NS *	NS***	NA	NA	NA	NS *	NS **	NA	NS *	NA	NA	NA	NA	NA
Carbon disulfide	ug/L	2,300	ID	5.50E+05	1.2E+06 (S)	13,000	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5
Carbon tetrachloride	ug/L	5.0 (A)	45 (X)	2,400	4,600	ID	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5
Chlorobenzene	ug/L	100 (A)	47	4.70E+05	86,000	1.60E+05	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5
Chloroethane	ug/L	1,700	ID	5.7E+06 (S)	4.40E+05	1.10E+05	NS **	< 10	NS **	< 10	NS *	NS***	< 10	< 10	<10	NS *	NS **	< 10	NS *	< 10	< 10	< 10	< 10	< 10
Chloroform	ug/L	80 (A, W)	170 (X)	1.80E+05	1.50E+05	ID	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5
Chloromethane	ug/L	1,100	ID	45,000	4.90E+05	36,000	NS **	<10	NS **	<10	NS *	NS***	<10	<10	<10	NS *	NS **	<10	NS *	<10	<10	<10	<10	<10
Dibromochloromethane	ug/L	80 (A, W)	ID	1.10E+05	18,000	ID	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5
Ethylbenzene	ug/L	74 (E)	18	1.7E+05 (S)	1.7E+05 (S)	43,000	NS **	< 5	NS **	< 5	NS *	NS***	**1400**	< 5	**860**	NS *	NS **	< 5	NS *	**130**	**1,100**	**1,300**	**1,200**	< 5
Methylene chloride	ug/L	5.0 (A)	940 (X)	1.40E+06	2.20E+05	ID	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5
n-Propylbenzene	ug/L	230	ID	ID	15,000	ID	NS **	NA	NS **	NA	NS *	NS***	NA	NA	NA	NS *	NS **	NA	NS *	NA	NA	NA	NA	NA
Styrene	ug/L	100 (A)	80	3.1E+05 (S)	9,700	1.40E+05	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5
Tetrachloroethylene	ug/L	5.0 (A)	45 (X)	1.70E+05	12,000	ID	NS **	< 5	NS **	< 5	NS *	NS***	< 5	< 5	<5	NS *	NS **	< 5	NS *	**8**	< 5	< 5	< 5	< 5
Toluene	ug/L	790 (E)	140	5.3E+05 (S)	5.3E+05 (S)	61,000	NS **	< 5	NS **	< 5	NS *	NS***	**3000**	< 5	**560**	NS *	NS **	< 5	NS *	30	**2,600**	**350**	**1,400**	< 5
Trichloroethene	ug/L	5.0 (A)	200 (X)	97,000	22,000	ID	NS **	**100**	NS **	**8**	NS *	NS***	<5	< 5	<5	NS *	NS **	**17**	NS *	< 5	**5**	< 5	< 5	< 5
Vinyl chloride	ug/L	2.0 (A)	15	13,000	1,000	33,000	NS **	< 10	NS **	< 10	NS *	NS***	<10	< 10	<10	NS *	NS **	< 10	NS *	< 10	< 10	**270 J**	< 10	< 10
cis-1,2-Dichloroethene	ug/L	70 (A)	620	2.10E+05	2.00E+05	5.30E+05	NS **	16	NS **	< 5	NS *	NS***	8	< 5	<5	NS *	NS **	< 5	NS *	< 5	5	**170**	< 5	< 5
cis-1,3-Dichloropropene	ug/L	none	none	none	none	none	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5
m,p-Xylene	ug/L	none	none	none	none	none	NS **	< 5	NS **	< 5	NS *	NS***	3800	< 5	2900	NS *	NS **	< 5	NS *	230	3,900	3,100	4,000	< 5
o-Xylene	ug/L	none	none	none	none	none	NS **	< 5	NS **	< 5	NS *	NS***	1700	< 5	120	NS *	NS **	< 5	NS *	37	1,200	530	990	< 5
trans-1,2-Dichloroethene	ug/L	100 (A)	1,500	2.0E+05 (S)	2.20E+05	2.3E+05 (S)	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5
trans-1,3-Dichloropropene	ug/L	none	none	none	none	none	NS **	<5	NS **	<5	NS *	NS***	<5	<5	<5	NS *	NS **	<5	NS *	<5	<5	<5	<5	<5
Xylenes, Total	ug/L	280 (E)	35	1.9E+05 (S)	1.9E+05 (S)	70,000	NS **	< 5	NS **	< 5	NS *	NS***	**5500**	< 5	**3020**	NS *	NS **	< 5	NS *	**267**	**5,100**	**3,630**	**4,990**	< 5
1,2-Dichloroethene (total)	ug/L	none	none	none	none	none	NS **	16	NS **	< 5	NS *	NS***	8	< 5	<5	NS *	NS **	< 5	NS *	< 5	5	170	< 5	< 5
1,2,3-Trimethylbenzene	ug/L	none	none	none	none	none	NS **	NA	NS **	NA	NS *	NS***	NA	NA	NA	NS *	NS **	NA	NS *	NA	NA	NA	NA	NA
Other Target VOCs	ug/L	various	various	various	various	various	NS **	ND	NS **	ND	NS *	NS***	ND	ND	ND	NS *	NS **	ND	NS *	ND	ND	ND	ND	ND
MTBE (EPA Method 8021B)	ug/L	40 (E)	730 (X)	4.7E+07 (S)	6.10E+05	ID	NS **	NA	NS **	NA	NS *	NS***	<5	<1	<10	NS *	NS **	NA	NS *	< 1	**60**	**87**	NA	NA
Dissolved Metals (Method 6020)																								
Cadmium	mg/L	0.005 (A)	(G,X)	NLV	190	ID	NS**	NS	NS **	NS	NS *	NS***	NS	NS	NS	NS*	NS**	NS	NS*	NS	NS	NS	NS	NS
Chromium - Trivalent	mg/L	0.1 (A)	(G,X)	NLV	2.90E+05	ID	NS**	NS	NS **	NS	NS *	NS***	NS	NS	NS	NS*	NS**	NS	NS*	NS	NS	NS	NS	NS
Lead	mg/L	0.004 (L)	(G,X)	NLV	ID	ID	NS **	NA	NS **	NA	NS *	NS***	NS	NS	NS	NS *	NS **	NA	NS *	NS	0.00211	0.00392	NA	NA

