AKT PEERLESS
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HISTORICAL CITY DIRECTORY REVIEW SUMMARY – AKT PROJECT 5133D-1-17
@WATER LOFTS DETROIT, WAYNE COUNTY, MICHIGAN

✸	Address ∨ // Year ➢	1941	1957	1963
SP	1471-1477 Atwater Street	Address not listed	Ainsworth Manufacturing Corp.	Vacant
N	1460-1490 Franklin Street	Address not listed	Eaton Chemical Co.	Eaton Chemical Co.
NE	1501 Guoin Street	Address not listed	Address not listed	Address not listed
E	1501 Atwater Street	Address not listed	Address not listed	Address not listed
SE	1500 Atwater Street	Address not listed	Huron Portland Cement Co.	Huron Portland Cement Co.
S	1470-1474 Atwater Street	Address not listed	Address not listed	Address not listed
SW	1440 Atwater Street	Vacant	Address not listed	Address not listed
W	1461 Atwater Street	Address not listed	Address not listed	Address not listed
NW	1438-1450 Franklin Street	Address not listed	Address not listed	Address no listed

✸	Address ∨ // Year ➢	1967	1970	1974
SP	1471-1477 Atwater Street	Coil Steel Co.	Vacant	Vacant
N	1460-1490 Franklin Street	Eaton Chemical Co.	C & V Industrial Pub and Warehouse	C & V Industrial Pub and Warehouse
NE	1501 Guoin Street	Address not listed	Address not listed	Address not listed
E	1501 Atwater Street	Address not listed	Address not listed	Address not listed
SE	1500 Atwater Street	Huron Portland Cement Co.	Huron Cement Co.	Huron Cement Co.
S	1470-1474 Atwater Street	Address not listed	Address not listed	Address not listed
SW	1440 Atwater Street	Address not listed	Address not listed	Address not listed
W	1461 Atwater Street	Address not listed	Address not listed	Address not listed
NW	1438-1450 Franklin Street	Address not listed	Address not listed	Address not listed

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HISTORICAL CITY DIRECTORY REVIEW SUMMARY – AKT PROJECT 5133D-1-17
@WATER LOFTS DETROIT, WAYNE COUNTY, MICHIGAN

✸	Address ⮟ // Year ➢	1997	2003	
SP	1471-1477 Atwater Street	Address not listed	Address not listed	
N	1460-1490 Franklin Street	Stone Soap Co.	Address not listed	
NE	1501 Guoin Street	Address not listed	Address not listed	
E	1501 Atwater Street	Address not listed	Address not listed	
SE	1500 Atwater Street	LaFarge Corp.	LaFarge Corp.	
S	1470-1474 Atwater Street	Koenig Fuel and Supply Co.	Address not listed	
SW	1440 Atwater Street	Address not listed	Address not listed	
W	1461 Atwater Street	Address not listed	Address not listed	
NW	1438-1450 Franklin Street	Address not listed	Address not listed	

✸	Address ⮟ // Year ➢	1900	1902	1906
SP	364 Atwater Street	Vacant	Vacant	Address not listed
N	379 Atwater Street	Address not listed	D.S. Ry Power House	Address not listed
NE	393 Atwater Street	Address not listed	Address not listed	Address not listed
E	394 Atwater Street	Pittmans and Deans	Address not listed	Address not listed
W	340-350 Atwater Street	Little CH Co.	Little CH Co.	Little CH Co.
NW	347-509 Atwater Street	D.S. Ry Power House	D.S. Ry Power House	D.S. Ry Power House

✸	Address ⮟ // Year ➢	1909	1912	1915
SP	364 Atwater Street	Address not listed	Address not listed	Address not listed
N	379 Atwater Street	Address not listed	Address not listed	Address not listed
NE	393 Atwater Street	Address not listed	Address not listed	Address not listed
E	394 Atwater Street	Address not listed	Address not listed	Address not listed
W	340-350 Atwater Street	Little CH Co.	Little CH Co.	United Fuel and Supply Co.
NW	347-509 Atwater Street	D.S. Ry Power House	D.S. Ry Power House	D.S. Ry Power House

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HISTORICAL CITY DIRECTORY REVIEW SUMMARY – AKT PROJECT 5133D-1-17
@WATER LOFTS DETROIT, WAYNE COUNTY, MICHIGAN

✸	Address ⮟ // Year ➢	1918	1922-23	1924-25
SP	364 Atwater Street	Address not listed	Address not listed	Address not listed
SP	1470-1474 Atwater Street	Address not listed	D.S. Ry Power Housed	D.S. Ry Power House
N	379 Atwater Street	Address not listed	Address not listed	Address not listed
N	1471-1477 Atwater Street	Address not listed	Detroit Screw Works	Detroit Screw Works
NE	393 Atwater Street	Address not listed	Address not listed	Address not listed
NE	1501 Atwater Street	Address not listed	Address not listed	Address not listed
E	394 Atwater Street	Address not listed	Address not listed	Address not listed
E	1500 Atwater Street	Address not listed	Address not listed	Address not listed
W	340-350 Atwater Street	United Fuel and Supply Co.	Address not listed	Address not listed
W	1440 Atwater Street	Address not listed	U.S. Gypsum Co.	U.S. Gypsum Co.
NW	347-509 Atwater Street	D.S. Ry Power House	Address not listed	Address not listed
NW	1461 Atwater Street	Address not listed	D.S. Ry Power Housed	D.S. Ry Power House

✸	Address ⮟ // Year ➢	1926-27	1928-30	1932-33
SP	1470-1474 Atwater Street	Address not listed	D.S. Ry Power House	D.S. Ry Power House
N	1471-1477 Atwater Street	Detroit Screw Works	Detroit Screw Works	Detroit Screw Works
NE	1501 Atwater Street	Address not listed	Address not listed	Address not listed
E	1500 Atwater Street	Address not listed	Address not listed	Address not listed
W	1440 Atwater Street	U.S. Gypsum Co.	U.S. Gypsum Co.	Vacant
NW	1461 Atwater Street	Address not listed	Eaton-Clark Chemicals	Eaton-Clark Chemicals

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HISTORICAL CITY DIRECTORY REVIEW SUMMARY – AKT PROJECT 5133D-1-17
@WATER LOFTS DETROIT, WAYNE COUNTY, MICHIGAN

✸	Address ⮟ // Year ➢	1935	1937	1939
SP	1470-1474 Atwater Street	Dept of Public Lighting	Address not listed	Address not listed
N	1471-1477 Atwater Street	Address not listed	Address not listed	Address not listed
NE	1501 Atwater Street	Address not listed	Address not listed	Address not listed
E	1500 Atwater Street	Address not listed	Address not listed	Address not listed
W	1440 Atwater Street	Vacant	Address not listed	Nicholson Universal Steamship Co.
NW	1461 Atwater Street	Vacant	Vacant	Address not listed

✸	Address ⮟ // Year ➢	1941	1957	1963
SP	1470-1474 Atwater Street	Address not listed	Address not listed	Address not listed
N	1471-1477 Atwater Street	Address not listed	Ainsworth Manufacturing Corp.	Vacant
NE	1501 Atwater Street	Address not listed	Address not listed	Address not listed
E	1500 Atwater Street	Address not listed	Huron Portland Cement Co.	Huron Portland Cement Co.
W	1440 Atwater Street	Vacant	Address not listed	Address not listed
NW	1461 Atwater Street	Address not listed	Address not listed	Address not listed

✸	Address ⮟ // Year ➢	1967	1970	1974
SP	1470-1474 Atwater Street	Address not listed	Address not listed	Address not listed
N	1471-1477 Atwater Street	Coil Steel Co.	Vacant	Vacant
NE	1501 Atwater Street	Address not listed	Address not listed	Address not listed
E	1500 Atwater Street	Huron Portland Cement Co.	Huron Cement Co.	Huron Cement Co.
W	1440 Atwater Street	Address not listed	Address not listed	Address not listed
NW	1461 Atwater Street	Address not listed	Address not listed	Address not listed

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HISTORICAL CITY DIRECTORY REVIEW SUMMARY – AKT PROJECT 5133D-1-17
@WATER LOFTS DETROIT, WAYNE COUNTY, MICHIGAN

✹	Address ⮟ // Year ➢	1997	2003	
SP	1470-1474 Atwater Street	Koenig Fuel and Supply Co.	Address not listed	
N	1471-1477 Atwater Street	Address not listed	Address not listed	
NE	1501 Atwater Street	Address not listed	Address not listed	
E	1500 Atwater Street	LaFarge Corp.	LaFarge Corp.	
W	1440 Atwater Street	Address not listed	Address not listed	
NW	1461 Atwater Street	Address not listed	Address not listed	

APPENDIX B

AKT Peerless' December 2006 Phase II ESA

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PHASE II ENVIRONMENTAL SITE ASSESSMENT
@WATER LOFTS DEVELOPMENT (SOUTH)
PARCEL H
1470 EAST ATWATER STREET
DETROIT, MICHIGAN 48207

prepared for

DETROIT/WAYNE COUNTY PORT AUTHORITY
8109 EAST JEFFERSON AVENUE
DETROIT, MICHIGAN, 48214

AKT PEERLESS PROJECT NO. 5133D-6-20
DECEMBER 14, 2006

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PHASE II ENVIRONMENTAL SITE ASSESSMENT

@WATER LOFTS DEVELOPMENT (SOUTH)
ATWATER STREET
DETROIT, MICHIGAN 48214

AKT PEERLESS PROJECT NO. 5133D-7-20

1.0 INTRODUCTION

Detroit/Wayne County Port Authority (DWCPA) retained AKT Peerless Environmental Services (AKT Peerless) to conduct a Phase II Environmental Site Assessment (ESA) of the property located on Atwater Street between Rivard and Riopelle Streets in Detroit, Wayne County, Michigan (subject property). This report summarizes the subsurface investigation activities conducted at the @water Lofts South development (Parcel H), which is located at 1470 East Atwater Street. This report was completed on behalf of DWCPA and Belmar Development Group, LLC (the Developer). AKT Peerless understands the Developer plans to construct a mixed-use commercial and residential development at the subject property.

DWCPA was awarded United States Environmental Protection Agency (USEPA) Brownfield Assessment Grants to conduct environmental assessments of petroleum and hazardous substance sites. This Phase II ESA was conducted as part of the Hazardous Substance Assessment Grant No. 1. The scope of the Phase II ESA was based on:

- USEPA Work Plan, dated November 28, 2006, and approved December 6, 2006.
- Proposals for Environmental Investigation, (AKT Peerless Proposal No. PD-7465, dated October 31, 2006, and;
- The recognized environmental conditions (RECs) identified in AKT Peerless' Phase I ESA dated October 31, 2006.