Notes: See Last Page

TABLE 3

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

GROUNDWATER ANALYTICAL DATA

Sample ID:	Units	Michigan Groundwater Cleanup Criteria and Risk Based Screening Levels					B-19 Outside Further North of NE Corner of Building - Release Delineation	B-20 Outside Further North of B-17 & Sewer Line - Release Delineation	B-21 Inside Northwest Portion of Building - South of B-15 - Release Delineation	TW-26	TW-27	TW-28	TW-29	TW-30	TW-31	TW-34	TW-35	TW-37	TW-44	TW-44	TW-45	EW-1 Outside North-NE Corner of Building - Former Gas Dispenser	MW-2 Northwest Portion of Site - Release Delineation Monitoring Well	MW-2 Northwest Portion of Site - Release Delineation Monitoring Well
		Non-Residential Drinking Water Protection Criteria & RBSLs	Groundwater Surface Water Interface Criteria & RBSLs	Non-Residential Groundwater Volatilization to Indoor Air Inhalation Criteria & RBSLs	Groundwater Contact Criteria & RBSLs	Flammability and Explosivity Screening Level																		
Date Collected:							11/8/2006	11/8/2006	11/30/2006	9/17/2007	9/14/2007	9/14/2007	9/17/2007	9/13/2007	9/14/2007	9/17/2007	9/14/2007	9/18/2007	9/26/2007	10/4/2007	9/25/2007	12/11/2006	12/11/2006	7/28/2008
Screened Interval (feet bgl):							5-10	10-15	7-12	10-15	7-12	10-15	5-10	4-9	5-10	5-10	7-14	10-15	10-15	10-15	10-15	3-13	3-13	3-13
Analytical Parameter																								
TPH (EPA Method 418.1)	mg/L	none	none	none	none	none	< 0.5	0.9	NS****	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS
Semivolatile Hydrocarbons (EPA Method 8015B)																								
Gasoline Range Organics	mg/L	none	none	none	none	none	NS	NS	NS****	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29	<0.1	NA
Diesel Range Organics	mg/L	none	none	none	none	none	NS	NS	NS****	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.5	<0.1	NA
Fuel Oil	mg/L	none	none	none	none	none	NS	NS	NS****	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12	<0.1	NA
Hydraulic Fluid	mg/L	none	none	none	none	none	NS	NS	NS****	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.5	<0.1	NA
Kerosene	mg/L	none	none	none	none	none	NS	NS	NS****	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.5	<0.1	NA
Mineral Spirits	mg/L	none	none	none	none	none	NS	NS	NS****	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.5	<0.1	NA
Motor Oil	mg/L	none	none	none	none	none	NS	NS	NS****	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.5	0.26	NA
PAH (EPA Method 8310)																								
1-Methylnaphthalene	ug/L	none	none	none	none	none	NA	NA	NS****	71	17	11	<5	<5	<5	<10	<5	<5	NA	NA	NA	56	<0.1	NA
2-Methylnaphthalene	ug/L	750	19	25,000 (S)	25,000 (S)	ID	NA	NA	NS****	**164**	**36**	**22**	<5	<5	<5	<10	<5	<5	NA	NA	NA	**98**	<0.1	<5
Acenaphthene	ug/L	3,800	38	4,200 (S)	4,200 (S)	ID	NA	NA	NS****	<5	<5	<5	<5	<5	<5	<10	<5	<5	NA	NA	<5	<1.5	<0.1	<5
Acenaphthylene	ug/L	150	ID	3,900 (S)	3,900 (S)	ID	NA	NA	NS****	<5	<5	<5	<5	<5	<5	<10	<5	<5	NA	NA	<5	8.2	<0.1	<5
Anthracene	ug/L	43 (S)	ID	43 (S)	43 (S)	ID	NA	NA	NS****	<5	<5	<5	<5	<5	<5	<10	<5	<5	NA	NA	<5	<1.5	<0.1	<5
Benz(a)anthracene	ug/L	8.5	ID	NLV	9.4 (S,AA)	ID	NA	NA	NS****	<5	<5	<5	<5	<5	<5	<10	<5	<5	NA	NA	<1	<1.5	<0.1	<1
Benzo(a)pyrene	ug/L	5.0 (A)	ID	NLV	1.0 (M,AA); 0.64	ID	NA	NA	NS****	<5	<5	<5	<5	<5	<5	<10	<5	<5	NA	NA	<1	<1.5	<0.1	<1
Benzo(b)fluoranthene	ug/L	1.5 (S, AA)	ID	ID	1.5 (S,AA)	ID	NA	NA	NS****	<5	<5	<5	<5	<5	<5	<10	<5	<5	NA	NA	<1	<1.5	<0.1	<1
Benzo(g,h,i)perylene	ug/L	1.0 (M); 0.26 (S)	NA	NLV	1.0 (M,AA); 0.26	ID	NA	NA	NS****	<5	<5	<5	<5	<5	<5	<10	<5	<5	NA	NA	<1	<1.5	<0.1	<1
Benzo(k)fluoranthene	ug/L	1.0 (M); 0.8 (S)	NA	NLV	1.0 (M,AA); 0.8 (S)	ID	NA	NA	NS****	<5	<5	<5	<5	<5	<5	<10	<5	<5	NA	NA	<1	<1.5	<0.1	<1
Chrysene	ug/L	1.6 (S)	ID	ID	1.6 (S,AA)	ID	NA	NA	NS****	<5	<5	<5	<5	<5	<5	<10	<5	<5	NA	NA	<1	<1.5	<0.1	<1
Dibenzo(a,h)anthracene	ug/L	2.0 (M); 0.85	ID	NLV	2.0 (M,AA); 0.31	ID	NA	NA	NS****	<5	<5	<5	<5	<5	<5	<10	<5	<5	NA	NA	<2	<1.5	<0.1	<2
Fluoranthene	ug/L	210 (S)	1.6	210 (S)	210 (S)	ID	NA	NA	NS****	<5	<5	<5	<5	<5	<5	<10	<5	<5	NA	NA	<1	<1.5	<0.1	<1
Fluorene	ug/L	2,000 (S)	12	2,000 (S)	2,000 (S)	ID	NA	NA	NS****	<5	<5	<5	<5	<5	<5	<10	<5	<5	NA	NA	<5	<1.5	<0.1	<5
Indeno(1,2,3-cd)pyrene	ug/L	2.0 (M); 0.022 (S)	ID	NLV	2.0 (M, AA); 0.022	ID	NA	NA	NS****	<5	<5	<5	<5	<5	<5	<10	<5	<5	NA	NA	<2	<0.19	<0.1	<2
Naphthalene	ug/L	1,500	11	31,000 (S)	31,000 (S)	NA	NA	NA	NS****	**219**	**117**	**47**	<5	<5	<5	<10	<5	<5	NA	NA	<5	**280**	<0.1	<5
Phenanthrene	ug/L	150	2.0 (M); 1.4	1,000 (S)	1,000 (S)	ID	NA	NA	NS****	<5	<5	<5	<5	<5	<5	<10	<5	<5	NA	NA	<2	<1.5	<0.1	<2
Pyrene	ug/L	140 (S)	ID	140 (S)	140 (S)	ID	NA	NA	NS****	<5	<5	<5	<5	<5	<5	<10	<5	<5	NA	NA	<5	<1.5	<0.1	<5
Other Target PAHs	ug/L	various	various	various	various	various	NA	NA	NS****	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND
VOCs (EPA Method 8260)																								
1,1,1-Trichloroethane	ug/L	200 (A)	200	1.3E+06 (S)	1.3E+06 (S)	ID	<5	<5	<5	<50	<30	<10	<1	<1	<1	<30	<10	<1	<1	<1	<1	<5	<5	<1
1,1,2,2-Tetrachloroethane	ug/L	35	78 (X)	77,000	4,700	ID	<5	<5	<5	<50	<30	<10	<1	<1	<1	<30	<10	<1	<1	<1	<1	<5	<5	<1
1,1,2-Trichloroethane	ug/L	5.0 (A)	330 (X)	1.10E+05	21,000	NA	<5	<5	<5	<50	<30	<10	<1	<1	<1	<30	<10	<1	<1	<1	<1	<5	<5	<1
1,1-Dichloroethane	ug/L	2,500	740	2.30E+06	2.40E+06	3.80E+05	<5	<5	<5	<50	<30	<10	<1	3	<1	<30	<10	6	<1	<1	<1	<5	<5	<1
1,1-Dichloroethene	ug/L	7.0 (A)	65 (X)	1,300	11,000	97,000	<5	<5	<5	<50	<30	<10	<1	<1	<1	<30	<10	<1	<1	<1	<1	<5	<5	<1
1,2,4-Trimethylbenzene	ug/L	63 (E)	17	56,000 (S)	56,000 (S)	56,000 (S)	NA	NA	**2,800**	**1,120**	**900**	**520**	<1	<1	<1	<30	<10	<1	<1	<1	<1	**790**	<5	<1
1,2-Dichloroethane	ug/L	5.0 (A)	360 (X)	59,000	19,000	2.50E+06	< 5	< 5	<5	<50	<30	<10	<1	**7**	2	<30	<10	2	<1	<1	<1	**13**	<5	<1
1,2-Dichloropropane	ug/L	5.0 (A)	290 (X)	36,000	16,000	5.50E+05	<5	<5	<5	<50	<30	<10	<1	**29**	<1	<30	**110**	<1	<1	<1	<1	<5	<5	<1
1,3,5-Trimethylbenzene	ug/L	72 (E)	45	61,000 (S)	61,000 (S)	ID	NA	NA	**750 J**	**370**	**270**	**200**	<1	<1	<1	<30	<10	<1	<1	<1	<1	**190**	<5	<1
2-Butanone	ug/L	38,000	2,200	2.4E+08 (S)	2.4E+08 (S)	ID	<20	<20	<20	<1,000	<600	<300	<30	<30	<30	<600	<300	<30	<30	<30	<30	<20	<20	<30
2-Hexanone	ug/L	2,900	NA	8.70E+06	5.20E+06	NA	<10	<10	<10	<3,000	<1,000	<500	<50	<50	<50	<1,000	<500	<50	<50	<50	<50	11	<10	<50
4-Methyl-2-pentanone	ug/L	5,200	ID	2.0E+07 (S)	1.30E+07	ID	<10	<10	<10	<3,000	<1,000	<500	<50	<50	<50	<1,000	<500	<50	<50	<50	<50	<10	<10	<50
Acetone	ug/L	2,100	1,700	1.0E+09 (D,S)	3.10E+07	1.50E+07	<100	<100	<100	<3,000	<1,000	<500	<50	<50	<50	<1,000	<500	190	<50	<50	<50	<100	<100	<50
Benzene	ug/L	5.0 (A)	200 (X)	35,000	11,000	68,000	< 5	**20**	**4,600**	**980**	**850**	**560**	<1	**74**	<1	<30	**1,040**	**133**	<1	<1	1	**930**	<5	<1
Bromochloromethane	ug/L	none	none	none	none	none	<5	<5	<5	<50	<30	<10	<1	<1	<1	<30	<10	<1	<1	<1	<1	<5	<5	<1
Bromoform	ug/L	80 (A,W)	ID	3.10E+06	1.40E+05	ID	<5	<5	<5	<50	<30	<10	<1	<1	<1	<30	<10	<1	<1	<1	<1	<5	<5	<1
Bromomethane	ug/L	29	35	9,000	70,000	ID	<10	<10	<10	<300	<100	<50	<5	<5	<5	<100	<50	<5	<50	<50	<50	<10	<10	<5
n-Butylbenzene	ug/L	230	ID	ID	5,900	ID	NA	NA	NA	110	50	30	<1	<1	<1	<30	<10	<1	<1	<1	<1	NA	NA	<1
Carbon disulfide	ug/L	2,300	ID	5.50E+05	1.2E+06 (S)	13,000	<5	<5	<5	<300	<100	<50	<5	<5	<5	<100	<50	<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	ug/L	5.0 (A)	45 (X)	2,400	4,600	ID	<5	<5	<5	<50	<30	<10	<1	<1	<1	<30	<10	<1	<1	<1	<1	<5	<5	<1
Chlorobenzene	ug/L	100 (A)	47	4.70E+05	86,000	1.60E+05	<5	<5	<5	<50	<30	<10	<1	<1	<1	<30	<10	<1	<1	<1	<1	<5	<5	<1
Chloroethane	ug/L	1,700	ID	5.7E+06 (S)	4.40E+05	1.10E+05	< 10	< 10	< 10	<300	<100	<50	<5	<5	<5	<100	<50	<5	<5	<5	<5	<10	<10	<5
Chloroform	ug/L	80 (A, W)	170 (X)	1.80E+05	1.50E+05	ID	<5	<5	<5	<50	<30	<10	<1	<1	<1	<30	<10	<1	<1	<1	<1	<5	<5	<1
Chloromethane	ug/L	1,100	ID	45,000	4.90E+05	36,000	<10	<10	<10	<300	<100	<50	<5	<5	<5	<100	<50	<5	<5	<5	<5	<10	<10	<5
Dibromochloromethane	ug/L	80 (A, W)	ID	1.10E+05	18,000	ID	<5	<5	<5	<300	<100	<50	<5	<5	<5	<100	<50	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	ug/L	74 (E)	18	1.7E+05 (S)	1.7E+05 (S)	43,000	< 5	< 5	**4,100**	**3,170**	**1,580**	**370**	<1	<1	<1	<30	<10	<1	<1	<1	<1	**1,500**	<5	<1
Methylene chloride	ug/L	5.0 (A)	940 (X)	1.40E+06	2.20E+05	ID	<5	<5	<5	<300	<100	<50	<5	<5	<5	<100	<50	<5	<5	<5	<5	<5	<5	<5
n-Propylbenzene	ug/L	230	ID	ID	15,000	ID	NA	NA	NA	**250**	150	50	<1	<1	<1	<30	<10	<1	<1	<1	<1	NA	NA	<1
Styrene	ug/L	100 (A)	80	3.1E+05 (S)	9,700	1.40E+05	<5	<5	<5	<50	<70	<30	<1	<1	<1	<30	<10	<1	<1	<1	<1	<5	<5	<1
Tetrachloroethylene	ug/L	5.0 (A)	45 (X)	1.70E+05	12,000	ID	< 5	< 5	<5	<50	<30	<10	<1	3	<1	<30	<10	<1	<1	<1	<1	<5	<5	<1
Toluene	ug/L	790 (E)	140	5.3E+05 (S)	5.3E+05 (S)	61,000	< 5	< 5	**20,000**	**1,490**	**620**	**550**	<1	1	<1	<30	<10	2	<1	<1	1	**520**	<5	<1
Trichloroethene	ug/L	5.0 (A)	200 (X)	97,000	22,000	ID	< 5	< 5	<5	<50	<30	<10	<1	<1	<1	**200**	<10	<1	<1	<1	2	<5	<5	<1
Vinyl chloride	ug/L	2.0 (A)	15	13,000	1,000	33,000	< 10	< 10	<10	<50	<30	<10	<1	<1	<1	<30	<10	**10**	<1	<1	<1	<2	<2	<1
cis-1,2-Dichloroethene	ug/L	70 (A)	620	2.10E+05	2.00E+05	5.30E+05	< 5	< 5	61	<50	<30	<10	<1	3	<1	**780**	<10	9	<1	<1	<1	<5	<5	<1
cis-1,3-Dichloropropene	ug/L	none	none	none	none	none	<5	<5	<5	<50	<30	<10	<1	<1	<1	<30	<10	<1	<1	<1	<1	<5	<5	<1
m,p-Xylene	ug/L	none	none	none	none	none	< 5	< 5	13,000	7,000	4,670	1,770	<2	<2	<2	<50	<20	<2	<2	<2	<2	4,400	<5	<2
o-Xylene	ug/L	none	none	none	none	none	< 5	< 5	5,900	770	2,070	610	<1	<1	<1	<30	<10	<1	<1	<1	<1	1,200	<5	<1
trans-1,2-Dichloroethene	ug/L	100 (A)	1,500	2.0E+05 (S)	2.20E+05	2.3E+05 (S)	<5	<5	<5	<50	<30	<10	<1	<1	<1	<30	<10	<1	<1	<1	<1	<5	<5	<1
trans-1,3-Dichloropropene	ug/L	none	none	none	none	none	<5	<5	<5	<50	<30	<10	<1	<1	<1	<30	<10	<1	<1	<1	<1	<5	<5	<1
Xylenes, Total	ug/L	280 (E)	35	1.9E+05 (S)	1.9E+05 (S)	70,000	< 5	< 5	**18,900**	**7,770**	**6,740**	**2,380**	<3	<3	<3	<80	<30	<3	<3	<3	<3	**5,600**	<5	<3
1,2-Dichloroethene (total)	ug/L	none	none	none	none	none	< 5	< 5	61	<50	<30	<10	<1	3	<1	<30	<10	<1	<1	<1	<1	<5	<5	<1
1,2,3-Trimethylbenzene	ug/L	none	none	none	none	none	NA	NA	NA	360	270	160	<1	<1	<1	<30	<10	<1	<1	<1	<1	NA	NA	<5
Other Target VOCs	ug/L	various	various	various	various	various	ND	ND	ND	ND	400	90	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE (EPA Method 8021B)	ug/L	40 (E)	730 (X)	4.7E+07 (S)	6.10E+05	ID	NA	NA	<25	<300	<100	<50	<5	<5	<5	<100	<5	<5	<5	<5	<5	**85**	<1	<5
Dissolved Metals (Method 6020)																								
Cadmium	mg/L	0.005 (A)	(G,X)	NLV	190	ID	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.025	<0.025	NA
Chromium - Trivalent	mg/L	0.1 (A)	(G,X)	NLV	2.90E+05	ID	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.025	<0.025	NA
Lead	mg/L	0.004 (L)	(G,X)	NLV	1D	ID	NA	NA	NS	**0.045**	**0.005**	**0.106**	**0.005**	<0.003	**0.005**	<0.003	<0.003	<0.003	NA	<0.003	**0.007**	**0.00734**	<0.005	<0.003

Notes: See Last Page

TABLE 3

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

GROUNDWATER ANALYTICAL DATA

Sample ID:	Units	Michigan Groundwater Cleanup Criteria and Risk Based Screening Levels					MW-2 Northwest Portion of Site - Release Delineation Monitoring Well	MW-3 Outside NW Corner of Building - Trench & Dyno Pit	MW-3 Outside NW Corner of Building - Trench & Dyno Pit	MW-3 Outside NW Corner of Building - Trench & Dyno Pit	MW-4 Eastern Corner of Site	MW-4 Eastern Corner of Site	MW-4 Eastern Corner of Site	MW-5 Outside East-SE Corner of Building - Boiler Room Sump Area	MW-5 Outside East-SE Corner of Building - Boiler Room Sump Area	MW-5 Outside East-SE Corner of Building - Boiler Room Sump Area	MW-6 Northeast Corner of Building - Classroom	MW-6 Northeast Corner of Building - Classroom	MW-7 Southern Portion of East Garage	MW-7 Southern Portion of East Garage	MW-8 Southern Portion of West Garage	MW-8 Southern Portion of West Garage	MW-9 South of Building on Sidewalk	MW-9 South of Building on Sidewalk
		Non-Residential Drinking Water Protection Criteria & RBSLs	Groundwater Surface Water Interface Criteria & RBSLs	Non-Residential Groundwater Volatilization to Indoor Air Inhalation Criteria & RBSLs	Groundwater Contact Criteria & RBSLs	Flammability and Explosivity Screening Level																		
Date Collected:							11/1/2010	12/11/2006	2/11/2008	11/3/2010	12/11/2006	2/13/2008	11/2/2010	12/11/2006	2/13/2008	11/3/2010	2/13/2008	11/3/2010	2/11/2008	11/3/2010	2/11/2008	11/3/2010	7/28/2008	11/3/2010
Screened Interval (feet bgl):							3-13	5-15	5-15	5-15	3-13	3-13	3-13	7-17	7-17	7-17	3-13	3-13	5-15	5-15	8-18	8-18	3-13	3-13
Analytical Parameter																								
TPH (EPA Method 418.1)	mg/L	none	none	none	none	none	NA	NS	NA	NA	NS	NA	NA	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Hydrocarbons (EPA Method 8015B)																								
Gasoline Range Organics	mg/L	none	none	none	none	none	NA	12	NA	NA	<0.1	NA	NA	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diesel Range Organics	mg/L	none	none	none	none	none	NA	<0.1	NA	NA	<0.11	NA	NA	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fuel Oil	mg/L	none	none	none	none	none	NA	1.9	NA	NA	0.79	NA	NA	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydraulic Fluid	mg/L	none	none	none	none	none	NA	<0.1	NA	NA	<0.11	NA	NA	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kerosene	mg/L	none	none	none	none	none	NA	<0.1	NA	NA	<0.11	NA	NA	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mineral Spirits	mg/L	none	none	none	none	none	NA	<0.1	NA	NA	<0.11	NA	NA	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Motor Oil	mg/L	none	none	none	none	none	NA	<0.1	NA	NA	<0.11	NA	NA	0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAH (EPA Method 8310)																								
1-Methylnaphthalene	ug/L	none	none	none	none	none	NA	0.55	<5	NA	<0.1	<5	NA	<0.1	<5	NA	31	NA	31	NA	8	NA	NA	NA
2-Methylnaphthalene	ug/L	750	19	25,000 (S)	25,000 (S)	ID	<5	0.41	<5	12	<0.1	<5	<5	<0.1	<5	<5	**51**	**21**	**52**	**52**	17	**21**	<5	<5
Acenaphthene	ug/L	3,800	38	4,200 (S)	4,200 (S)	ID	<5	<0.1	<5	<5	<0.1	<5	<5	<0.1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acenaphthylene	ug/L	150	ID	3,900 (S)	3,900 (S)	ID	<5	<0.1	<5	<5	<0.1	<5	<5	<0.1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Anthracene	ug/L	43 (S)	ID	43 (S)	43 (S)	ID	<5	<0.1	<5	<5	<0.1	<5	<5	<0.1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Benz(a)anthracene	ug/L	8.5	ID	NLV	9.4 (S,AA)	ID	<1	<0.1	<5	<1	<0.1	<5	<1	<0.1	<5	<1	<5	<2	<5	<2	<5	<2	<1	<1
Benzo(a)pyrene	ug/L	5.0 (A)	ID	NLV	1.0 (M,AA); 0.64	ID	<1	<0.1	<5	<1	<0.1	<5	<1	<0.1	<5	<1	<5	<2	<5	<2	<5	<2	<1	<1
Benzo(b)fluoranthene	ug/L	1.5 (S, AA)	ID	ID	1.5 (S,AA)	ID	<1	<0.1	<5	<1	<0.1	<5	<1	<0.1	<5	<1	<5	<2	<5	<2	<5	<2	<1	<1
Benzo(g,h,i)perylene	ug/L	1.0 (M); 0.26 (S)	NA	NLV	1.0 (M,AA); 0.26	ID	<1	<0.1	<5	<1	<0.1	<5	<1	<0.1	<5	<1	<5	<2	<5	<2	<5	<2	<1	<1
Benzo(k)fluoranthene	ug/L	1.0 (M); 0.8 (S)	NA	NLV	1.0 (M,AA); 0.8 (S)	ID	<1	<0.1	<5	<1	<0.1	<5	<1	<0.1	<5	<1	<5	<2	<5	<2	<5	<2	<1	<1
Chrysene	ug/L	1.6 (S)	ID	ID	1.6 (S,AA)	ID	<1	<0.1	<5	<1	<0.1	<5	<1	<0.1	<5	<1	<5	<2	<5	<2	<5	<2	<1	<1
Dibenzo(a,h)anthracene	ug/L	2.0 (M); 0.85	ID	NLV	2.0 (M,AA); 0.31	ID	<2	<0.1	<5	<2	<0.1	<5	<2	<0.1	<5	<2	<5	<2	<5	<2	<5	<2	<2	<2
Fluoranthene	ug/L	210 (S)	1.6	210 (S)	210 (S)	ID	<1	<0.1	<5	<1	<0.1	<5	<1	<0.1	<5	<1	<5	<2	<5	<2	<5	<2	<1	<1
Fluorene	ug/L	2,000 (S)	12	2,000 (S)	2,000 (S)	ID	<5	<0.1	<5	<5	<0.1	<5	<5	<0.1	<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	NLV	2.0 (M, AA); 0.022	ID	<2	<0.1	<5	<2	<0.1	<5	<2	<0.1	<5	<2	<5	<2	<5	<2	<5	<2	<2	<2
Naphthalene	ug/L	1,500	11	31,000 (S)	31,000 (S)	NA	<5	2.4	6	**31**	<0.1	<5	<5	<0.1	<5	<5	**135**	**72**	**142**	**156**	**109**	**134**	<5	<5
Phenanthrene	ug/L	150	2.0 (M); 1.4	1,000 (S)	1,000 (S)	ID	<2	0.13	<5	<2	0.12	<5	<2	<0.1	<5	<2	<5	<2	<5	<2	<5	<2	<2	<2
Pyrene	ug/L	140 (S)	ID	140 (S)	140 (S)	ID	<5	<0.1	<5	<5	0.15	<5	<5	<0.1	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Other Target PAHs	ug/L	various	various	various	various	various	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)	200	1.3E+06 (S)	1.3E+06 (S)	ID	<1	<5	<30	<50	<5	<1	<1	<5	<1	<1	<300	<50	<50	<100	<200	<100	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	35	78 (X)	77,000	4,700	ID	<1	<5	<30	<50	<5	<1	<1	<5	<1	<1	<300	<50	<50	<100	<200	<100	<1	<1
1,1,2-Trichloroethane	ug/L	5.0 (A)	330 (X)	1.10E+05	21,000	NA	<1	<5	<30	<50	<5	<1	<1	<5	<1	<1	<300	<50	<50	<100	<200	<100	<1	<1
1,1-Dichloroethane	ug/L	2,500	740	2.30E+06	2.40E+06	3.80E+05	<1	<5	<30	<50	<5	<1	<1	<5	<1	<1	<300	<50	<50	<100	<200	<100	<1	<1
1,1-Dichloroethene	ug/L	7.0 (A)	65 (X)	1,300	11,000	97,000	<1	7	<30	<50	<5	<1	<1	<5	<1	<1	<300	<50	<50	<100	<200	<100	<1	<1
1,2,4-Trimethylbenzene	ug/L	63 (E)	17	56,000 (S)	56,000 (S)	56,000 (S)	<1	**40**	**80**	**450 Y**	<5	<1	<1	<5	<1	<1	**500**	**610 Y**	**1,150**	**500 Y**	**900**	**400 Y**	<1	<1
1,2-Dichloroethane	ug/L	5.0 (A)	360 (X)	59,000	19,000	2.50E+06	<1	**14**	<30	<160	<5	<1	<1	<5	<1	<1	<300	<230	<50	<100	<200	<210	<1	<1
1,2-Dichloropropane	ug/L	5.0 (A)	290 (X)	36,000	16,000	5.50E+05	<1	**140**	**200**	<50	<5	<1	<1	<5	<1	<1	<300	<50	<50	<100	<200	<100	<1	<1
1,3,5-Trimethylbenzene	ug/L	72 (E)	45	61,000 (S)	61,000 (S)	ID	<1	13	<30	**150 Y**	<5	<1	<1	<5	<1	<1	<300	**80 Y**	**310**	**200 Y**	**300**	**100 Y**	<1	<1
2-Butanone	ug/L	38,000	2,200	2.4E+08 (S)	2.4E+08 (S)	ID	<30	21	<600	<1000	<20	<30	<30	<20	<30	<30	<6,000	<1000	<1,000	<3000	<5,000	<3000	<30	<30
2-Hexanone	ug/L	2,900	NA	8.70E+06	5.20E+06	NA	<50	<10	<1,000	<3000	<10	<50	<50	<10	<50	<50	<10,000	<3000	<3,000	<5000	<10,000	<5000	<50	<50
4-Methyl-2-pentanone	ug/L	5,200	ID	2.0E+07 (S)	1.30E+07	ID	<50	<10	<1,000	<3000	<10	<50	<50	<10	<50	<50	<10,000	<3000	<3,000	<5000	<10,000	<5000	<50	<50
Acetone	ug/L	2,100	1,700	1.0E+09 (D,S)	3.10E+07	1.50E+07	<50	<100	<1,000	<3000	<100	<50	<50	<100	<50	<50	<10,000	<3000	<3,000	<5000	<10,000	<5000	<50	<50
Benzene	ug/L	5.0 (A)	200 (X)	35,000	11,000	68,000	<1	**3,000**	**2,530**	**4470 Y**	<5	<1	<1	<5	<1	<1	**13,200**	**5930 Y**	**1240**	**1700 Y**	**7,900**	**5800 Y**	<1	<1
Bromochloromethane	ug/L	none	none	none	none	none	<1	<5	<30	<50	<5	<1	<1	<5	<1	<1	<300	<50	<50	<100	<200	<100	<1	<1
Bromoform	ug/L	80 (A,W)	ID	3.10E+06	1.40E+05	ID	<1	<5	<30	<50	<5	<1	<1	<5	<1	<1	<300	<50	<50	<100	<200	<100	<1	<1
Bromomethane	ug/L	29	35	9,000	70,000	ID	<5	<10	<100	<300	<10	<5	<5	<10	<5	<5	<1,000	<300	<300	<500	<1,000	<500	<5	<5
n-Butylbenzene	ug/L	230	ID	ID	5,900	ID	<1	NA	<30	<50	NA	<1	<1	NA	<1	<1	<300	<50	<50	<100	<200	<100	<1	<1
Carbon disulfide	ug/L	2,300	ID	5.50E+05	1.2E+06 (S)	13,000	<5	<5	<100	<300	<5	<5	<5	<5	<5	<5	<1,000	<300	<300	<500	<1,000	<500	<5	<5
Carbon tetrachloride	ug/L	5.0 (A)	45 (X)	2,400	4,600	ID	<1	<5	<30	<50	<5	<1	<1	<5	<1	<1	<300	<50	<50	<100	<200	<100	<1	<1
Chlorobenzene	ug/L	100 (A)	47	4.70E+05	86,000	1.60E+05	<1	<5	<30	<50	<5	<1	<1	<5	<1	<1	<300	<50	<50	<100	<200	<100	<1	<1
Chloroethane	ug/L	1,700	ID	5.7E+06 (S)	4.40E+05	1.10E+05	<5	<10	<100	<300	<10	<5	<5	<10	<5	<5	<1,000	<300	<300	<500	<1,000	<500	<5	<5
Chloroform	ug/L	80 (A, W)	170 (X)	1.80E+05	1.50E+05	ID	<1	<5	<30	<50	<5	<1	<1	<5	<1	<1	<300	<50	<50	<100	<200	<100	<1	<1
Chloromethane	ug/L	1,100	ID	45,000	4.90E+05	36,000	<5	<10	<100	<300	<10	<5	<5	<10	<5	<5	<1,000	<300	<300	<500	<1,000	<500	<5	<5
Dibromochloromethane	ug/L	80 (A, W)	ID	1.10E+05	18,000	ID	<5	<5	<100	<300	<5	<5	<5	<5	<5	<5	<1,000	<300	<300	<500	<1,000	<500	<5	<5
Ethylbenzene	ug/L	74 (E)	18	1.7E+05 (S)	1.7E+05 (S)	43,000	<1	**54**	**150**	**650 Y**	<5	<1	<1	<5	<1	<1	**1,000**	**1020 Y**	**2,980**	**2000 Y**	**2,000**	**1400 Y**	<1	<1
Methylene chloride	ug/L	5.0 (A)	940 (X)	1.40E+06	2.20E+05	ID	<5	<5	<100	<300	<5	<5	<5	<5	<5	<5	<1,000	<300	<300	<500	<1,000	<500	<5	<5
n-Propylbenzene	ug/L	230	ID	ID	15,000	ID	<1	NA	<30	100 Y	NA	<1	<1	NA	<1	<1	<300	90	170	<100	<200	<100	<1	<1
Styrene	ug/L	100 (A)	80	3.1E+05 (S)	9,700	1.40E+05	<1	<5	<30	<50	<5	<1	<1	<5	<1	<1	<300	<50	<70	<100	<200	<100	<1	<1
Tetrachloroethylene	ug/L	5.0 (A)	45 (X)	1.70E+05	12,000	ID	<1	<5	<30	<50	<5	<1	<1	<5	<1	<1	<300	<50	<50	<100	<200	<100	<1	<1
Toluene	ug/L	790 (E)	140	5.3E+05 (S)	5.3E+05 (S)	61,000	<1	140 J	**740**	70 Y	<5	<1	<1	<5	<1	<1	**6,600**	**1890 Y**	**7,560**	**3800 Y**	**6,800**	**7900 Y**	<1	<1
Trichloroethene	ug/L	5.0 (A)	200 (X)	97,000	22,000	ID	<1	<5	<30	<50	<5	<1	<1	**11**	**14**	**23**	<300	<50	<50	<100	<200	<100	<1	<1
Vinyl chloride	ug/L	2.0 (A)	15	13,000	1,000	33,000	<1	<2	<30	<50	<2	<1	<1	<2	<1	<1	**1,500**	**170 Y**	<50	<100	<200	<100	<1	<1
cis-1,2-Dichloroethene	ug/L	70 (A)	620	2.10E+05	2.00E+05	5.30E+05	<1	19	<30	<50	<5	<1	<1	<5	<1	2	**2,200**	**480 Y**	<50	<100	<200	<100	<1	<1
cis-1,3-Dichloropropene	ug/L	none	none	none	none	none	<1	<5	<30	<50	<5	<1	<1	<5	<1	<1	<300	<50	<50	<100	<200	<100	<1	<1
m,p-Xylene	ug/L	none	none	none	none	none	<2	240	260	600 Y	<5	<2	<2	<5	<2	<2	2,600	1500 Y	9,000	5500 Y	7,000	4800 Y	<2	<2
o-Xylene	ug/L	none	none	none	none	none	<1	87	40	60 Y	<5	<1	<1	<5	<1	<1	700	350 Y	1,990	1300 Y	1,600	2000 Y	<1	<1
trans-1,2-Dichloroethene	ug/L	100 (A)	1,500	2.0E+05 (S)	2.20E+05	2.3E+05 (S)	<1	<5	<30	<50	<5	<1	<1	<5	<1	<1	<300	<50	<50	<100	<200	<100	<1	<1
trans-1,3-Dichloropropene	ug/L	none	none	none	none	none	<1	<5	<30	<50	<5	<1	<1	<5	<1	<1	<300	<50	<50	<100	<200	<100	<1	<1
Xylenes, Total	ug/L	280 (E)	35	1.9E+05 (S)	1.9E+05 (S)	70,000	NA	**327**	**300**	NA	<5	<3	NA	<5	<3	NA	**3,300**	**1850 Y**	**10,990**	**6800 Y**	**8,600**	**6800 Y**	<3	<3
1,2-Dichloroethene (total)	ug/L	none	none	none	none	none	NA	19	<30	NA	<5	<1	NA	<5	<1	NA	<300	NA	<50	NA	<200	NA	<2	NA
1,2,3-Trimethylbenzene	ug/L	none	none	none	none	none	<1	NA	<30	<50	NA	<1	<1	NA	<1	<1	<300	170 Y	310	200 Y	300	100 Y	<5	<1
Other Target VOCs	ug/L	various	various	various	various	various	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)	730 (X)	4.7E+07 (S)	6.10E+05	ID	<5	<10	<100	<300	<1	<5	<5	<1	<5	<5	<1	<300	<300	<500	<1,000	<500	<5	<5
Dissolved Metals (Method 6020)																								
Cadmium	mg/L	0.005 (A)	(G,X)	NLV	190	ID	NA	<0.025	NA	NA	<0.025	NA	NA	<0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium - Trivalent	mg/L	0.1 (A)	(G,X)	NLV	2.90E+05	ID	NA	<0.025	NA	NA	<0.025	NA	NA	<0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/L	0.004 (L)	(G,X)	NLV	1D	ID	<0.003	<0.005	**0.019**	<0.003	<0.005	<0.001	<0.003	<0.005	<0.001	<0.003	0.004	<0.003	**0.034**	0.004	**0.010**	<0.003	<0.003	<0.003