This documents the field activities, sampling protocols, and laboratory analytical results associated with AKT Peerless' Phase II ESA. AKT Peerless' Phase II ESA was performed for the benefit of DWCPA, Belmar Development Group, LLC, and for future financing entities. AKT Peerless asserts that these parties may rely on the contents and conclusions of this report.

The field activities were performed on December 6 and 11, 2006. AKT Peerless' scope of work was based on American Society for Testing and Materials (ASTM) "*Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process E-1903-97.*" ASTM E-1903-97 provides a framework for employing good and commercial and customary practices in conducting a Phase II ESA of a property with RECs.

2.0 BACKGROUND

The background information provided in the following sections is based on AKT Peerless' Phase I ESA.

2.1 SUBJECT PROPERTY DESCRIPTION AND FEATURES

The subject property is situated between the southern side of E. Atwater Street and the Detroit River, near the intersection of Atwater and Riopelle Streets in Detroit, Wayne County, Michigan. It consists of one vacant rectangular-shaped parcel. The subject property is currently vacant land.

2.2 PHYSICAL SETTING

The subject property is located in an area of Detroit that is characterized by vacant land, residential, commercial, and industrial property.

2.3 HYDROGEOLOGIC SETTING

The following subsections present the regional geologic setting based on available published information and the local geologic setting based on subsurface work conducted at the subject property.

2.3.1 Topography and Surface Water Drainage

According to the USGS' *Topographic Map of the Detroit, Michigan Quadrangle*, which was published in 1968 and was photorevised in 1973 and 1980, the subject property is situated approximately 630 feet above the National Geodetic Vertical Datum (NGVD). The subject property's topography appears flat.

2.3.2 Regional Geology and Hydrogeology

Soil

According to the MDNR Geological Survey Division's *Bedrock Geology of Southern Michigan* (1987), bedrock beneath the subject property is classified as Dundee Limestone of the Traverse group, which is included in the Erian Series within the Devonian System of the Paleozoic Era. The depth to bedrock beneath the subject property was not readily available prior to the completion of this Phase II ESA.

According to the Michigan Geological Survey Division's publication, *Quaternary Geology of Southern Michigan* (1982), soil in the area is lacustrine clay and silt. This soil is described as gray to dark reddish brown and is varved in some localities. The soil chiefly underlies extensive, flat, low-lying areas formerly inundated by glacial Great Lakes. Soil thickness ranges from 10 to 30 feet. Typically, lacustrine clay and silt are associated with low hydraulic permeability and restrict the movement of groundwater.

According to the United States Department of Agriculture, *Soil Survey of Wayne County, Michigan,* the soil in the area is classified as the Pewamo-Blount-Metamora association. This soil is described as *"nearly level to gently sloping, poorly drained to somewhat poorly drained soils that have a fine-textured to moderately fine-textured subsoil."*

The geology encountered during the Phase II investigation is consistent with the geology described in these publications.

Groundwater

Typically, the water table aquifer flows toward a major drainage feature or in the same direction as the drainage basin. The Detroit River, which flows to the southwest, is located approximately

200 feet south of the subject property. Therefore, AKT Peerless infers that groundwater beneath the subject property flows to the south-southwest, with potential influence from the Detroit River. However, man-made cultural features (e.g., utility corridors and filled areas) may influence the groundwater flow direction in older urban environments with fill material and shallow groundwater.

Other than the Detroit River, AKT Peerless' research did not identify any known groundwater recharge area on or near the subject property, or any groundwater supply or monitor wells on the subject property. Groundwater from the area of the subject property does not serve as the primary drinking water source for properties in Detroit, which obtains its municipal water from the City of Detroit. Public sources of information do not identify main aquifers below the subject property.

2.4 SUBJECT PROPERTY HISTORY AND LAND USE

The following table summarizes the general development and use of the subject property, as identified by AKT Peerless.

Parcel H 1470 E. Atwater Street				
Time Period	**Improvements**	**Use**	**Owner / Occupant**	**Data Source(s)**
1884	Several sheds.	Lumber, coal storage, and Lime Kiln	R.C. Faulconer and F.B. Sibley & Co. Lime Kiln	Sanborns
1887	Construction of large rectangular building.	Powerhouse boiler room and offices, Ice Company, and Lime and Stone Yard.	Pittman and Deans Ice Company (1897), Detroit Ry Powerhouse (1897-1922), and J.H. Little Lime and Stone Yard	Sanborns
1922 – 1956	Removal of sheds.	Powerhouse	Public Lighting Commission (1951)	Municipal records Aerial photographs City directories Sanborns
1961	Removal of former buildings.	Vacant land	Unknown	Municipal records Aerial photographs City directories Sanborns
1966-2002	Construction of two rectangular buildings.	Light industrial/manufacturing	Cooper Supply Co. (1967) and Koenig Fuels and Supply (1970 and 1997-2003)	Municipal records Aerial photographs City directories Topographic map Sanborns
2006	Demolition of remaining structures.	Vacant	City of Detroit	Municipal records Aerial photographs

Parcel H 1470 E. Atwater Street				
Time Period	Improvements	Use	Owner / Occupant	Data Source(s)
				City directories Topographic map Sanborns

2.5 ADJACENT PROPERTY HISTORY AND LAND USE

2.5.1 Northern Adjoining Properties

The northern adjoining properties, beyond Atwater Street consisted of storage yards from at least 1884 until 1897, when it was improved with light industrial/manufacturing buildings and associated paved and landscaped areas. These buildings were demolished over time with the most recent demolitions between 2002 and 2006. Currently, the northeastern adjoining property consists of vacant land (@water Northeast and Northwest).

The northeastern adjoining property, beyond Riopelle Street and Atwater Street, contained railroad tracks and light industrial/manufacturing from at least 1884 until 1922. From at least 1950 to 2000 the property to the east was vacant land. Currently, the northeastern adjoining property consists of vacant land.

2.5.2 Eastern Adjoining Property

The eastern adjoining property contained a coal storage yard from at least 1884 the late 1800s or early 1900s, when it was improved with a light industrial/manufacturing building. This building was demolished between 2002 and 2006. Currently, the eastern adjoining property consists of vacant land.

2.5.3 Southern Adjoining Properties

The southern adjoining property consisted of boat slips from at least 1884 until the late 1800s or early 1900s when these features were filled. The southern adjoining property was then developed with industrial buildings, which extended across the subject and southern adjoining property. These structures were demolished between 2002 and 2006. AKT Peerless understands the Michigan Department of Natural Resources plans to construct a storm water retention basin or marina on the southern adjoining property. Currently, the southern adjoining property consists of vacant land.

2.5.4 Western Adjoining Property

The western adjoining property consisted of light industrial/manufacturing buildings from at least 1884 until these buildings were demolished in the 1980s. Currently, the western adjoining property consists of vacant land.

2.6 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

2.6.1 Enviro Matrix's June 2005 Baseline Environmental Assessment

Belmar Development provided AKT Peerless with a copy of a Category "N" Baseline Environmental Assessment (BEA), prepared in June 2005 by Enviro Matrix on behalf of the City of Detroit. The BEA was disclosed to the MDEQ on June 30, 2005. Enviro-Matrix's BEA

included several previous environmental investigations of the subject property, which are summarized in the following subsections:

- Phase I Environmental Site Assessment, prepared in May 1999 by Environmental Consulting and Technology Inc. (ECT) on behalf of The City of Detroit.

On May 28, 1999, ECT conducted a Phase I ESA of Parcel H. At the time of Phase I Environmental Site Assessment, the subject property consisted of a cement material distribution and storage facility with no structures except packing and loading hoppers and an operations control room. The purpose of ECT's Phase I ESA was to determine if the current and historical use of the property resulted in recognized environmental conditions. ECT identified the following environmental concerns associated with Parcel H.

1. three pole-mounted transformers of unknown age and PCB status
2. current and historical industrial use of the property (coal yard, marine terminal, cement plant, public lighting commission, Detroit Street Railway yard)
3. possible vent pipe indicating abandoned UST
4. surface staining from truck fueling
5. potential releases from numerous former USTs
6. the use of fill material during water front construction
7. onsite storage of UST and ASTs
8. current and historical use of the adjacent properties

ECT recommended conducting a Phase II subsurface investigation to evaluate the environmental concerns identified during the Phase I ESA.

- Phase II Environmental Inquiry, prepared in May 1999 by Roy F. Weston Inc. (Weston) on behalf of The City of Detroit.

In May 1999, Weston completed a Phase II Environmental Inquiry for the Waterfront Reclamation Casino Development Project. The purpose of this inquiry was to provide the information necessary to complete an Administrative Agreement and Covenant Not to Sue with the State of Michigan. The investigation area included 107 parcels and adjacent rights-of-way – part of which included the subject property Parcels D through H. Weston's investigation included (1) review of existing environmental reports, (2) geophysical survey of select parcels, (3) collecting surface samples from select parcels, (4) an evaluation of abandoned containers, and (5) drilling soil borings.

Weston conducted assessment activities on the subject property Parcels D through G. During the investigation on these parcels, Weston (1) conducted a geophysical surveys of Parcels F and G (outside of buildings), (2) drilled soil borings on Parcels D through H, (3) collected soil and groundwater samples, and (4) submitted soil samples for laboratory analyses. Samples were submitted for laboratory analyses of select parameters including VOCs, semi-volatile organic compounds (SVOCs), PCBs, and Michigan metals.

The following table provides a summary of analytical results detected above applicable criteria at the respective parcel.

Parcel Designation	Matrix	Parameter	Criteria Exceeded
Parcel D	Soil	SVOCs	Direct Contact
	Groundwater	SVOCs	Groundwater Contact
Parcel E (r-o-w)	Soil	Metal (arsenic)	Direct Contact
Parcel F	Soil	SVOCs Metals (arsenic and lead)	Direct Contact
	Groundwater	SVOCs	Groundwater Contact
Parcel H	Soil	BTEX	Groundwater to Surface Water Interface Drinking Water

In addition, several abandoned containers (ASTs, drums, etc.) were observed at the subject property during Enviro-Matrix investigation. These containers have since been removed from the subject property.

According to Enviro-Matrix, geophysical surveys conducted on the subject property identified two anomalies (one on northeast corner and one on southeast corner) on Parcel F. AKT Peerless was not provided with any additional information regarding investigation of these anomalies. It is important to note that the surveys were not conducted on all parcels (only Parcels F and G), and were conducted outside the former buildings.

2.6.2 AKT Peerless' October 2006, Phase I ESA

On October 31, 2006, AKT Peerless completed a Phase I ESA of the subject property on behalf of DWCPA. The purpose of AKT Peerless' ESA was to provide an independent, professional opinion of the *recognized environmental conditions* (RECs) or *historical recognized environmental conditions* (HRECs) associated with the subject property, if any. The RECs identified by AKT Peerless are summarized below.

1. Parcel H consisted of a coal and lumber storage yard from at least 1884 until industrial buildings were constructed in the late 1880s. These buildings were occupied by a powerhouse, a boiler room, a blacksmith shop, a machine shop, an oil house, coal bunkers, an ice house, and a lime kiln and storage yard. These structures were demolished between 1956 and 1961, and replaced with another industrial building. This building was occupied by a fuel supply company until it was demolished in the 2000s. Analytical results of previous investigations indicate that BTEX concentrations were detected in soil above MDEQ Part 201 GSI and Drinking Water Protection Criteria. It is AKT Peerless' opinion that a potential exists for the subject property's soil and groundwater to have been adversely affected by the historical use of Parcel H.

2. AKT Peerless observed fill material on the ground surface of each of the subject property parcels. The origin of this material is not known. Historical shipping wells formerly present on a portion of the subject property were filled with an unknown material.

3. Historical information indicates that the following USTs were located on Parcel H:

Underground Storage Tanks				
Installation Date	Tank Contents	Tank Capacity	Removal Date	Tank Status
April 1956	Gasoline	2,000 gallons	Unknown	Unknown
June 1960	Gasoline	2,000 gallons	Unknown	Unknown
December 1961	Gasoline	6,000 gallons	September 1990	Removed
December 1961	Diesel	12,000 gallons	September 1990	Removed

According to Fire Department records the 6,000-gallon gasoline UST and the 12,000-gallon diesel UST – formerly located along the northeastern portion of the former building - were removed in September 1990. In addition, fire department file information indicates two 2,000-gallon gasoline USTs were installed on Parcel H in 1956 and 1960, respectively. However, this information did not indicate whether these USTs were removed from Parcel H.

4. Industrial activities were conducted on the adjoining properties beginning in the 1800s. The eastern adjoining property was identified on the "open" LUST site database.

3.0 INVESTIGATION ACTIVITIES

3.1 SCOPE OF ASSESSMENT

To further evaluate the RECs identified in AKT Peerless' Phase I ESA, AKT Peerless conducted a subsurface investigation of the subject property that included: (1) completing a geophysical survey, (2) drilling 18 soil borings, (3) installing 13 temporary groundwater monitoring wells, (4) collecting 27 soil samples and 13 groundwater samples (5) submitting samples for laboratory analyses. Samples were submitted for select laboratory analysis including volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PNAs), Michigan Metals[1], and/or polychlorinated biphenyls (PCBs).

3.2 GEOPHYSICAL SURVEY

AKT Peerless retained Geophysical Imaging, Inc. (GII) to conduct a geophysical survey of Parcel H. In December 2006, GII conducted an electromagnetic induction (EM) and ground penetrating radar (GPR) survey to evaluate whether USTs are present beneath Parcel H. The results of the GPR survey indicated nine anomalies were detected beneath Parcel H. GII recommended conducting test pits to evaluate these anomalies. A copy of the geophysical survey report is included as Appendix C.

3.3 SUBSURFACE INVESTIGATION

The following table summarizes each REC, the subsurface investigation activities performed to address each REC, and the laboratory parameters used to address each REC.

[1] Michigan Metals include arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc.

Summary of AKT Peerless' Scope of Subsurface Investigation

REC #	Environmental Concern	Investigation Activity*
1	Historical use of Parcel H including (powerhouse, machine shop, oil house, coal bunkers, fuel supply company)	B-1 through B-18
2	Fill material	B-1 through B-18
3	Former USTs	B-7, B-18, B-11, B-12, and B-18 Geophysical survey
4	Adjoining properties	B-1, B-2, B-8, B-9, B-13, B-15 through B-17

* In total, 43 soil borings were drilled to evaluate the three @water Lofts developments. These soil borings (B-1 through B-18) were drilled on the @water Lofts South development (Parcel H).

3.4.1 Soil Evaluation

On December 6, 2006, AKT Peerless retained Fibertec Environmental Services. (Fibertec) of Brighton, Michigan to drill 11 soil borings at the subject property. Fibertec used hydraulic drive/direct-push (Geoprobe®) sampling techniques and followed the drilling procedures outlined in ASTM publication ASTM D-4700. Fibertec collected continuous soil samples from the soil borings at four-foot and five-foot intervals to the maximum depth explored of 20 feet below ground surface (bgs). AKT Peerless personnel inspected, field-screened, and logged the samples collected at each soil boring location. The following table summarizes soil boring locations and soil samples submitted for laboratory analyses

Summary of Soil Sample Collection

Soil Boring Location*	Soil Boring Location	Samples Submitted To Laboratory (in feet bgs)	Analytical Parameters
B-1	Near former machine shop	B-1 (3-4)	Leaded gasoline parameters[2]
		B-1 (9-10)	VOCs, PNAS, Michigan metals
B-2	In area of former coal Bunkers and cement warehouse	B-2 (1-3)	PNAs and arsenic
		B-2 (5-7)	VOCs, PNAs, PCBs, Michigan metals
B-3	In area of former blacksmith	B-3 (5-6)	VOCs, PNAS, Michigan metals
B-4	In area of former machine shop	B-4 (2-4)	VOCs, PNAs, PCBs, Michigan metals
B-5	Near former oil house	B-5 (5-6)	Waste oil parameters[3]
B-6	In area of former ice company and cement yard	B-6 (4-6)	VOCs, PNAS, Michigan metals
B-7	Near former warehouse and machine shop	B-7 (0-0.5)	VOCs, PNAS, Michigan metals
		B-7 (1-3)	VOCs, PNAS, Michigan metals
B-8	UST area	B-8 (0-0.5)	PNAs and arsenic

[2] Leaded gasoline parameters include benzene, toluene, ethylbenzene, trimethylbenzene isomers (TMBs), 1,2-Dibromoethane (EDB), 1,2-Dichloroethane ((DCA), naphthalene, 2-methylnaphthalene, and lead.
[3] Waste oil parameters include BTEX, TMB, EDB, DCA, PNAs, cadmium, chromium, lead, volatile halocarbons, and PCBs.

Soil Boring Location*	Soil Boring Location	Samples Submitted To Laboratory (in feet bgs)	Analytical Parameters
		B-8 (2-4)	VOCs, PNAs, PCBs, Michigan metals
B-9	In area of former building and yard	B-9 (0-0.5)	VOCs, PNAs, PCBs, Michigan metals
B-10	In area of former ice house	B-10 (2-4)	VOCs, PNAS, Michigan metals
B-11	In UST area and lime kiln storage yard	B-11 (2-4)	VOCs, PNAS, Michigan metals
B-12	In UST area and lime kiln storage yard	B-12 (0-0.5)	VOCs, PNAS, Michigan metals
		B-12 (2-4)	VOCs, PNAs, PCBs, Michigan metals
B-13	Western edge of the subject property	B-13 (2-4)	VOCs, PNAS, Michigan metals
B-14	In area of former cement yard	B-14 (0-0.5)	VOCs, PNAS, Michigan metals
		B-14 (2-4)	VOCs, PNAS, Michigan metals
B-15	In area of former boat slip	B-15 (0-0.5)	VOCs, PNAS, Michigan metals
		B-15 (6-8)	VOCs, PNAS, Michigan metals
B-16	Northwest corner of the subject property	B-16 (6-8)	VOCs, PNAS, Michigan metals
B-17	Near former boat slips.	B-17 (3-4)	VOCs, PNAS, Michigan metals
		B-17 (8-10)	VOCs, PNAS, Michigan metals
B-18	Near former boat slip	B-18 (2-4)	VOCs, PNAS, Michigan metals
		B-18 (6-8)	VOCs, PNAS, Michigan metals

*Note: It should be noted that soil borings B-19 through B-32 were drilled on Atwater (Northeast) and soil borings B-33 through B-43 were located on Atwater (Northwest).

Refer to Figure 2 for a site map with soil boring locations.

3.4.2 Groundwater Evaluation

AKT Peerless encountered groundwater in 13 of the 18 soil borings drilled at the subject property. The groundwater was encountered at depths ranging from 2.5 to 10 feet below ground surface AKT Peerless instructed Fibertec to install temporary groundwater monitoring wells in these boring locations. The following table summarizes temporary groundwater monitoring well locations and groundwater samples submitted for laboratory analyses.

Summary of Groundwater Sample Collection

Monitor Well Location	Monitor Well Location On Subject Property	Samples Submitted To Laboratory	Analytical Parameters
B-2	In area of former coal Bunkers and cement warehouse	B-2w	VOCs, PNAs, PCBs, Michigan metals
B-3	In area of former blacksmith	B-3w	VOCs, PNAS, Michigan metals
B-4	In area of former machine shop	B-4w	VOCs, PNAS, Michigan metals
B-5	Near former oil house	B-5w	Waste oil parameters
B-6	In area of former ice company and cement yard	B-6w	VOCs, PNAS, Michigan metals

Monitor Well Location	Monitor Well Location On Subject Property	Samples Submitted To Laboratory	Analytical Parameters
B-7	Near former warehouse and machine shop	B-7w	VOCs, PNAS, Michigan metals
B-10	In area of former ice house	B-10w	VOCs, PNAS, Michigan metals
B-11	In UST area and lime kiln storage yard	B-11w	VOCs, PNAS, Michigan metals
B-13	Western edge of the subject property	B-13w	VOCs, PNAS, Michigan metals
B-14	In area of former cement yard	B-14w	VOCs, PNAS, Michigan metals
B-16	Northwest corner of the subject property	B-16w	VOCs, PNAS, Michigan metals
B-17	Near former boat slips.	B-17w	VOCs and PNAs
B-18	Near former boat slip	B-18w	VOCs, PNAS, Michigan metals

Refer to Figure 2 for a site map with temporary monitor well locations.

3.5 QUALITY ASSURANCE/QUALITY CONTROL

To ensure the accuracy of data collected during on site activities, AKT Peerless implemented proper quality assurance/quality control (QA/QC) measures. The QA/QC procedures included, but were not limited to, (1) decontamination of sampling equipment before and between sampling events, (2) calibration of field equipment, (3) documentation of field activities, and (4) appropriate sample preservation techniques, and (5) collection of QAQC evaluation samples. AKT Peerless performed a qualitative evaluation of all samples collected during drilling, and a quantitative analysis of discrete samples using approved laboratory analytical methods.