Notes: See Last Page

TABLE 3

FORMER GM EMPLOYEE DEVELOPMENT CENTER
65 EAST UNIVERSITY
PONTIAC, MICHIGAN

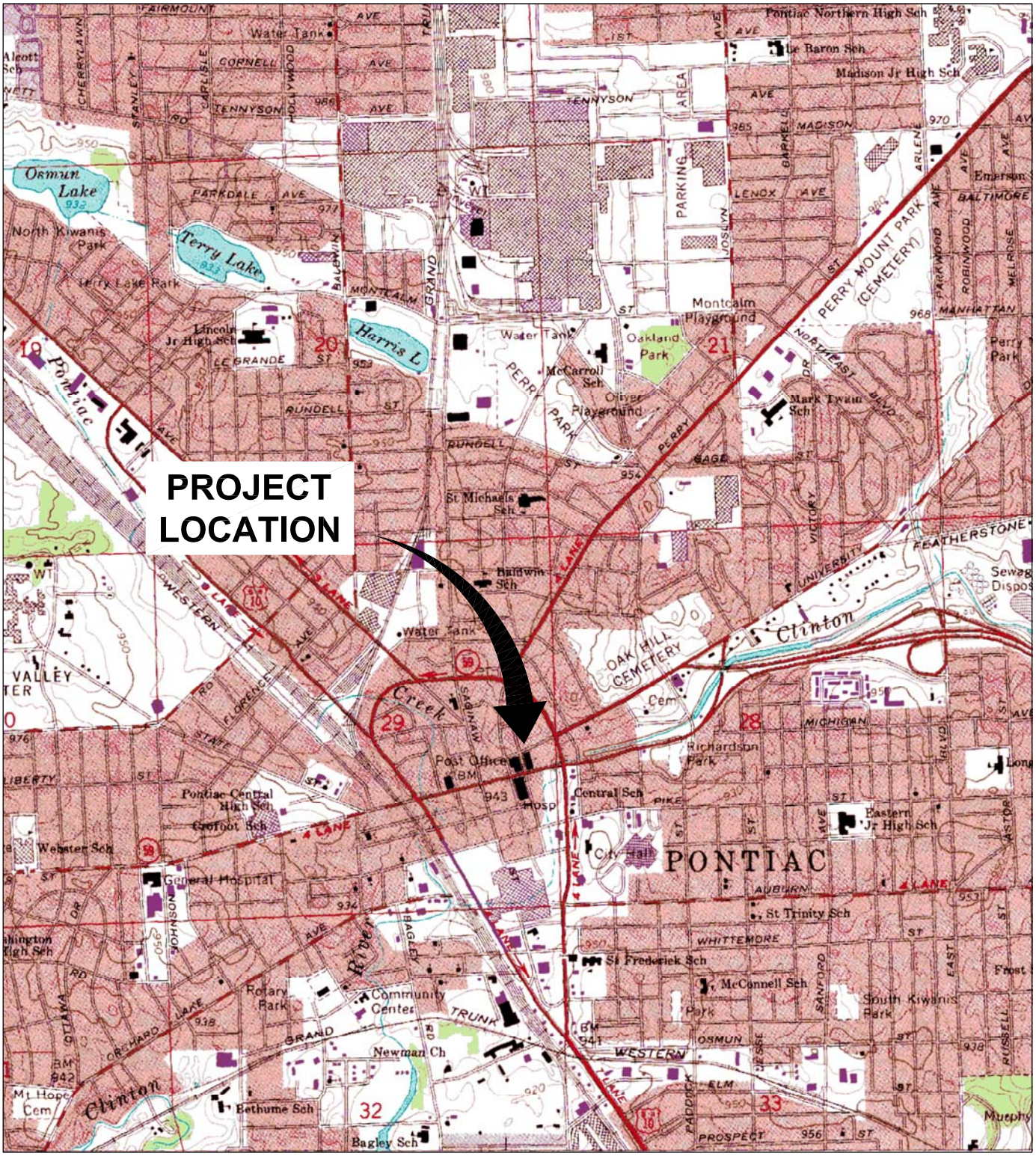
GROUNDWATER ANALYTICAL DATA

Sample ID:	Units	Michigan Groundwater Cleanup Criteria and Risk Based Screening Levels					MW-10	MW-10	MW-10	MW-11	MW-11	MW-12	MW-12	MW-13	MW-13	MW-14	MW-14	MW-15	MW-15	MW-16	MW-16	MW-17	DUP-01 (MW-17)	MW-17
		Non-Residential Drinking Water Protection Criteria & RBSLs	Groundwater Surface Water Interface Criteria & RBSLs	Non-Residential Groundwater Volatilization to Indoor Air Inhalation Criteria & RBSLs	Groundwater Contact Criteria & RBSLs	Flammability and Explosivity Screening Level	East-Northeast of Building	East-Northeast of Building	East-Northeast of Building	West of Building on Sidewalk	West of Building on Sidewalk	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	East-Northeast of Building	East-Northeast of Building	East-Northeast of Building	East-Northeast of Building - Auditorium	East of Building - Auditorium	East of Building - Auditorium
Date Collected:							2/12/2008	7/28/2008	11/2/2010	2/13/2008	11/2/2010	2/12/2008	11/3/2010	2/12/2008	11/1/2010	2/12/2008	11/1/2010	2/12/2008	11/3/2010	2/12/2008	11/2/2010	7/28/2008	7/28/2008	11/2/2010
Screened Interval (feet bgl):							6-16	6-16	6-16	9-19	9-19	9-19	9-19	8-18	8-18	5-15	5-15	4-14	4-14	4-9	4-9	2-7	2-7	2-7
Analytical Parameter																								
TPH (EPA Method 418.1)	mg/L	none	none	none	none	none	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	none	none	none	none	none	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diesel Range Organics	mg/L	none	none	none	none	none	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fuel Oil	mg/L	none	none	none	none	none	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hydraulic Fluid	mg/L	none	none	none	none	none	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kerosene	mg/L	none	none	none	none	none	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mineral Spirits	mg/L	none	none	none	none	none	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Motor Oil	mg/L	none	none	none	none	none	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	none	none	none	none	none	<5	NA	NA	<5	NA	<5	NA	<5	NA	<5	NA	11	NA	<5	NA	NA	NA	NA
2-Methylnaphthalene	ug/L	750	19	25,000 (S)	25,000 (S)	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	16	**59**	<5	<5	<5	<5	<5
Acenaphthene	ug/L	3,800	38	4,200 (S)	4,200 (S)	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acenaphthylene	ug/L	150	ID	3,900 (S)	3,900 (S)	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Anthracene	ug/L	43 (S)	ID	43 (S)	43 (S)	ID	<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	NLV	9.4 (S,AA)	ID	<5	<1	<1	<5	<1	<5	<1	<5	<1	<5	<1	<5	<1	<5	<1	<1	<1	<1
Benzo(a)pyrene	ug/L	5.0 (A)	ID	NLV	1.0 (M,AA); 0.64	ID	<5	<1	<1	<5	<1	<5	<1	<5	<1	<5	<1	<5	<1	<5	<1	<1	<1	<1
Benzo(b)fluoranthene	ug/L	1.5 (S, AA)	ID	ID	1.5 (S,AA)	ID	<5	<1	<1	<5	<1	<5	<1	<5	<1	<5	<1	<5	<1	<5	<1	<1	<1	<1
Benzo(g,h,i)perylene	ug/L	1.0 (M); 0.26 (S)	NA	NLV	1.0 (M,AA); 0.26	ID	<5	<1	<1	<5	<1	<5	<1	<5	<1	<5	<1	<5	<1	<5	<1	<1	<1	<1
Benzo(k)fluoranthene	ug/L	1.0 (M); 0.8 (S)	NA	NLV	1.0 (M,AA); 0.8 (S)	ID	<5	<1	<1	<5	<1	<5	<1	<5	<1	<5	<1	<5	<1	<5	<1	<1	<1	<1
Chrysene	ug/L	1.6 (S)	ID	ID	1.6 (S,AA)	ID	<5	<1	<1	<5	<1	<5	<1	<5	<1	<5	<1	<5	<1	<5	<1	<1	<1	<1
Dibenzo(a,h)anthracene	ug/L	2.0 (M); 0.85	ID	NLV	2.0 (M,AA); 0.31	ID	<5	<2	<2	<5	<2	<5	<2	<5	<2	<5	<2	<5	<2	<5	<2	<2	<2	<2
Fluoranthene	ug/L	210 (S)	1.6	210 (S)	210 (S)	ID	<5	<1	<1	<5	<1	<5	<1	<5	<1	<5	<1	<5	<1	<5	<1	<1	<1	<1
Fluorene	ug/L	2,000 (S)	12	2,000 (S)	2,000 (S)	ID	<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	NLV	2.0 (M, AA); 0.022	ID	<5	<2	<2	<5	<2	<5	<2	<5	<2	<5	<2	<5	<2	<5	<2	<2	<2	<2
Naphthalene	ug/L	1,500	11	31,000 (S)	31,000 (S)	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	**50**	**137**	<5	<5	<5	<5	<5
Phenanthrene	ug/L	150	2.0 (M); 1.4	1,000 (S)	1,000 (S)	ID	<5	<2	<2	<5	<2	<5	<2	<5	<2	<5	<2	<5	<2	<5	<2	<2	<2	<2
Pyrene	ug/L	140 (S)	ID	140 (S)	140 (S)	ID	<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	various	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)	200	1.3E+06 (S)	1.3E+06 (S)	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	35	78 (X)	77,000	4,700	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	ug/L	5.0 (A)	330 (X)	1.10E+05	21,000	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	2,500	740	2.30E+06	2.40E+06	3.80E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	7.0 (A)	65 (X)	1,300	11,000	97,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	ug/L	63 (E)	17	56,000 (S)	56,000 (S)	56,000 (S)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**270**	**810 Y**	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	5.0 (A)	360 (X)	59,000	19,000	2.50E+06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<40	<1	<1	<1	<1	<1
1,2-Dichloropropane	ug/L	5.0 (A)	290 (X)	36,000	16,000	5.50E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	ug/L	72 (E)	45	61,000 (S)	61,000 (S)	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**80**	**250 Y**	<1	<1	<1	<1	<1
2-Butanone	ug/L	38,000	2,200	2.4E+08 (S)	2.4E+08 (S)	ID	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<600	<500	<30	<30	<30	<30	<30
2-Hexanone	ug/L	2,900	NA	8.70E+06	5.20E+06	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<1,000	<1000	<50	<50	<50	<50	<50
4-Methyl-2-pentanone	ug/L	5,200	ID	2.0E+07 (S)	1.30E+07	ID	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<1,000	<1000	<50	<50	<50	<50	<50
Acetone	ug/L	2,100	1,700	1.0E+09 (D,S)	3.10E+07	1.50E+07	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<1,000	<1000	<50	<50	<50	<50	<50
Benzene	ug/L	5.0 (A)	200 (X)	35,000	11,000	68,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**1,460**	**1000 Y**	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	none	none	none	none	none	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1
Bromoform	ug/L	80 (A,W)	ID	3.10E+06	1.40E+05	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1
Bromomethane	ug/L	29	35	9,000	70,000	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<100	<100	<5	<5	<5	<5	<5
n-Butylbenzene	ug/L	230	ID	ID	5,900	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1
Carbon disulfide	ug/L	2,300	ID	5.50E+05	1.2E+06 (S)	13,000	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<100	<100	<5	<5	<5	<5	<5
Carbon tetrachloride	ug/L	5.0 (A)	45 (X)	2,400	4,600	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	100 (A)	47	4.70E+05	86,000	1.60E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1
Chloroethane	ug/L	1,700	ID	5.7E+06 (S)	4.40E+05	1.10E+05	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<100	<100	<5	<5	<5	<5	<5
Chloroform	ug/L	80 (A, W)	170 (X)	1.80E+05	1.50E+05	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1
Chloromethane	ug/L	1,100	ID	45,000	4.90E+05	36,000	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<100	<100	<5	<5	<5	<5	<5
Dibromochloromethane	ug/L	80 (A, W)	ID	1.10E+05	18,000	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<100	<100	<5	<5	<5	<5	<5
Ethylbenzene	ug/L	74 (E)	18	1.7E+05 (S)	1.7E+05 (S)	43,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**640**	**1320 Y**	<1	<1	<1	<1	<1
Methylene chloride	ug/L	5.0 (A)	940 (X)	1.40E+06	2.20E+05	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<100	<100	<5	<5	<5	<5	<5
n-Propylbenzene	ug/L	230	ID	ID	15,000	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	40	100 Y	<1	<1	<1	<1	<1
Styrene	ug/L	100 (A)	80	3.1E+05 (S)	9,700	1.40E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	5.0 (A)	45 (X)	1.70E+05	12,000	ID	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1
Toluene	ug/L	790 (E)	140	5.3E+05 (S)	5.3E+05 (S)	61,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**2,760**	**1410 Y**	<1	<1	<1	<1	<1
Trichloroethene	ug/L	5.0 (A)	200 (X)	97,000	22,000	ID	<1	<1	<1	<1	<1	5	**9**	<1	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1
Vinyl chloride	ug/L	2.0 (A)	15	13,000	1,000	33,000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	70 (A)	620	2.10E+05	2.00E+05	5.30E+05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**80**	20 Y	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	ug/L	none	none	none	none	none	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1
m,p-Xylene	ug/L	none	none	none	none	none	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	1,410	3020 Y	<2	<2	<2	<2	<2
o-Xylene	ug/L	none	none	none	none	none	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	350	580 Y	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	100 (A)	1,500	2.0E+05 (S)	2.20E+05	2.3E+05 (S)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	none	none	none	none	none	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<30	<20	<1	<1	<1	<1	<1
Xylenes, Total	ug/L	280 (E)	35	1.9E+05 (S)	1.9E+05 (S)	70,000	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	**1,710**	**3600 Y**	NA	<3	<3	<3	<3
1,2-Dichloroethene (total)	ug/L	none	none	none	none	none	<1	<2	NA	<1	NA	<1	NA	<1	NA	<1	NA	<30	NA	NA	NA	<2	<2	NA
1,2,3-Trimethylbenzene	ug/L	none	none	none	none	none	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	80	270 Y	<1	<1	<5	<5	<1
Other Target VOCs	ug/L	various	various	various	various	various	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)	730 (X)	4.7E+07 (S)	6.10E+05	ID	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<100	<5	<5	<5	<5	<5	<5
Dissolved Metals (Method 6020)																								
Cadmium	mg/L	0.005 (A)	(G,X)	NLV	190	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium - Trivalent	mg/L	0.1 (A)	(G,X)	NLV	2.90E+05	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/L	0.004 (L)	(G,X)	NLV	ID	ID	<0.001	<0.003	<0.003	<0.001	<0.003	<0.001	<0.003	<0.001	<0.003	<0.001	<0.003	0.001	<0.003	0.001	<0.003	**0.011**	**0.011**	<0.003