3.5.1 Decontamination of Equipment

During sample collection, AKT Peerless and Fibertec adhered to proper decontamination procedures. Sampling equipment was decontaminated using the following methods to minimize potential cross-contamination of soil samples:

- Steam-cleaning or washing and scrubbing the equipment with non-phosphate detergent;
- Rinsing the equipment with tap water; and
- Air-drying the equipment.

3.5.2 Calibration of Field Equipment

During AKT Peerless' Phase II ESA, a photoionization detector (PID) was used to screen all soil samples. The PID was maintained in a calibrated condition using 100-ppm isobutylene gas prior to conducting the Phase II ESA.

3.5.3 Documentation of Activities

During AKT Peerless' Phase II ESA activities, subject property conditions (i.e. soil boring locations, weather conditions) were documented. AKT Peerless visually inspected the soil samples and prepared a geologic log for each soil boring. The logs included soil characteristics such as (1) color, (2) composition (e.g., sand, clay, or gravel), (3) soil moisture and/or water table depth, and (4) signs of possible contamination. All samples were delivered to the laboratory under chain-of-custody documentation. See Appendix A for AKT Peerless' soil

boring logs.

3.5.4 Sample Preservation Techniques

AKT Peerless collected samples in accordance with United States Environmental Protection Agency's (USEPA) Publication SW-846, *"Testing Methods for Evaluating Solid Waste."* Samples were collected in laboratory-supplied containers, properly preserved, stored on ice, and submitted under chain-of-custody documentation to the laboratory.

3.5.5 QA/QC Samples

During AKT Peerless' Phase II activities, AKT Peerless field personnel strictly followed quality control measures through the use of replicate measurements, equipment calibration checks, and data verification. Field sampling precision and data quality were evaluated through the use of sample duplicates, equipment blanks, VOA trip blanks and bottle blanks. Sample duplicates provide precision information regarding homogeneity, handling, transportation, storage, and analyses. Equipment (rinsate) blanks will be used to assure that proper decontamination procedures have been performed and that no cross-contamination has occurred during sampling or transportation. VOA trip blanks will be used to assure that transportation of samples have not contaminated samples. Bottle blanks will be used to ensure that containers utilized to collect samples were free of contaminants.

3.6 LABORATORY ANALYSES AND METHODS

AKT Peerless submitted 28 soil samples and 15 groundwater samples for laboratory analyses. The samples were analyzed for select laboratory analysis including VOCs, PNAs, leaded gasoline parameters, Michigan metals, arsenic, waste oils, and/or PCBs. Refer to Section 3.4 for a summary of the soil and groundwater samples selected and the associated parameters selected for analyses.

The laboratory analyzed the samples for: (1) VOCs in accordance with USEPA Method 5035/8260; (2) PNAs in accordance with USEPA Method 3550B/8270C; (3) metals in accordance with USEPA Method 6020/7470/7471; and (4) PCBs in accordance with USEPA Method 8082.

4.0 LOCAL GEOLOGY/HYDROGEOLOGY

4.1 LOCAL GEOLOGY

During drilling activities, AKT Peerless encountered:

- **FILL:** in all soil boring locations from ground surface to varying depths in some cases as deep as 25 feet bgs. The fill consisted of brown/black sand and gravel with masonry debris located in some of the borings.
- **CLAY:** in most soil boring locations at varying depths from approximately 4 to 25 feet below ground surface, the maximum explored depth. This clay was dry to moist, gray to brown in color, medium-stiff to stiff, occasionally mottled, and contained trace gravel.

Other than the fill material, the geology encountered during this Phase II ESA is consistent with the geology described in the publications noted in Section 2.3.2. Refer to the soil boring logs

Appendix A for a more detailed description of subsurface soil conditions.

4.2 LOCAL HYDROGEOLOGY

AKT Peerless encountered groundwater in 13 of the 18 soil borings drilled at the subject property. The groundwater was encountered at depths ranging from 2.5 to 10 feet below ground surface. Based on conditions encountered during this investigation, shallow groundwater conditions typically consisted of shallow, perched groundwater encountered in fill material above native clay. AKT Peerless was unable to determine groundwater flow direction based on this investigation.

5.0 RESULTS OF LABORATORY ANALYSIS

5.1 RELEVANT EXPOSURE PATHWAYS

As defined in Michigan Public Act 451 Part 201, "relevant pathway" means an exposure pathway that is reasonable and relevant because there is a reasonable potential for exposure to a hazardous substance. Applicable criterion means a cleanup criterion for a relevant pathway. A criterion is not an applicable criterion if the exposure pathway is not a relevant pathway at the property.

The analysis of potential exposure pathways is based on existing conditions at the subject property.

5.1.1 Soil Exposure Pathways

The following subsections describe the potential soil exposure pathways and evaluate hazardous substances in light of the applicable criteria.

Drinking Water Protection Criteria
In order to evaluate "facility" status, analytical results were compared to Drinking Water Protection Criteria.

Groundwater Surface Water Interface Protection Criteria
In order to evaluate "facility" status, analytical results were compared to Groundwater Surface Water Interface Protection Criteria.

Groundwater Contact Protection Criteria
Groundwater Contact Protection is a relevant pathway.

Soil Volatilization to Indoor Air Inhalation Criteria
Soil Volatilization to Indoor Air Inhalation is a relevant exposure pathway.

Infinite Source Volatile Soil Inhalation Criteria
Infinite Source Volatile Soil Inhalation is a relevant exposure pathway.

Particulate Soil Inhalation Criteria
Particulate Soil Inhalation is a relevant exposure pathway.

Soil Direct Contact Criteria

Soil Direct Contact is a relevant exposure pathway.

5.1.2 Groundwater Exposure Pathways

The following subsections describe the potential groundwater exposure pathways and evaluate hazardous substances in light of the applicable criteria.

Drinking Water Criteria
In order to evaluate "facility" status, analytical results were compared to Drinking Water Criteria.

Groundwater Surface Water Interface Criteria
In order to evaluate "facility" status, analytical results were compared to Groundwater Surface Water Interface Criteria.

Groundwater Volatilization to Indoor Air Inhalation Criteria
Groundwater Volatilization to Indoor Air Inhalation is a relevant exposure pathway.

Groundwater Contact Criteria
Groundwater Direct Contact is a relevant exposure pathway.

5.2 APPLICABLE CRITERIA

AKT Peerless compared the laboratory analytical data to the applicable Part 201 Generic Residential Cleanup Criteria (GRCC) as published by the Remediation and Redevelopment Division (RRD) of the Michigan Department of Environmental Quality (MDEQ). The relevant exposure pathways at the subject property include:

- Soil Volatilization to Indoor Air Inhalation (SVIAI)/Groundwater Volatilization to Indoor Air Inhalation (GVIAI);
- Infinite Source Volatile Soil Inhalation (VSIC);
- Particulate Soil Inhalation (PSI);
- Soil Direct Contact (DC);
- Groundwater Contact (GC)/Groundwater Contact Protection (GCP);
- Groundwater Surface Water Interface (GSI)/Groundwater Surface Water Interface Protection (GSIP); and
- Drinking Water Protection (DWP)/Drinking Water (DW)

5.3 SOIL ANALYTICAL RESULTS

AKT Peerless submitted 27 soil samples for laboratory analysis. Laboratory analytical results indicated that concentrations of VOCs, PNAs, and metals were detected in soil samples above MDEQ GRCC. The following table summarizes the soil boring locations, the analytes detected, and their respective exceeded MDEQ GRCC.

Soil Boring Location & Depth	Parameter	DWP	SVIAI	VSIC	PSI	DC	GSIP
B-1 (9-10)	Trichloroethylene	☑					
	Arsenic	☑				☑	
	Mercury						☑
	Selenium						☑
B-2 (1-3)	Arsenic	☑				☑	
B-2 (5-7)	Arsenic	☑					
	Mercury						☑
	Selenium						☑
B-3 (5-6)	Arsenic	☑				☑	
	Mercury						☑
	Selenium						☑
B-5 (5-6)	Naphthalene						☑
	Benzo(a)pyrene					☑	
	Fluoranthene						☑
	Lead					☑	
B-6 (4-6)	Arsenic	☑				☑	☑
	Lead					☑	
	Mercury						☑
	Selenium	☑					☑
	Silver						☑
B-7 (0-0.5)	Naphthalene						☑
	Arsenic	☑				☑	☑
B-7 (1-3)	Mercury						☑
	Selenium						☑
	Silver						☑
B-8 (0-0.5)	Acenaphthene						☑
	Benzo(a)pyrene					☑	
	Fluoranthene						☑
	Fluorene						☑
	Naphthalene						☑
	Phenanthrene						☑
	Arsenic	☑					
B-8 (2-4)	Arsenic	☑					
	Mercury						☑
	Selenium						☑
	Silver						☑
B-9 (0-0.5)	Arsenic	☑				☑	
	Mercury						☑
	Selenium						☑
B-10 (2-4)	Arsenic	☑					
	Mercury						☑
B-11 (2-4)	Arsenic	☑					
	Lead					☑	
	Mercury						☑
	Selenium						☑
B-12 (0-0.5)	Selenium						☑
B-12 (2-4)	Arsenic	☑					
	Arsenic	☑				☑	

Soil Boring Location & Depth	Parameter	DWP	SVIAI	VSIC	PSI	DC	GSIP
B-13 (2-4)	Arsenic	☑				☑	
	Selenium						☑
B-14 (0-0.5)	Benzo(a)pyrene					☑	
	Fluoranthene						☑
	Phenanthrene						☑
	Arsenic	☑					
	Mercury						☑
	Silver						☑
B-14 (2-4)	Benzo(a)pyrene					☑	
	Arsenic	☑				☑	☑
	Lead					☑	
	Mercury	☑					☑
	Selenium	☑					☑
	Silver						☑
B-15 (0-0.5)	Benzo(a)pyrene					☑	
	Fluoranthene						☑
	Phenanthrene						☑
	Arsenic	☑				☑	
	Lead					☑	
	Mercury						☑
	Selenium						☑
	Silver						☑
B-15 (6-8)	Arsenic	☑					
	Mercury						☑
	Selenium						☑
B-16 (6-8)	Arsenic	☑					
	Mercury						☑
B-17 (3-4)	Arsenic	☑				☑	
	Mercury						☑
	Selenium						☑
B-18 (2-4)	Arsenic	☑				☑	
B-18 (6-8)	Arsenic	☑					
	Mercury						☑

It is important to note that AKT Peerless' soil borings were drilled a safe distance from the geophysical anomalies. Therefore, additional investigation may be necessary during investigation of these anomalies.

Refer to Table 1 for a summary of soil analytical results. Refer to Appendix B for a complete analytical laboratory report. See Figure 3 for a site map with soil analytical results exceeding relevant MDEQ GRCC.

5.4 GROUNDWATER ANALYTICAL RESULTS

AKT Peerless submitted 13 groundwater samples for laboratory analysis. Laboratory analytical results indicated that concentrations of metals were detected in groundwater samples above MDEQ GRCC. The following table summarizes the temporary well locations, the analytes detected, and their respective exceeded MDEQ GRCC.

Soil Boring Location & Depth	Parameter	DW	GVIAI	GC	GSI
B-2w	Arsenic	☑			
	Lead	☑			
	Mercury				☑
	Silver				☑
B-3w	Arsenic	☑			
	Lead	☑			
B-4w	Arsenic	☑			☑
	Lead	☑			
	Mercury				☑
	Selenium	☑			☑
	Silver				☑
B-5w	Lead	☑			
B-6w	Arsenic	☑			☑
	Lead	☑			
	Mercury				☑
	Selenium				☑
B-7w	Arsenic	☑			☑
	Lead	☑			
	Mercury				☑
B-10w	Arsenic	☑			
	Lead	☑			
	Mercury				☑
B-11w	Arsenic	☑			
	Lead	☑			
	Mercury				☑
	Selenium				☑
B-13w	Lead	☑			
	Silver				☑
B-14w	Arsenic	☑			
	Lead	☑			
	Mercury	☑			☑
	Selenium				☑
	Silver				☑
B-16w	Arsenic	☑			
	Lead	☑			
	Mercury	☑			☑
	Silver				☑
B-18w	Arsenic	☑			
	Lead	☑			
	Mercury				☑
	Silver				☑

It is important to note that AKT Peerless' soil borings were drilled a safe distance from the geophysical anomalies. Therefore, additional investigation may be necessary during investigation of these anomalies.

Refer to Table 2 for a summary of groundwater analytical results. Refer to Appendix B for a

complete analytical laboratory report.

6.0 SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

6.1 SUMMARY OF SUBSURFACE INVESTIGATION

In December 2006, AKT Peerless: (1) completed a geophysical survey of the subject property; (2) drilled 18 soil borings, (3) installed 13 temporary groundwater monitoring wells, (4) collected 28 soil samples and 13 groundwater samples, and (5) submitted samples for laboratory analysis. Samples were submitted for select laboratory analysis including VOCs, PNAs, PCBs, and/or Michigan Metals.

6.2 CONCLUSIONS

Based on laboratory analytical results, concentrations of VOCs, PNAs, and metals were detected in the soil samples above the MDEQ Generic Residential Cleanup Criteria. In addition, concentrations of metals were detected in groundwater samples above MDEQ Generic Residential Cleanup Criteria. Therefore, the subject property meets the definition of a "facility", as defined in Part 201 of Natural Resources and Environmental Protection Act (NREPA), Michigan Public Act (PA) 451, as amended. Further, the results of the GPR survey indicated three anomalies were detected beneath Parcel H.

6.3 RECOMMENDATIONS

The subject property meets the definition of a "facility". AKT Peerless recommends that, prior to transfer of the property to a new owner/operator, the new owner/operator should complete a Baseline Environmental Assessment (BEA). The BEA provides new purchaser's liability for existing contamination under Part 201 of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451 as amended (Part 201). AKT Peerless also recommends further investigation of the anomalies identified during the geophysical survey of the subject property.

AKT Peerless further recommends preparation of a Section 7a Compliance Analysis or "Due Care" Plan. Additional investigation will be necessary to define the extent of contamination identified at the subject property. Due care obligations under Part 201 include:

1. Undertake measures as are necessary to prevent exacerbation of the existing contamination.
2. Exercise due care by undertaking response activity necessary to mitigate unacceptable exposure to hazardous substances, mitigate fire and explosion hazards due to hazardous substances, and allow for the intended use of the *facility* in a manner that protects the public health and safety.
3. Take reasonable precautions against the reasonably foreseeable acts of omissions of a third party and the consequences that foreseeably could result from those acts or omissions.

7.0 LIMITATIONS

The information and opinions obtained in this report are for the exclusive use of Belmar Development Group, LLC and for future financing entities. No distribution to, or reliance by, other parties may not occur without the express written permission of AKT Peerless. AKT

Peerless will not distribute this report without the written consent of Belmar Development Group, LLC, or as required by law or by a Court order. The information and opinions contained in the report are given in light of that assignment. The report must be reviewed and relied upon only in conjunction with the terms and conditions expressly agreed upon by the parties and as limited therein. Any third parties who have been extended the right to rely on the contents of this report by AKT Peerless (which is expressly required prior to any third-party release), expressly agrees to be bound by the original terms and conditions entered into by AKT Peerless, DWCPA, and Belmar Development Group, LLC.

8.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

The following individuals contributed to the completion of this Phase II ESA.

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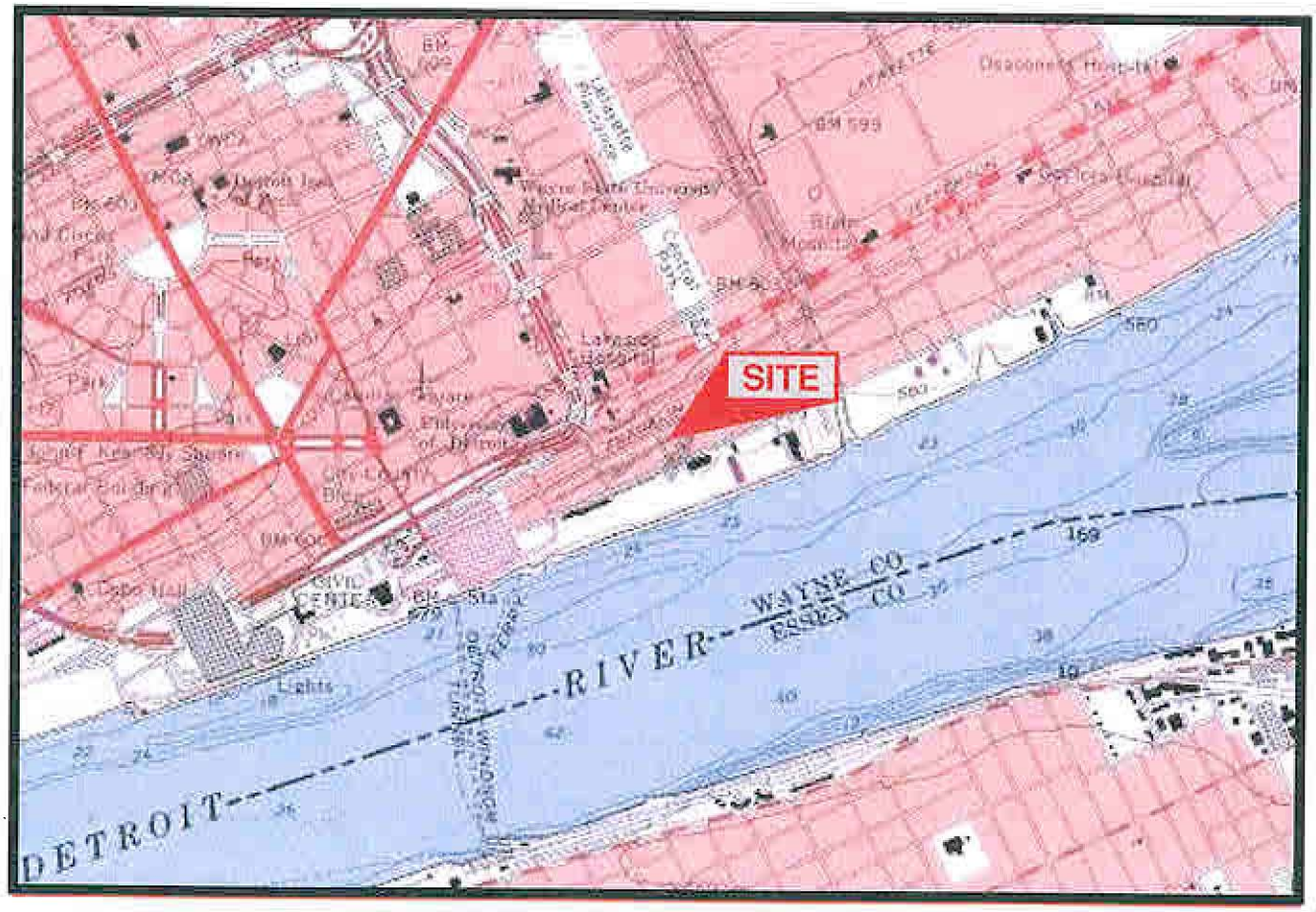
FIGURES

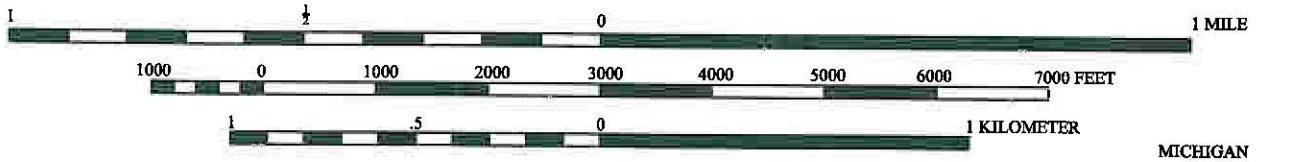
DETROIT QUADRANGLE

MICHIGAN - WAYNE COUNTY

7.5 MINUTE SERIES (TOPOGRAPHIC)



T.2 S. - R.12 E.