Notes: See Last Page

ARCADIS

Figures



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., PONTIAC NORTH, MICH, 1968, PHOTOREVISED 1983.

0 2000' 4000'

Approximate Scale: 1 in. = 2000 ft.

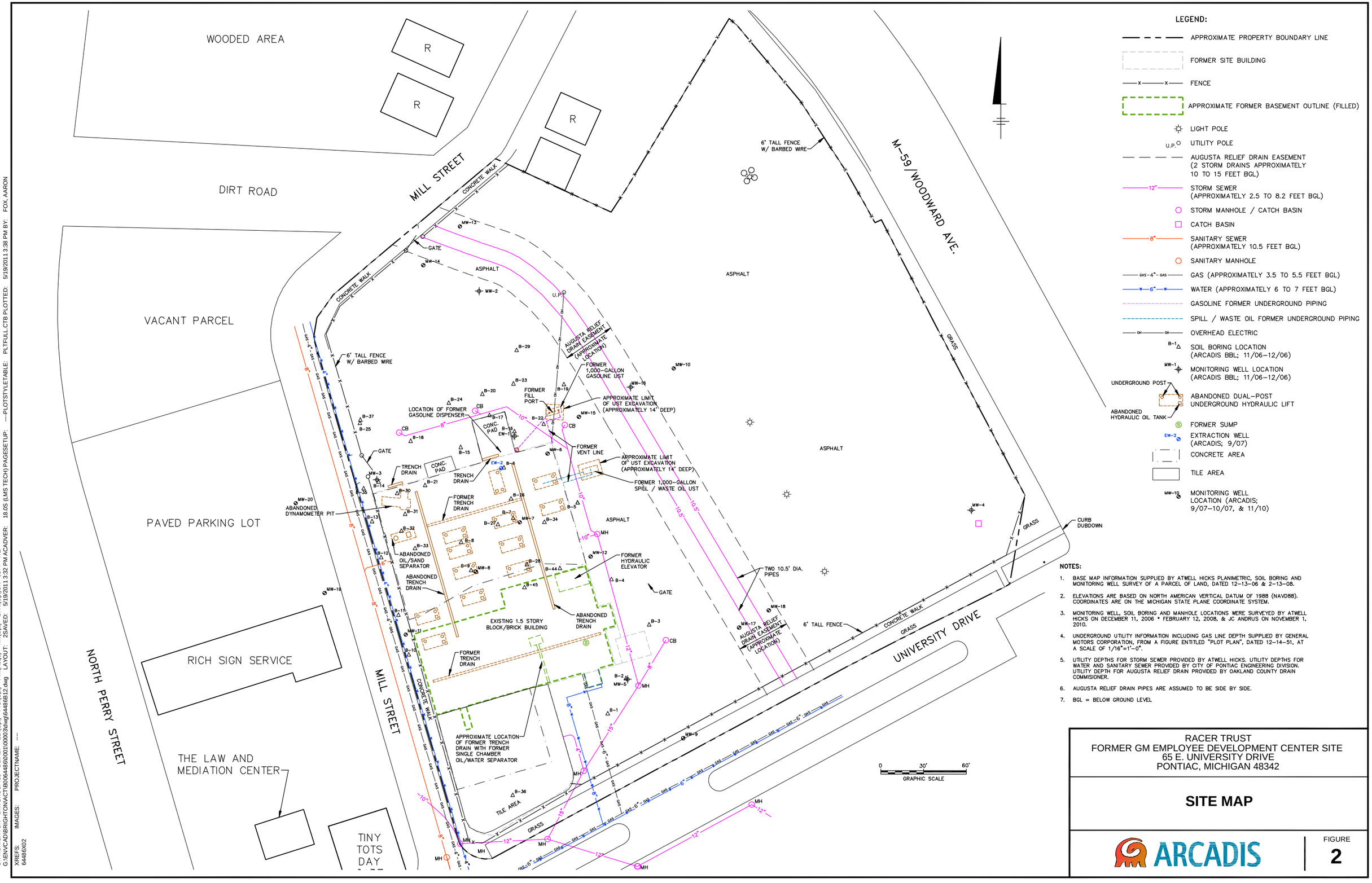
RACER TRUST
FORMER GM EMPLOYEE DEVELOPMENT CENTER SITE
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

SITE LOCATION MAP

ARCADIS

FIGURE
1

CITY:(Reqd) DIV/GROUP:(Reqd) DB:(Reqd) LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\SYRACUSE\ACTIVE\00644866\2011\00003\DWG\644866N01.dwg LAYOUT: 1 SAVED: 6/2/2011 1:22 PM ACADVER: 18.0S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 6/2/2011 1:25 PM BY: HOWES, DAVID
XREFS: IMAGES: PROJECTNAME: --
MI_Pontiac North.tif



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
- 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
- OVERHEAD ELECTRIC
- SOIL BORING LOCATION (ARCADIS BBL; 11/06-12/06)
- MONITORING WELL LOCATION (ARCADIS BBL; 11/06-12/06)
- ABANDONED DUAL-POST UNDERGROUND HYDRAULIC LIFT
- FORMER SUMP
- EXTRACTION WELL (ARCADIS; 9/07)
- CONCRETE AREA
- TILE AREA
- MONITORING WELL LOCATION (ARCADIS; 9/07-10/07, & 11/10)

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.
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

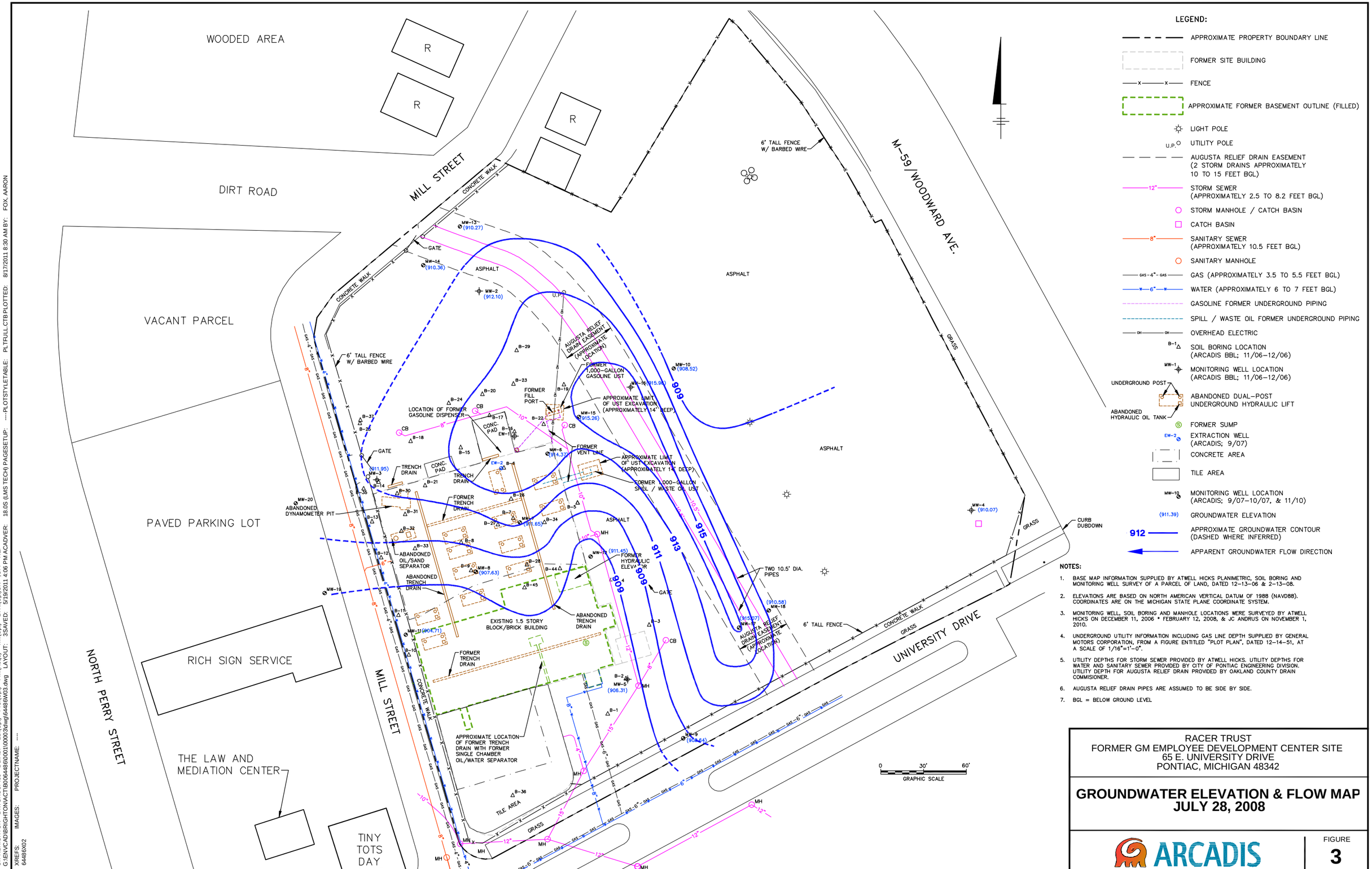
RACER TRUST
FORMER GM EMPLOYEE DEVELOPMENT CENTER SITE
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

SITE MAP

ARCADIS

FIGURE 2

CITY:BRIGHTON DV/GROUP:85 DB:ADF LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\BRIGHTON\ACTIVE\064486000\1000030\dwg\64486B12.dwg LAYOUT: 2SAVED: 5/19/2011 3:32 PM ACADVER: 18.0S (LMS TECH) PAGESETUP: ---
XREFS: IMAGES: PROJECTNAME: ---
64486X02
PLTFULL.CTB PLOTTED: 5/19/2011 3:38 PM BY: FOX, AARON



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
- 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
- OVERHEAD ELECTRIC
- SOIL BORING LOCATION (ARCADIS BBL; 11/06–12/06)
- MONITORING WELL LOCATION (ARCADIS BBL; 11/06–12/06)
- ABANDONED DUAL–POST UNDERGROUND HYDRAULIC LIFT
- FORMER SUMP
- EXTRACTION WELL (ARCADIS; 9/07)
- CONCRETE AREA
- TILE AREA
- MONITORING WELL LOCATION (ARCADIS; 9/07–10/07, & 11/10)
- (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.
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

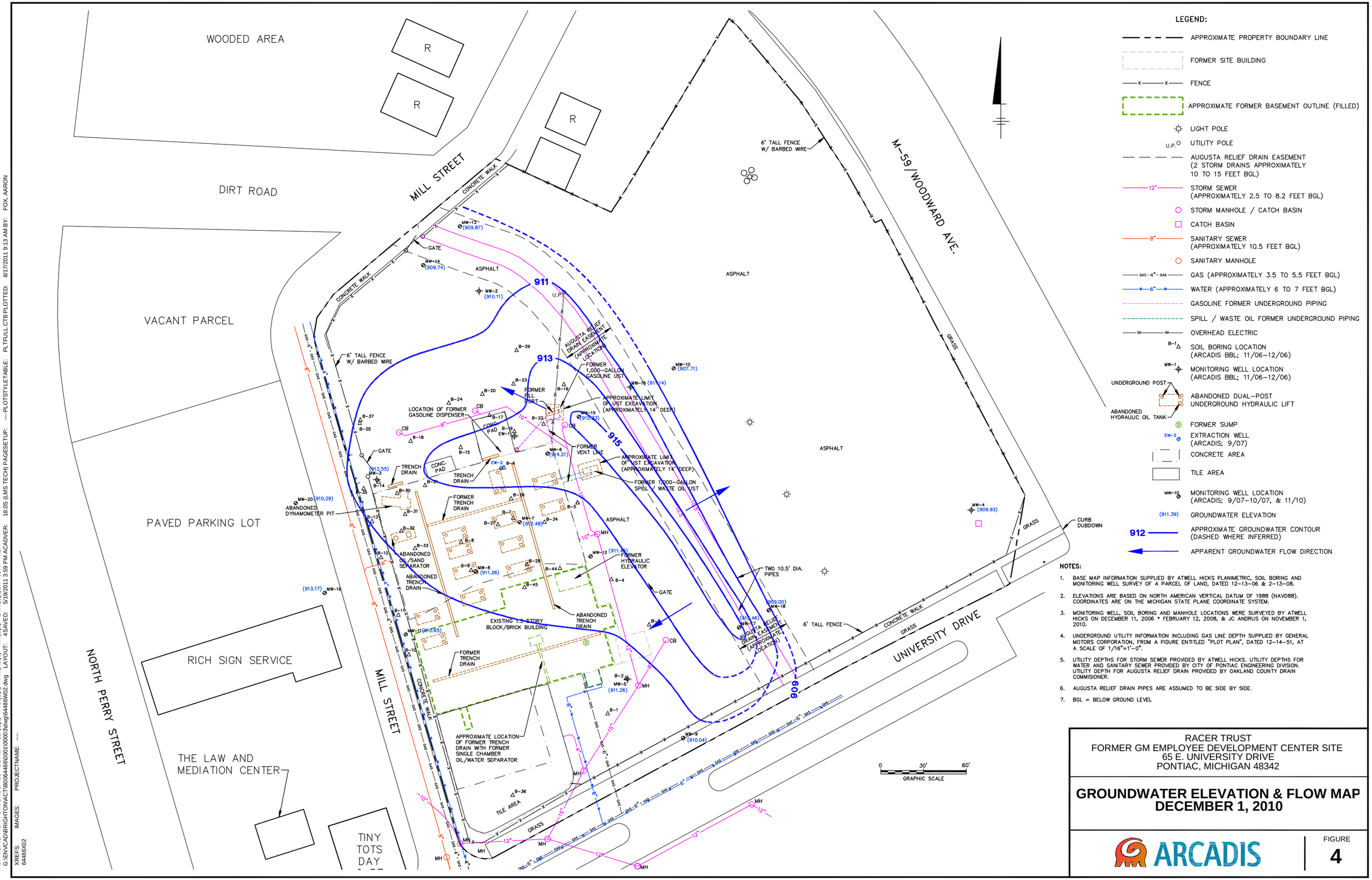
RACER TRUST
FORMER GM EMPLOYEE DEVELOPMENT CENTER SITE
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

GROUNDWATER ELEVATION & FLOW MAP JULY 28, 2008

ARCADIS

FIGURE 3

CITY:BRIGHTON DIV/GROUP:85 DB:ADF LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\BRIGHTON\ACTIVE\00644860\001\00003\dwg\64486W03.dwg LAYOUT: 3SAVED: 5/19/2011 4:06 PM ACADVER: 18.0S (LMS TECH) PAGESETUP:
XREFS: IMAGES: PROJECTNAME: ---
64486X02
---: PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 8/17/2011 8:30 AM BY: FOX, AARON



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
- 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
- OVERHEAD ELECTRIC
- SOIL BORING LOCATION (ARCADIS BBL; 11/06-12/06)
- MONITORING WELL LOCATION (ARCADIS BBL; 11/06-12/06)
- ABANDONED DUAL-POST UNDERGROUND HYDRAULIC LIFT
- FORMER SUMP
- EXTRACTION WELL (ARCADIS; 9/07)
- CONCRETE AREA
- TILE AREA
- MONITORING WELL LOCATION (ARCADIS; 9/07-10/07, & 11/10)
- (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.
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

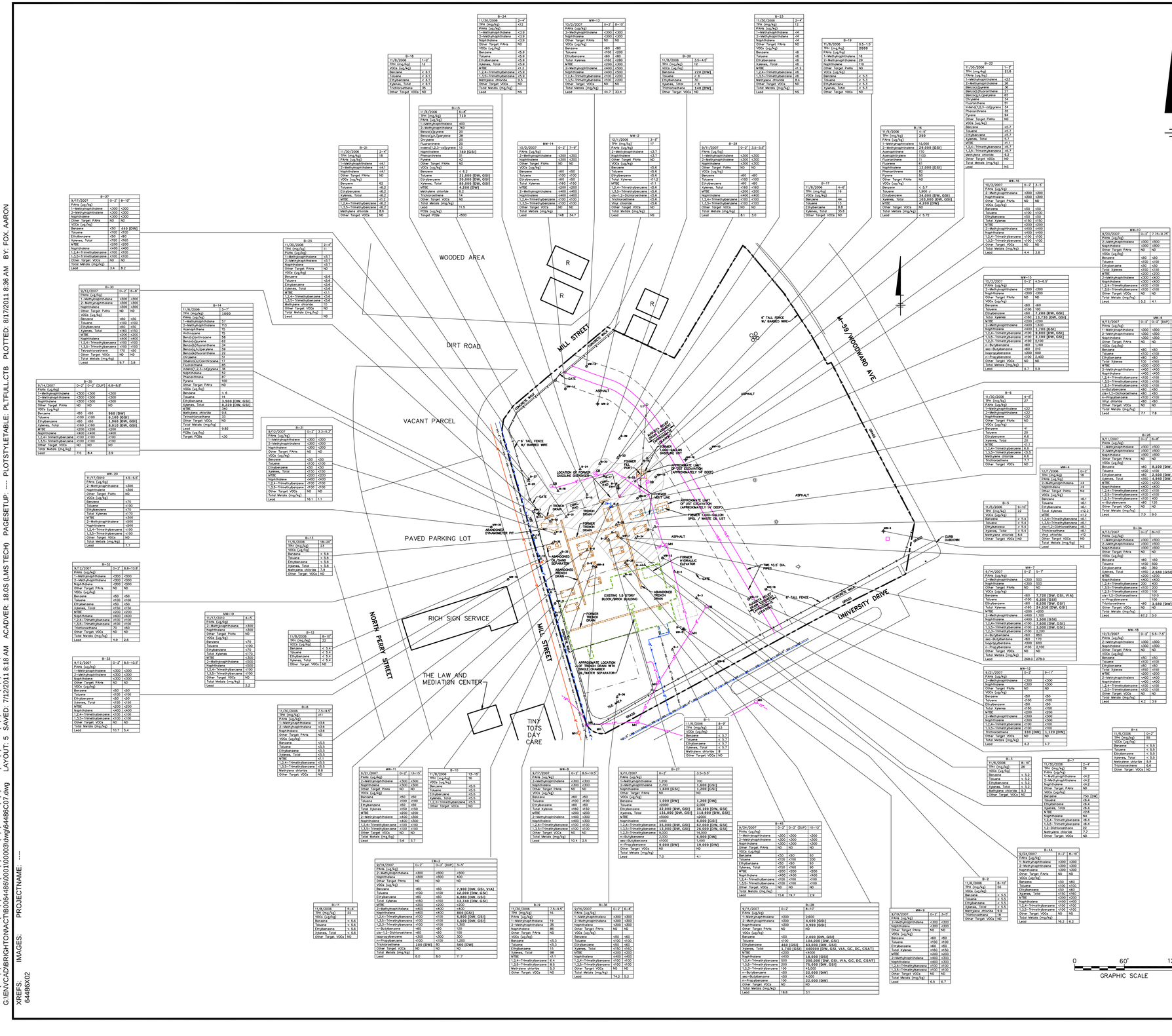
RACER TRUST
FORMER GM EMPLOYEE DEVELOPMENT CENTER SITE
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

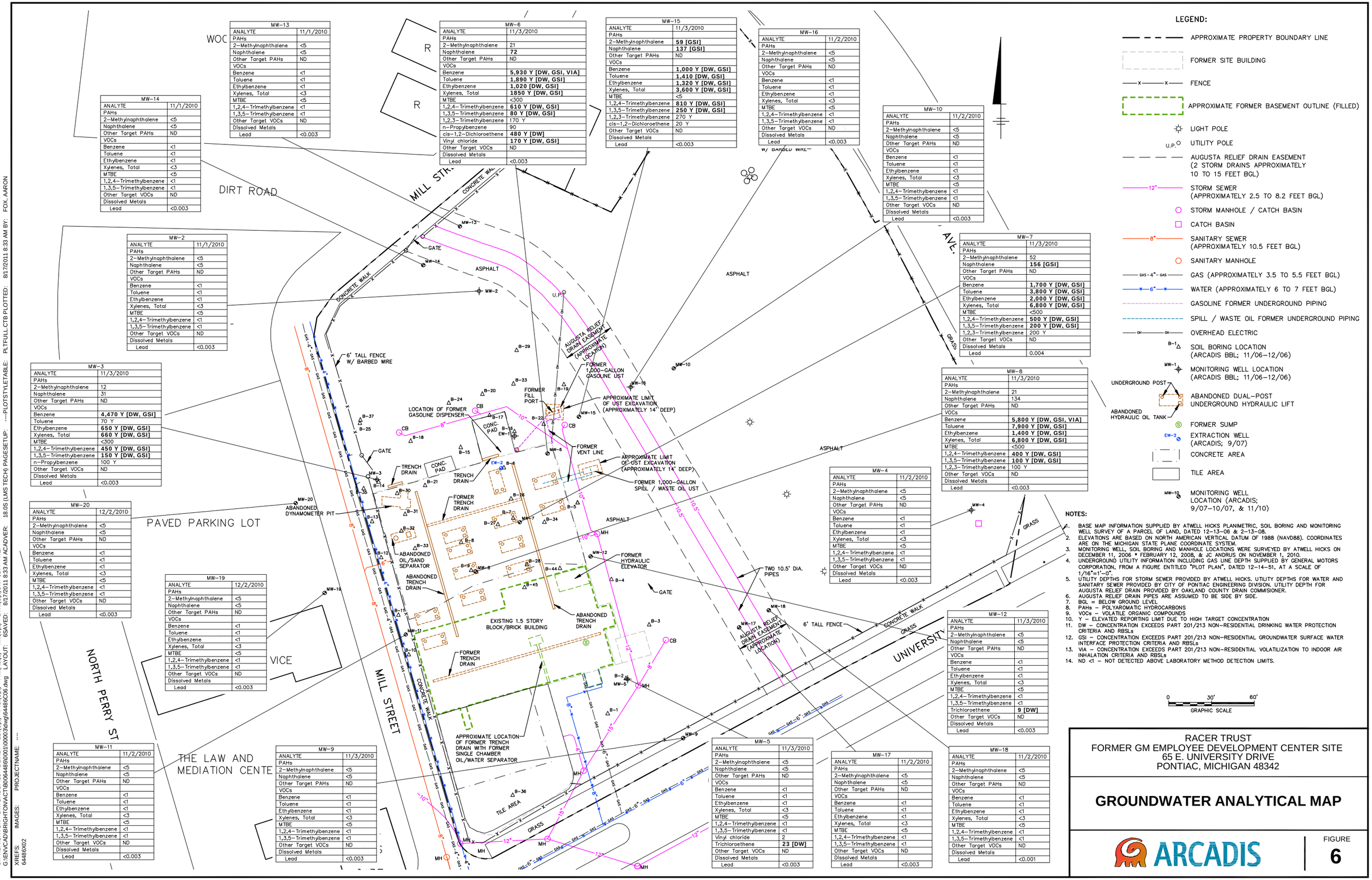
GROUNDWATER ELEVATION & FLOW MAP DECEMBER 1, 2010

ARCADIS

FIGURE 4

CITY:BRIGHTON DIV/GROUP:85 DB:ADF LD:(Opt) PIC:(Opt) PM:(Req'd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\BRIGHTON\ACTIB\06448\60001\100003\dwg\64486W02.dwg LAYOUT: 4SAVED: 5/19/2011 3:59 PM ACADVER: 18.0S (LMS TECH) PAGESETUP: ----PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 8/17/2011 9:13 AM BY: FOX, AARON
XREFS: IMAGES: PROJECTNAME: ---
64486X02