CONTOUR INTERVAL 5 FEET
DATUM IS MEAN SEA LEVEL

MICHIGAN
QUADRANGLE LOCATION

IMAGE TAKEN FROM 1968 U.S.G.S. TOPOGRAPHIC MAP
PHOTOREVISED 1973 AND 1980

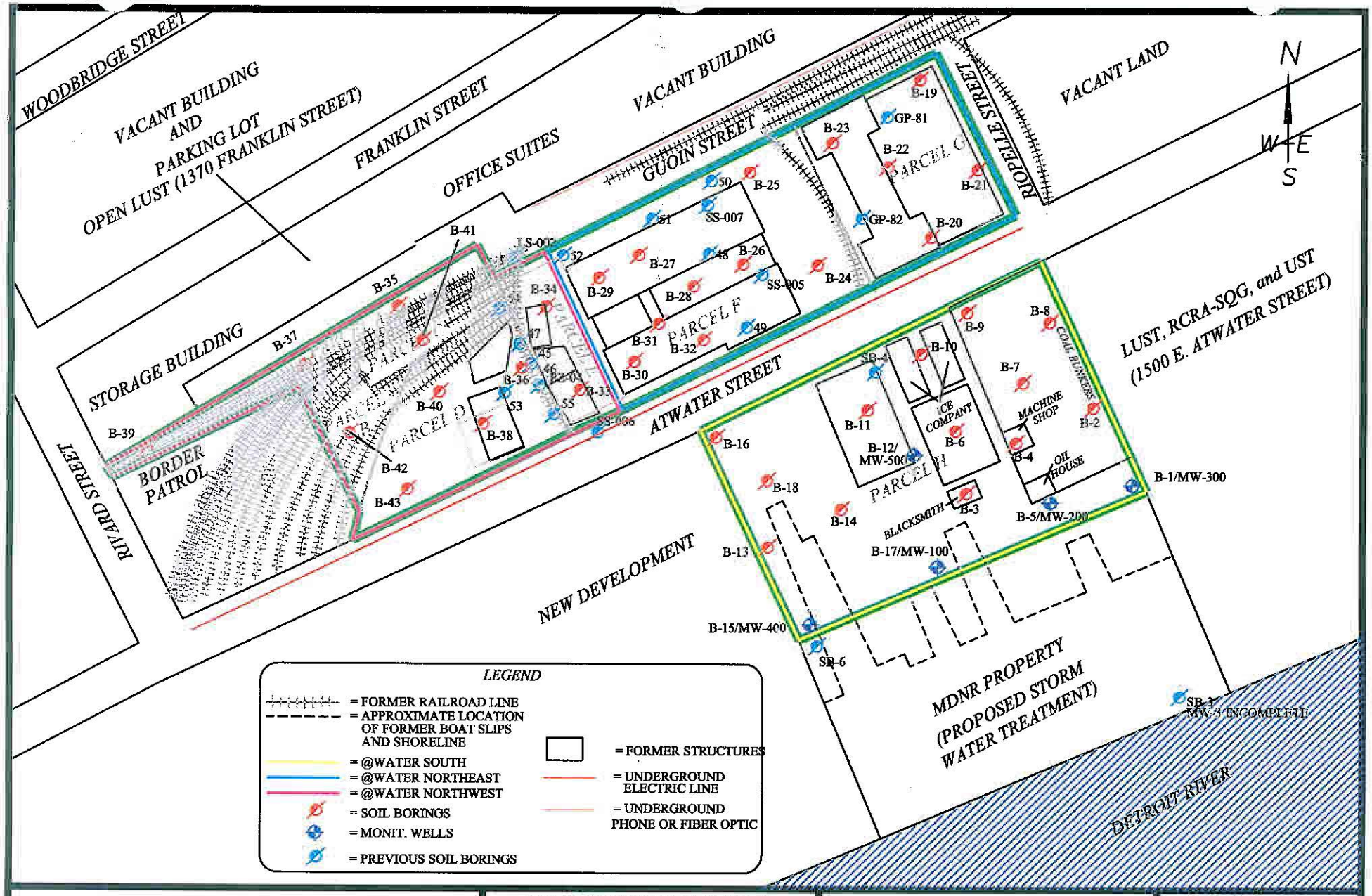
AKTPEERLESS
environmental services

TOPOGRAPHIC LOCATION MAP

@WATER LOFTS
(SOUTH)
ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER : 5133D

DRAWN BY: MB
DATE. 12.14.06

FIGURE 1



AKTPEERLESS environmental services

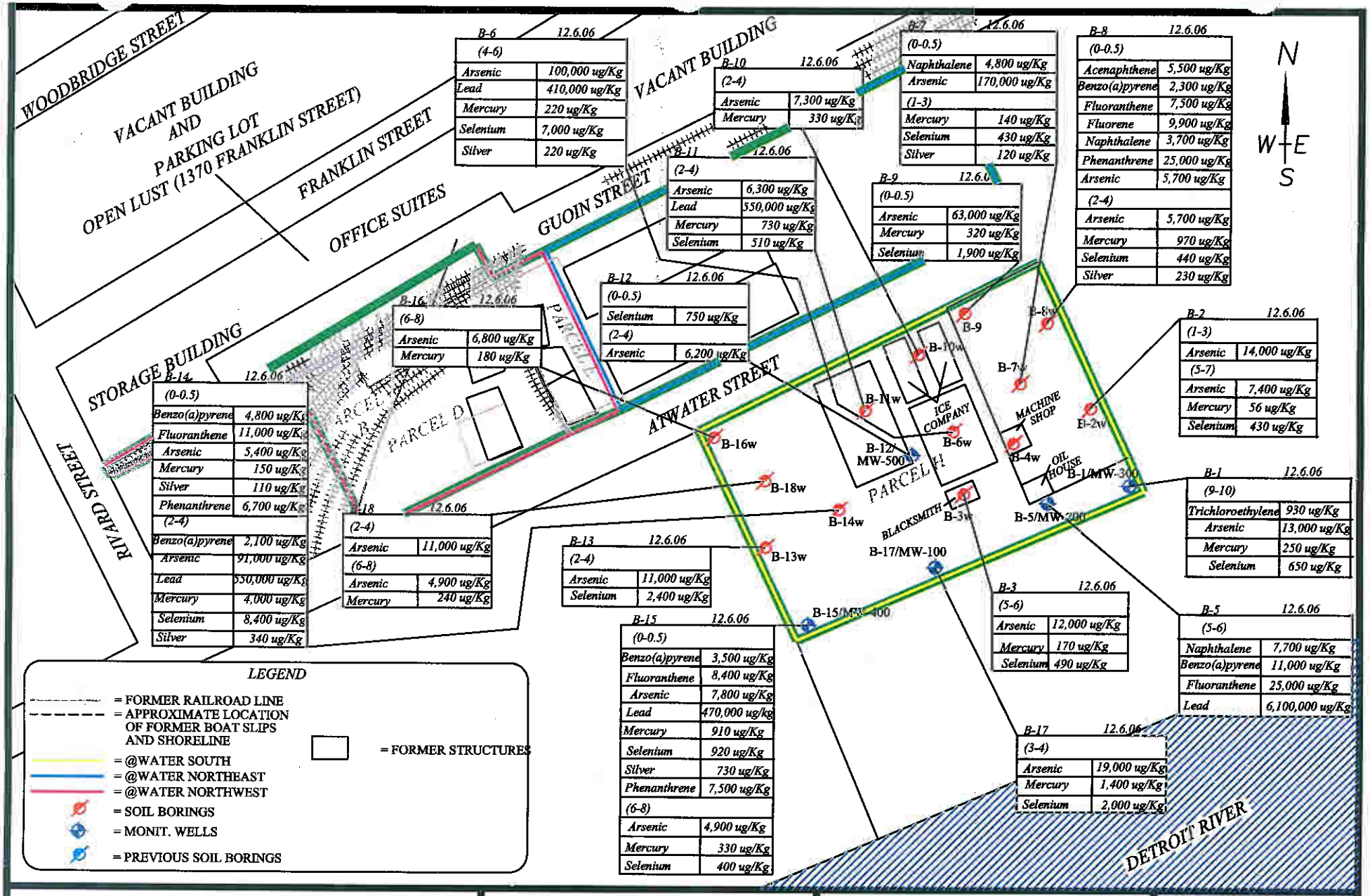
SUBJECT PROPERTY, UTILITY, AND SOIL BORING LOCATION MAP
@WATER LOFTS (SOUTH)
ATWATER STREET
DETROIT, MICHIGAN

PROJECT NUMBER : 5133D

DRAWN BY: MB
DATE: 12.14.06

0 75 150
SCALE: 1" = 150'±

FIGURE 2



AKTPEERLESS environmental services

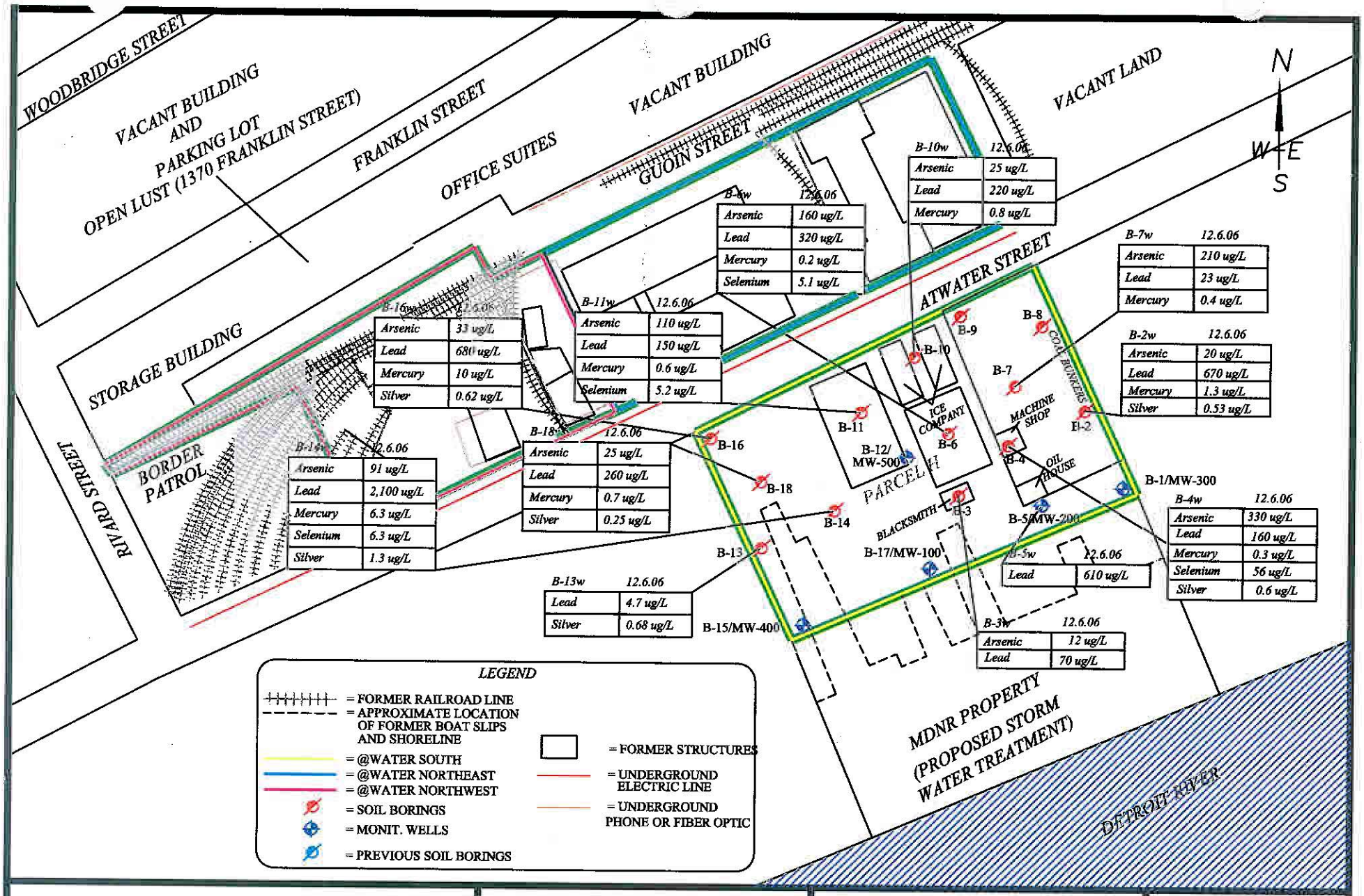
SITE MAP WITH SOIL ANALYTICAL RESULTS EXCEEDING MDEQ GRCC
@WATER LOFTS (SOUTH)
ATWATER STREET
DETROIT, MICHIGAN