WOODED AREA
DIRT ROAD
VACANT PARCEL
PAVED PARKING LOT
RICH SIGN SERVICE
THE LAW AND MEDIATION CENTER
TINY TOTS DAY CARE
MILL STREET
NORTH PERRY STREET
UNIVERSITY DRIVE
M-59 / WOODWARD AVE.
6' TALL FENCE W/ BARBED WIRE
CHAIN LINK FENCE
GRAVEL ROAD
CURB CUT
CURB CUT/DRIVEWAY
ASPHALT
CONCRETE
GATE
FORMER 1,000-GALLON GASOLINE UST
APPROXIMATE LIMIT OF UST EXCAVATION (APPROXIMATELY 14' DEEP)
FORMER 1,000-GALLON SPILL / WASTE OIL UST
FORMER HYDRAULIC ELEVATOR
ABANDONED HYDRAULIC OIL TANK
ABANDONED DYNAMOMETER PIT
ABANDONED OIL/WATER SEPARATOR
ABANDONED TRENCH DRAIN
FORMER TRENCH DRAIN
EXISTING 1.5 STORY BLOCK/BRICK BUILDING
APPROXIMATE LOCATION OF FORMER DRAIN WITH GRAVEL CHAMBER (OIL/WATER SEPARATOR)
TWO 10.5' DIA. WELLS
TRENCH PAD
FORMER TRENCH DRAIN
FORMER PORTE-COCHERE
FORMER ENTRANCE
FORMER ENTRANCE CANOPY
TRENCH DRAIN
CONC. PAD
CONC. PAD
CONC. PAD


MW-13
ANALYTE | 11/1/2010
PAHs |
2-Methylnaphthalene | <5
Naphthalene | <5
Other Target PAHs | ND
VOCs |
Benzene | <1
Toluene | <1
Ethylbenzene | <1
Xylenes, Total | <3
MTBE | <5
1,2,4-Trimethylbenzene | <1
1,3,5-Trimethylbenzene | <1
Other Target VOCs | ND
Dissolved Metals |
Lead | <0.003
MW-6
ANALYTE | 11/3/2010
PAHs |
2-Methylnaphthalene | 21
Naphthalene | 72
Other Target PAHs | ND
VOCs |
Benzene | 5,930 Y [DW, GSI, VIA]
Toluene | 1,890 Y [DW, GSI]
Ethylbenzene | 1,020 [DW, GSI]
Xylenes, Total | 1850 Y [DW, GSI]
MTBE | <300
1,2,4-Trimethylbenzene | 610 Y [DW, GSI]
1,3,5-Trimethylbenzene | 80 Y [DW, GSI]
1,2,3-Trimethylbenzene | 170 Y
n-Propylbenzene | 90
cis-1,2-Dichloroethene | 480 Y [DW]
Vinyl chloride | 170 Y [DW, GSI]
Other Target VOCs | ND
Dissolved Metals |
Lead | <0.003
MW-15
ANALYTE | 11/3/2010
PAHs |
2-Methylnaphthalene | 59 [GSI]
Naphthalene | 137 [GSI]
Other Target PAHs | ND
VOCs |
Benzene | 1,000 Y [DW, GSI]
Toluene | 1,410 [DW, GSI]
Ethylbenzene | 1,320 Y [DW, GSI]
Xylenes, Total | 3,600 Y [DW, GSI]
MTBE | <5
1,2,4-Trimethylbenzene | 810 Y [DW, GSI]
1,3,5-Trimethylbenzene | 250 Y [DW, GSI]
1,2,3-Trimethylbenzene | 270 Y
cis-1,2-Dichloroethene | 20 Y
Other Target VOCs | ND
Dissolved Metals |
Lead | <0.003
MW-16
ANALYTE | 11/2/2010
PAHs |
2-Methylnaphthalene | <5
Naphthalene | <5
Other Target PAHs | ND
VOCs |
Benzene | <1
Toluene | <1
Ethylbenzene | <1
Xylenes, Total | <3
MTBE | <5
1,2,4-Trimethylbenzene | <1
1,3,5-Trimethylbenzene | <1
Other Target VOCs | ND
Dissolved Metals |
Lead | <0.003
MW-14
ANALYTE | 11/1/2010
PAHs |
2-Methylnaphthalene | <5
Naphthalene | <5
Other Target PAHs | ND
VOCs |
Benzene | <1
Toluene | <1
Ethylbenzene | <1
Xylenes, Total | <3
MTBE | <5
1,2,4-Trimethylbenzene | <1
1,3,5-Trimethylbenzene | <1
Other Target VOCs | ND
Dissolved Metals |
Lead | <0.003
MW-10
ANALYTE | 11/2/2010
PAHs |
2-Methylnaphthalene | <5
Naphthalene | <5
Other Target PAHs | ND
VOCs |
Benzene | <1
Toluene | <1
Ethylbenzene | <1
Xylenes, Total | <3
MTBE | <5
1,2,4-Trimethylbenzene | <1
1,3,5-Trimethylbenzene | <1
Other Target VOCs | ND
Dissolved Metals |
Lead | <0.003
MW-2
ANALYTE | 11/1/2010
PAHs |
2-Methylnaphthalene | <5
Naphthalene | <5
Other Target PAHs | ND
VOCs |
Benzene | <1
Toluene | <1
Ethylbenzene | <1
Xylenes, Total | <3
MTBE | <5
1,2,4-Trimethylbenzene | <1
1,3,5-Trimethylbenzene | <1
Other Target VOCs | ND
Dissolved Metals |
Lead | <0.003
MW-7
ANALYTE | 11/3/2010
PAHs |
2-Methylnaphthalene | 52
Naphthalene | 156 [GSI]
Other Target PAHs | ND
VOCs |
Benzene | 1,700 Y [DW, GSI]
Toluene | 3,800 Y [DW, GSI]
Ethylbenzene | 2,000 Y [DW, GSI]
Xylenes, Total | 6,800 Y [DW, GSI]
MTBE | <500
1,2,4-Trimethylbenzene | 500 Y [DW, GSI]
1,3,5-Trimethylbenzene | 200 Y [DW, GSI]
1,2,3-Trimethylbenzene | 200 Y
Other Target VOCs | ND
Dissolved Metals |
Lead | 0.004
MW-3
ANALYTE | 11/3/2010
PAHs |
2-Methylnaphthalene | 12
Naphthalene | 31
Other Target PAHs | ND
VOCs |
Benzene | 4,470 Y [DW, GSI]
Toluene | 70 Y
Ethylbenzene | 650 Y [DW, GSI]
Xylenes, Total | 660 Y [DW, GSI]
MTBE | <300
1,2,4-Trimethylbenzene | 450 Y [DW, GSI]
1,3,5-Trimethylbenzene | 150 Y [DW, GSI]
n-Propylbenzene | 100 Y
Other Target VOCs | ND
Dissolved Metals |
Lead | <0.003
MW-8
ANALYTE | 11/3/2010
PAHs |
2-Methylnaphthalene | 21
Naphthalene | 134
Other Target PAHs | ND
VOCs |
Benzene | 5,800 Y [DW, GSI, VIA]
Toluene | 7,900 Y [DW, GSI]
Ethylbenzene | 1,400 Y [DW, GSI]
Xylenes, Total | 6,800 Y [DW, GSI]
MTBE | <500
1,2,4-Trimethylbenzene | 400 Y [DW, GSI]
1,3,5-Trimethylbenzene | 100 Y [DW, GSI]
1,2,3-Trimethylbenzene | 100 Y
Other Target VOCs | ND
Dissolved Metals |
Lead | <0.003
MW-20
ANALYTE | 12/2/2010
PAHs |
2-Methylnaphthalene | <5
Naphthalene | <5
Other Target PAHs | ND
VOCs |
Benzene | <1
Toluene | <1
Ethylbenzene | <1
Xylenes, Total | <3
MTBE | <5
1,2,4-Trimethylbenzene | <1
1,3,5-Trimethylbenzene | <1
Other Target VOCs | ND
Dissolved Metals |
Lead | <0.003
MW-4
ANALYTE | 11/2/2010
PAHs |
2-Methylnaphthalene | <5
Naphthalene | <5
Other Target PAHs | ND
VOCs |
Benzene | <1
Toluene | <1
Ethylbenzene | <1
Xylenes, Total | <3
MTBE | <5
1,2,4-Trimethylbenzene | <1
1,3,5-Trimethylbenzene | <1
Other Target VOCs | ND
Dissolved Metals |
Lead | <0.003
MW-19
ANALYTE | 12/2/2010
PAHs |
2-Methylnaphthalene | <5
Naphthalene | <5
Other Target PAHs | ND
VOCs |
Benzene | <1
Toluene | <1
Ethylbenzene | <1
Xylenes, Total | <3
MTBE | <5
1,2,4-Trimethylbenzene | <1
1,3,5-Trimethylbenzene | <1
Other Target VOCs | ND
Dissolved Metals |
Lead | <0.003
MW-12
ANALYTE | 11/3/2010
PAHs |
2-Methylnaphthalene | <5
Naphthalene | <5
Other Target PAHs | ND
VOCs |
Benzene | <1
Toluene | <1
Ethylbenzene | <1
Xylenes, Total | <3
MTBE | <5
1,2,4-Trimethylbenzene | <1
1,3,5-Trimethylbenzene | <1
Trichloroethene | 9 [DW]
Other Target VOCs | ND
Dissolved Metals |
Lead | <0.003
MW-11
ANALYTE | 11/2/2010
PAHs |
2-Methylnaphthalene | <5
Naphthalene | <5
Other Target PAHs | ND
VOCs |
Benzene | <1
Toluene | <1
Ethylbenzene | <1
Xylenes, Total | <3
MTBE | <5
1,2,4-Trimethylbenzene | <1
1,3,5-Trimethylbenzene | <1
Other Target VOCs | ND
Dissolved Metals |
Lead | <0.003
MW-9
ANALYTE | 11/3/2010
PAHs |
2-Methylnaphthalene | <5
Naphthalene | <5
Other Target PAHs | ND
VOCs |
Benzene | <1
Toluene | <1
Ethylbenzene | <1
Xylenes, Total | <3
MTBE | <5
1,2,4-Trimethylbenzene | <1
1,3,5-Trimethylbenzene | <1
Other Target VOCs | ND
Dissolved Metals |
Lead | <0.003
MW-5
ANALYTE | 11/3/2010
PAHs |
2-Methylnaphthalene | <5
Naphthalene | <5
Other Target PAHs | ND
VOCs |
Benzene | <1
Toluene | <1
Ethylbenzene | <1
Xylenes, Total | <3
MTBE | <5
1,2,4-Trimethylbenzene | <1
1,3,5-Trimethylbenzene | <1
Vinyl chloride | 2
Trichloroethene | 23 [DW]
Other Target VOCs | ND
Dissolved Metals |
Lead | <0.003
MW-17
ANALYTE | 11/2/2010
PAHs |
2-Methylnaphthalene | <5
Naphthalene | <5
Other Target PAHs | ND
VOCs |
Benzene | <1
Toluene | <1
Ethylbenzene | <1
Xylenes, Total | <3
MTBE | <5
1,2,4-Trimethylbenzene | <1
1,3,5-Trimethylbenzene | <1
Other Target VOCs | ND
Dissolved Metals |
Lead | <0.003
MW-18
ANALYTE | 11/2/2010
PAHs |
2-Methylnaphthalene | <5
Naphthalene | <5
Other Target PAHs | ND
VOCs |
Benzene | <1
Toluene | <1
Ethylbenzene | <1
Xylenes, Total | <3
MTBE | <5
1,2,4-Trimethylbenzene | <1
1,3,5-Trimethylbenzene | <1
Other Target VOCs | ND
Dissolved Metals |
Lead | <0.001
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
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
OVERHEAD ELECTRIC
SOIL BORING LOCATION (ARCADIS BBL; 11/06-12/06)
MONITORING WELL LOCATION (ARCADIS BBL; 11/06-12/06)
ABANDONED DUAL-POST UNDERGROUND HYDRAULIC LIFT
FORMER SUMP
EXTRACTION WELL (ARCADIS; 9/07)
CONCRETE AREA
TILE AREA
MONITORING WELL LOCATION (ARCADIS; 9/07-10/07, & 11/10)
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.
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. PAHs = POLYAROMATIC HYDROCARBONS
9. VOCs = VOLATILE ORGANIC COMPOUNDS
10. Y = ELEVATED REPORTING LIMIT DUE TO HIGH TARGET CONCENTRATION
11. DW = CONCENTRATION EXCEEDS PART 201/213 NON-RESIDENTIAL DRINKING WATER PROTECTION CRITERIA AND RBSLs
12. GSI = CONCENTRATION EXCEEDS PART 201/213 NON-RESIDENTIAL GROUNDWATER SURFACE WATER INTERFACE PROTECTION CRITERIA AND RBSLs
13. VIA = CONCENTRATION EXCEEDS PART 201/213 NON-RESIDENTIAL VOLATILIZATION TO INDOOR AIR INHALATION CRITERIA AND RBSLs
14. ND <1 = NOT DETECTED ABOVE LABORATORY METHOD DETECTION LIMITS.
0 30' 60'
GRAPHIC SCALE
RACER TRUST
FORMER GM EMPLOYEE DEVELOPMENT CENTER SITE
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342
GROUNDWATER ANALYTICAL MAP
ARCADIS
FIGURE
6
MILL STREET
NORTH PERRY ST
UNIVERSITY
DIRT ROAD
PAVED PARKING LOT
THE LAW AND MEDIATION CENTE
VICE
ASPHALT
GRASS
CONCRETE WALK
6' TALL FENCE W/ BARBED WIRE
GATE
TRENCH DRAIN
CONC. PAD
FORMER FILL PORT
FORMER 1,000-GALLON GASOLINE UST
APPROXIMATE LIMIT OF UST EXCAVATION (APPROXIMATELY 14' DEEP)
LOCATION OF FORMER GASOLINE DISPENSER
FORMER VENT LINE
FORMER 1,000-GALLON SPILL / WASTE OIL UST
AUGUSTA RELIEF DRAIN EASEMENT (APPROXIMATE LOCATION)
FORMER TRENCH DRAIN
ABANDONED OIL/SAND SEPARATOR
ABANDONED TRENCH DRAIN
FORMER HYDRAULIC ELEVATOR
EXISTING 1.5 STORY BLOCK/BRICK BUILDING
APPROXIMATE LOCATION OF FORMER TRENCH DRAIN WITH FORMER SINGLE CHAMBER OIL/WATER SEPARATOR
ABANDONED DYNAMOMETER PIT
TWO 10.5' DIA. PIPES
W/ BARBED WIRE
UNDERGROUND POST
ABANDONED HYDRAULIC OIL TANK
CITY:BRIGHTON DIV/GROUP:BS DB:ADF LD:(Opt) PIC:(Opt) PM:(Read) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF* G:\ENVCAD\BRIGHTON\ACTIB0064486\000\100003d\wg\64486C06.dwg LAYOUT: 6SAVED: 8/17/2011 8:33 AM ACADVER: 18.0S (LMS TECH) PAGESETUP: ---
PLTFULL.CTB PLOTTED: 8/17/2011 8:33 AM BY: FOX, AARON
XREFS: 64486X02 IMAGES: PROJECTNAME: ---