PROJECT NUMBER : 5133D

DRAWN BY: JM
DATE: 12.14.06

0 75 150
SCALE: 1" = 150'±

FIGURE 3



AKTPEERLESS environmental services

SITE MAP WITH GROUNDWATER ANALYTICAL RESULTS EXCEEDING MDEQ GRCC

@WATER LOFTS (SOUTH)

ATWATER STREET
DETROIT, MICHIGAN

PROJECT NUMBER : 5133D

DRAWN BY: MB
DATE: 12.14.06

0 75 150
SCALE: 1" = 150'±

FIGURE 4

TABLES

Table 1
Summary of Soil Analytical Results
Atwater Lofts
Atwater Street
Detroit, Michigan
AKT Peerless Project Number
5133D2-6-20

Sample Identification and Date		Statewide Default Background Levels	Groundwater Protection			Indoor Air	Ambient Air (Y)		Direct Contact	Groundwater Protection				Indoor Air	Ambient Air (Y)							
			Residential and Commerical I Drinking Water Protection Criteria & RBSLs	Residential and Commerical I Groundwater Surface Water Interface Protection Criteria & RBSLs	Residential and Commerical I Groundwater Contact Protection Criteria & RBSLs	Residential and Commerical I Soil Volatilization to Indoor Air Inhalation Criteria & RBSLs	Residential and Commerical I Infinite Source Volatile Soil Inhalation Criteria (VSIC) & RBSLs	Residential and Commerical I Particulate Soil Inhalation Criteria & RBSLs	Residential and Commerical I Direct Contact Criteria & RBSLs	Residential Drinking Water Protection Criteria & RBSLs	Industrial and Commercial Drinking Water Protection Criteria & RBSLs	Groundwater Surface Water Interface Protection Criteria & RBSLs	Groundwater Contact Protection Criteria & RBSLs	Soil Volatilization to Indoor Air Inhalation Criteria & RBSLs	Infinite Source Volatile Soil Inhalation Criteria (VSIC) & RBSLs	Particulate Soil Inhalation Criteria & RBSLs	B-1 (3-4 feet) 12.6.06	B-1 (9-10 feet) 12.6.06	B-2 (1-3 feet) 12.6.06	B-2 (5-7 feet) 12.6.06	B-3 (5-6 feet) 12.6.06	B-4 (2-4 feet) 12.6.06
Analytes	**CAS#**																					
Volatile Organic Compounds (VOCs) (ug/Kg)																						
n-Butylbenzene	104518	NA	1,600	ID	1.2E+5	ID	ID	ID	2.5E+6	1,600	4,600	ID	1.2E+5	ID	ID	ID	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	135988	NA	1,600	ID	88,000	ID	ID	ID	2.5E+6	1,600	4,600	ID	88,000	ID	ID	ID	ND	ND	NA	ND	ND	ND
Naphthalene	91203	NA	35,000	870	2.1E+6	2.5E+5	3.0E+5	2.0E+8	1.6E+7	35,000	1.0E+5	870	2.1E+6	4.7E+5	3.5E+5	8.8E+7	ND	ND	NA	ND	ND	ND
Toluene (I)	108883	NA	16,000	2,800	2.5E+5 (C)	2.5E+5 (C)	2.8E+6	2.7E+10	2.5E+5 (C)	16,000	16,000	2,800	2.5E+5 (C)	2.5E+5 (C)	3.3E+6	1.2E+10	ND	180	NA	ND	ND	ND
Trichloroethylene	79016	NA	100	4,000 (X)	4.4E+5	7,100	78,000	1.8E+9	5.0E+5 (C,ID)	100	100	4,000 (X)	4.4E+5	37,000	2.6E+5	2.3E+9	ND	**930**	NA	ND	ND	ND
1,2,4-Trimethylbenzene (I)	95636	NA	2,100	570	1.1E+5 (C)	1.1E+5 (C)	2.1E+7	8.2E+10	1.1E+5 (C)	2,100	2,100	570	1.1E+5 (C)	1.1E+5 (C)	2.5E+7	3.6E+10	ND	480	NA	ND	ND	ND
Xylenes (I)	1330207	NA	5,600	700	1.5E+5 (C)	1.5E+5 (C)	4.6E+7	2.9E+11	1.5E+5 (C)	5,600	5,600	700	1.5E+5 (C)	1.5E+5 (C)	5.4E+7	1.3E+11	ND	340	NA	ND	ND	ND
Remaining VOCs	Varies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	ND	NA	ND	ND	ND
Polynuclear Aromatic Hydrocarbons (PNAs) (ug/Kg)																						
Acenaphthene	83329	NA	3.0E+5	4,400	9.7E+5	1.9E+8	8.1E+7	1.4E+10	4.1E+7	3.0E+5	8.8E+5	4,400	9.7E+5	3.5E+8	9.7E+7	6.2E+9	NA	ND	ND	ND	ND	ND
Acenaphthylene	208968	NA	5,900	ID	4.4E+5	1.6E+6	2.2E+6	2.3E+9	1.6E+6	5,900	17,000	ID	4.4E+5	3.0E+6	2.7E+6	1.0E+9	NA	ND	ND	ND	ND	ND
Anthracene	120127	NA	41,000	ID	41,000	1.0E+9 (D)	1.4E+9	6.7E+10	2.3E+8	41,000	41,000	ID	41,000	1.0E+9 (D)	1.6E+9	2.9E+10	NA	ND	ND	ND	ND	ND
Benzo(a)anthracene (Q)	56553	NA	NLL	NLL	NLL	NLV	NLV	ID	20,000	NLL	NLL	NLL	NLL	NLV	NLV	ID	NA	1,700	ND	ND	350	ND
Benzo(a)pyrene (Q)	50328	NA	NLL	NLL	NLL	NLV	NLV	1.5E+6	2,000	NLL	NLL	NLL	NLL	NLV	NLV	1.9E+6	NA	1,800	ND	ND	ND	ND
Benzo(b)fluoranthene (Q)	205992	NA	NLL	NLL	NLL	ID	ID	ID	20,000	NLL	NLL	NLL	NLL	ID	ID	ID	NA	2,200	ND	ND	730	ND
Benzo(g,h,i)perylene	191242	NA	NLL	NLL	NLL	NLV	NLV	8.0E+8	2.5E+6	NLL	NLL	NLL	NLL	NLV	NLV	3.5E+8	NA	1,300	ND	ND	430	ND
Benzo(k)fluoranthene (Q)	207089	NA	NLL	NLL	NLL	NLV	NLV	ID	2.0E+5	NLL	NLL	NLL	NLL	NLV	NLV	ID	NA	770	ND	ND	ND	ND
Chrysene (Q)	218019	NA	NLL	NLL	NLL	ID	ID	ID	2.0E+6	NLL	NLL	NLL	NLL	ID	ID	ID	NA	2,000	ND	ND	1,000	ND
Dibenzo(a,h)anthracene (Q)	53703	NA	NLL	NLL	NLL	NLV	NLV	ID	2,000	NLL	NLL	NLL	NLL	NLV	NLV	ID	NA	ND	ND	ND	ND	ND
Fluoranthene	206440	NA	7.3E+5	5,500	7.3E+5	1.0E+9 (D)	7.4E+8	9.3E+9	4.6E+7	7.3E+5	7.3E+5	5,500	7.3E+5	1.0E+9 (D)	8.9E+8	4.1E+9	NA	3,800	ND	ND	ND	ND
Fluorene	86737	NA	3.9E+5	5,300	8.9E+5	5.8E+8	1.3E+8	9.3E+9	2.7E+7	3.9E+5	8.9E+5	5,300	8.9E+5	1.0E+9 (D)	1.5E+8	4.1E+9	NA	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene (Q)	193395	NA	NLL	NLL	NLL	NLV	NLV	ID	20,000	NLL	NLL	NLL	NLL	NLV	NLV	ID	NA	1,300	ND	ND	370	ND
2-Methylnaphthalene	91576	NA	57,000	ID	5.5E+6	ID	ID	ID	8.1E+6	57,000	1.7E+5	ID	5.5E+6	ID	ID	ID	NA	1,100	ND	ND	ND	ND
Naphthalene	91203	NA	35,000	870	2.1E+6	2.5E+5	3.0E+5	2.0E+8	1.6E+7	35,000	1.0E+5	870	2.1E+6	4.7E+5	3.5E+5	8.8E+7	ND	ND	ND	ND	ND	ND
Phenanthrene	85018	NA	56,000	5,300	1.1E+6	2.8E+6	1.6E+5	6.7E+6	1.6E+6	56,000	1.6E+5	5,300	1.1E+6	5.1E+6	1.9E+5	2.9E+6	NA	2,600	ND	ND	ND	ND
Pyrene	129000	NA	4.8E+5	ID	4.8E+5	1.0E+9 (D)	6.5E+8	6.7E+9	2.9E+7	4.8E+5	4.8E+5	ID	4.8E+5	1.0E+9 (D)	7.8E+8	2.9E+9	NA	3,500	ND	ND	960	ND
Total Metals Analysis (ug/Kg)																						
Arsenic	7440382	5,800	4,600	70,000 (X)	2.0E+6	NLV	NLV	7.2E+5	7,600	4,600	4,600	70,000 (X)	2.0E+6	NLV	NLV	9.1E+5	NA	**13,000**	**14,000**	**7,400**	**12,000**	2,400
Barium (B)	7440393	75,000	1.3E+6	(G,X)	1.0E+9 (D)	NLV	NLV	3.3E+8	3.7E+7	1.3E+6	1.3E+6	(G,X)	1.0E+9 (D)	NLV	NLV	1.5E+8	NA	**120,000**	NA	**79,000**	**76,000**	24,000
Cadmium (B)	7440439	1,200	6,000	(G,X)	2.3E+8	NLV	NLV	1.7E+6	5.5E+5	6,000	6,000	(G,X)	2.3E+8	NLV	NLV	2.2E+6	NA	520	NA	370	690	ND
Chromium (total) (B,H)	16065831	18,000 (total)	1.0E+9 (D)	(G,X)	1.0E+9 (D)	NLV	NLV	3.3E+8	7.9E+8	1.0E+9 (D)	1.0E+9 (D)	(G,X)	1.0E+9 (D)	NLV	NLV	1.5E+8	NA	**21,000**	NA	**18,000**	14,000	6,100
Copper (B)	7440508	32,000	5.8E+6	(G)	1.0E+9 (D)	NLV	NLV	1.3E+8	2.0E+7	5.8E+6	5.8E+6	(G)	1.0E+9 (D)	NLV	NLV	5.9E+7	NA	**46,000**	NA	18,000	**51,000**	3,900
Lead (B)	7439921	21,000	7.0E+5	(G,X)	ID	NLV	NLV	1.0E+8	4.0E+5	7.0E+5	7.0E+5	(G,X)	ID	NLV	NLV	4.4E+7	NA	**160,000**	NA	**22,000**	**200,000**	4,200
Mercury (Total) (B,Z)	Varies	120	1,700	50 (M); 1.2	47,000	48,000	52,000	2.0E+7	1.6E+5	1,700	1,700	50 (M); 1.2	47,000	89,000	62,000	8.8E+6	NA	**250**	NA	**56**	**170**	ND
Selenium (B)	7782492	410	4,000	400	7.8E+7	NLV	NLV	1.3E+8	2.6E+6	4,000	4,000	400	7.8E+7	NLV	NLV	5.9E+7	NA	**650**	NA	**430**	**490**	ND
Silver (B)	7440224	1,000	4,500	100 (M); 27	2.0E+8	NLV	NLV	6.7E+6	2.5E+6	4,500	13,000	100 (M); 27	2.0E+8	NLV	NLV	2.9E+6	NA	ND	NA	ND	ND	ND
Zinc (B)	7440666	47,000	2.4E+6	(G)	1.0E+9 (D)	NLV	NLV	ID	1.7E+8	2.4E+6	5.0E+6	(G)	1.0E+9 (D)	NLV	NLV	ID	NA	**120,000**	NA	**65,000**	**240,000**	13,000
Polychlorinated biphenyls (PCBs) (J,T)																						
Polychlorinated biphenyls (PCBs) (J,T)	1336363	NA	NLL	NLL	NLL	3.0E+6	2.4E+5	5.2E+6	(T)	NLL	NLL	NLL	NLL	1.6E+7	8.1E+5	6.5E+6	NA	NA	NA	ND	NA	ND