CITY:BRIGHTON DIV/GROUP:85 DB:ADF LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\BRIGHTON\ACTIVE\064486001\000030\dwg\64486B13.dwg LAYOUT: 7SAVED: 7/19/2011 1:33 PM ACADVER: 18.0S (LMS TECH) PAGESETUP: ----
XREFS: IMAGES: PROJECTNAME: ----
64486X02 2945_001.tif PLTFULL.CTB PLOTTED: 8/17/2011 8:38 AM BY: FOX, AARON

WOODED AREA

R

R

R

DIRT ROAD

VACANT PARCEL

MILL STREET

CONCRETE WALK

GATE

MW-13

MW-14

ASPHALT

MW-2

U.P.

6' TALL FENCE W/ BARBED WIRE

AUGUSTA RELIEF DRAIN EASEMENT (APPROXIMATE LOCATION)

B-29

B-23

B-20

B-24

B-16

FORMER 1,000-GALLON GASOLINE UST

MW-10

MW-16

FORMER FILL PORT

APPROXIMATE LIMIT OF UST EXCAVATION (APPROXIMATELY 14' DEEP)

LOCATION OF FORMER GASOLINE DISPENSER

CB

B-17

B-22

MW-15

B-37

B-25

B-18

CONC. PAD

B-16

EW-1

EW-2

B-6

FORMER VENT LINE

MW-6

GATE

TRENCH DRAIN

MW-3

B-14

B-21

B-30

B-15

B-5

MW-20

ABANDONED DYNAMOMETER PIT

FORMER TRENCH DRAIN

B-26

B-7

MW-7

B-34

ASPHALT

PAVED PARKING LOT

B-31

B-13

B-32

B-33

MH

B-12

ABANDONED OIL/SAND SEPARATOR

MW-12

FORMER HYDRAULIC ELEVATOR

B-8

B-9

MW-8

B-28

B-44

B-4

ABANDONED TRENCH DRAIN

MW-19

B-45

GATE

B-11

EXISTING 1.5 STORY BLOCK/BRICK BUILDING

B-3

MW-11

B-10

CB

FORMER TRENCH DRAIN

B-2

MW-5

MH

NORTH PERRY STREET

RICH SIGN SERVICE

MILL STREET

CONCRETE WALK

B-1

MW-9

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

MH

B-36

TILE AREA

GRASS

THE LAW AND MEDIATION CENTER

TINY TOTS DAY

6' TALL FENCE W/ BARBED WIRE

M-59/WOODWARD AVE.

ASPHALT

GRASS

ASPHALT

MW-4

GRASS

CURB DUBDOWN

TWO 10.5' DIA. PIPES

MW-18

MW-17

AUGUSTA RELIEF DRAIN EASEMENT (APPROXIMATE LOCATION)

6' TALL FENCE

CONCRETE WALK

GRASS

UNIVERSITY DRIVE

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
- 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
- OH OVERHEAD ELECTRIC
- B-1 SOIL BORING LOCATION (ARCADIS BBL; 11/06-12/06)
- MW-1 MONITORING WELL LOCATION (ARCADIS BBL; 11/06-12/06)
- UNDERGROUND POST / ABANDONED HYDRAULIC OIL TANK ABANDONED DUAL-POST UNDERGROUND HYDRAULIC LIFT
- FORMER SUMP
- EW-2 EXTRACTION WELL (ARCADIS; 9/07)
- CONCRETE AREA
- TILE AREA
- MW-10 MONITORING WELL LOCATION (ARCADIS; 9/07-10/07, & 11/10)
- APPROXIMATE EXTENT OF SOIL CONTAMINATION ABOVE MDEQ PART 201/213 NON-RESIDENTIAL DIRECT CONTACT, GROUNDWATER CONTACT PROTECTION, CSAT CRITERIA & RBSLs, & EFFECTIVE SOLUBILITY SCREENING LEVELS (PROPOSED EXCAVATION LIMITS)
- SOIL SAMPLE EXCEEDS EFFECTIVE SOLUBILITY GUIDELINES
- SOIL SAMPLE EXCEEDS PART 201/213 NON-RESIDENTIAL DIRECT CONTACT, GROUNDWATER CONTACT PROTECTION & SOIL SATURATION CONCENTRATION CRITERIA & RBSLs.

0 30' 60'
GRAPHIC SCALE

NOTES:

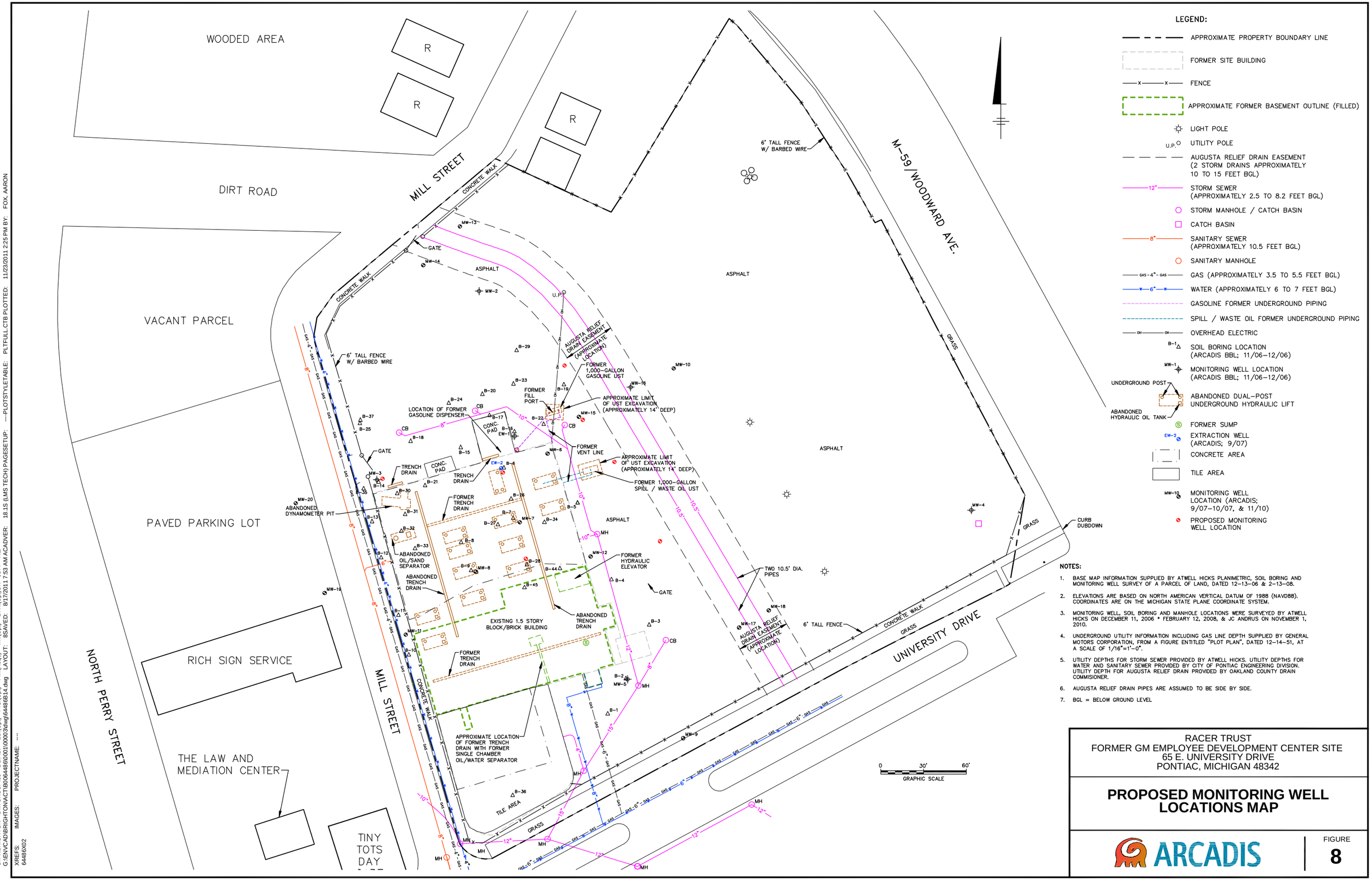
1. BASE MAP INFORMATION SUPPLIED BY ATWELL HICKS PLANIMETRIC, SOIL BORING AND MONITORING WELL SURVEY OF A PARCEL OF LAND, DATED 12-13-06 & 2-13-08.
2. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). COORDINATES ARE ON THE MICHIGAN STATE PLANE COORDINATE SYSTEM.
3. MONITORING WELL, SOIL BORING AND MANHOLE LOCATIONS WERE SURVEYED BY ATWELL HICKS ON DECEMBER 11, 2006 * FEBRUARY 12, 2008, & JC ANDRUS ON NOVEMBER 1, 2010.
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. GC - CONCENTRATION EXCEEDS PART 201/213 NON-RESIDENTIAL GROUNDWATER CONTACT PROTECTION CRITERIA AND RBSLs
9. DC - CONCENTRATION EXCEEDS PART 201/213 NON-RESIDENTIAL DIRECT CONTACT CRITERIA AND RBSLs
10. CSAT - CONCENTRATION EXCEEDS PART 201/213 NON-RESIDENTIAL SOIL SATURATION CONCENTRATION SCREENING LEVELS

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

PROPOSED EXCAVATION LIMITS MAP

ARCADIS

FIGURE
7



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
- 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
- OH-OH OVERHEAD ELECTRIC
- B-1 SOIL BORING LOCATION (ARCADIS BBL; 11/06-12/06)
- MW-1 MONITORING WELL LOCATION (ARCADIS BBL; 11/06-12/06)
- UNDERGROUND POST / ABANDONED HYDRAULIC OIL TANK — ABANDONED DUAL-POST UNDERGROUND HYDRAULIC LIFT
- S FORMER SUMP
- EW-2 EXTRACTION WELL (ARCADIS; 9/07)
- CONCRETE AREA
- TILE AREA
- MW-10 MONITORING WELL LOCATION (ARCADIS; 9/07-10/07, & 11/10)
- PROPOSED MONITORING WELL LOCATION

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.
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
FORMER GM EMPLOYEE DEVELOPMENT CENTER SITE
65 E. UNIVERSITY DRIVE
PONTIAC, MICHIGAN 48342

PROPOSED MONITORING WELL LOCATIONS MAP

ARCADIS

FIGURE 8

CITY:BRIGHTON DV/GROUP:85 DB:ADF LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\BRIGHTON\ACTIVE\064486001\00003\dwg\64486814.dwg LAYOUT: 8SAVED: 8/17/2011 7:53 AM ACADVER: 18.1S (LMS TECH) PAGESETUP: ---
XREFS: IMAGES: PROJECTNAME: ---
64486X02