Notes:

B - Background, as defined in R 299.5701(b), may be substituted if higher than the calculated cleanup criterion.

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.

D - Calculated criterion exceeds 100%, hence it is reduced to 100% or 1.0E+9 ppb.

G - Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.

H - Valence-specific chromium data (Cr III and Cr VI) shall be compared to the corresponding valence-specific cleanup criteria.

I - Hazardous substance may exhibit the characteristic of ignitability as defined in 40 C.F.R. Section 261.21 (revised as of July 1, 2001), which is adopted by reference in these rules and which is available for inspection

M - Calculated criterion is below the analyticals target detection limit, therefore, the criterion defaults to the target detection limit.

Q - Criteria for carcinogenic polycyclic aromatic hydrocarbons were developed using relative potential potencies to benzo(a)pyrene.

X - The groundwater surface water interface (GSI) criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.

ID - Insufficient data to develop criterion.

NA - Criterion or value is not available or, in the case of background and chemical abstract service numbers, not applicable.

NLL - Hazardous substance is not likely to leach under most soil conditions.

NLV - Hazardous substance is not likely to volatilize under most conditions.

ND - Non-detect

µg/Kg - micrograms per Kilogram

bold - Parameter exceeds indicated criterion

Table 1
Summary of Soil Analytical Results
Atwater Lofts
Atwater Street
Detroit, Michigan
AKT Peerless Project Number
5133D2-6-20

Sample Identification and Date		Statewide Default Background Levels	Groundwater Protection			Indoor Air	Ambient Air (Y)		Direct Contact	Groundwater Protection				Indoor Air	Ambient Air (Y)						
			Residential and Commerical I Drinking Water Protection Criteria & RBSLs	Residential and Commerical I Groundwater Surface Water Interface Protection Criteria & RBSLs	Residential and Commerical I Groundwater Contact Protection Criteria & RBSLs	Residential and Commerical I Soil Volatilization to Indoor Air Inhalation Criteria & RBSLs	Residential and Commerical I Infinite Source Volatile Soil Inhalation Criteria (VSIC) & RBSLs	Residential and Commerical I Particulate Soil Inhalation Criteria & RBSLs	Residential and Commerical I Direct Contact Criteria & RBSLs	Residential Drinking Water Protection Criteria & RBSLs	Industrial and Commercial Drinking Water Protection Criteria & RBSLs	Groundwater Surface Water Interface Protection Criteria & RBSLs	Groundwater Contact Protection Criteria & RBSLs	Soil Volatilization to Indoor Air Inhalation Criteria & RBSLs	Infinite Source Volatile Soil Inhalation Criteria (VSIC) & RBSLs	Particulate Soil Inhalation Criteria & RBSLs	B-5 (5-6 feet) 12.6.06	B-6 (4-6 feet) 12.6.06	B-7 (0-0.5 feet) 12.6.06	B-7 (1-3 feet) 12.6.06	B-8 (0-0.5 feet) 12.6.06
Analytes	**CAS#**																				
Volatile Organic Compounds (VOCs) (ug/Kg)																					
n-Butylbenzene	104518	NA	1,600	ID	1.2E+5	ID	ID	ID	2.5E+6	1,600	4,600	ID	1.2E+5	ID	ID	ID	ND	300	**ND**	ND	NA
sec-Butylbenzene	135988	NA	1,600	ID	88,000	ID	ID	ID	2.5E+6	1,600	4,600	ID	88,000	ID	ID	ID	ND	ND	**ND**	ND	NA
Naphthalene	91203	NA	35,000	870	2.1E+6	2.5E+5	3.0E+5	2.0E+8	1.6E+7	35,000	1.0E+5	870	2.1E+6	4.7E+5	3.5E+5	8.8E+7	**7,700**	ND	**4,800**	ND	NA
Toluene (I)	108883	NA	16,000	2,800	2.5E+5 (C)	2.5E+5 (C)	2.8E+6	2.7E+10	2.5E+5 (C)	16,000	16,000	2,800	2.5E+5 (C)	2.5E+5 (C)	3.3E+6	1.2E+10	ND	ND	ND	ND	NA
Trichloroethylene	79016	NA	100	4,000 (X)	4.4E+5	7,100	78,000	1.8E+9	5.0E+5 (C,DD)	100	100	4,000 (X)	4.4E+5	37,000	2.6E+5	2.3E+9	ND	ND	ND	ND	NA
1,2,4-Trimethylbenzene (I)	95636	NA	2,100	570	1.1E+5 (C)	1.1E+5 (C)	2.1E+7	8.2E+10	1.1E+5 (C)	2,100	2,100	570	1.1E+5 (C)	1.1E+5 (C)	2.5E+7	3.6E+10	ND	ND	ND	ND	NA
Xylenes (I)	1330207	NA	5,600	700	1.5E+5 (C)	1.5E+5 (C)	4.6E+7	2.9E+11	1.5E+5 (C)	5,600	5,600	700	1.5E+5 (C)	1.5E+5 (C)	5.4E+7	1.3E+11	ND	ND	ND	ND	NA
Remaining VOCs	Varies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	ND	ND	ND	NA
Polynuclear Aromatic Hydrocarbons (PNAs) (ug/Kg)																					
Acenaphthene	83329	NA	3.0E+5	4,400	9.7E+5	3.9E+8	8.1E+7	1.4E+10	4.1E+7	3.0E+5	8.8E+5	4,400	9.7E+5	3.5E+8	9.7E+7	6.2E+9	2,100	NA	780	ND	**5,500**
Acenaphthylene	208968	NA	5,900	ID	4.4E+5	1.6E+6	2.2E+6	2.3E+9	1.6E+6	5,900	17,000	ID	4.4E+5	3.0E+6	2.7E+6	1.0E+9	460	NA	ND	ND	ND
Anthracene	120127	NA	41,000	ID	41,000	1.0E+9 (D)	1.4E+9	6.7E+10	2.3E+8	41,000	41,000	ID	41,000	1.0E+9 (D)	1.6E+9	2.9E+10	5,800	NA	1,600	ND	4,300
Benzo(a)anthracene (Q)	56553	NA	NLL	NLL	NLL	NLV	NLV	ID	20,000	NLL	NLL	NLL	NLL	NLV	NLV	ID	11,000	1,700	1,900	ND	3,100
Benzo(a)pyrene (Q)	50328	NA	NLL	NLL	NLL	NLV	NLV	1.5E+6	2,000	NLL	NLL	NLL	NLL	NLV	NLV	1.9E+6	**11,000**	1,500	1,700	ND	**2,300**
Benzo(b)fluoranthene (Q)	205992	NA	NLL	NLL	NLL	ID	ID	ID	20,000	NLL	NLL	NLL	NLL	ID	ID	ID	14,000	2,700	2,100	ND	2,600
Benzo(g,h,i)perylene	191242	NA	NLL	NLL	NLL	NLV	NLV	8.0E+8	2.5E+6	NLL	NLL	NLL	NLL	NLV	NLV	3.5E+8	6,900	1,100	530	ND	670
Benzo(k)fluoranthene (Q)	207089	NA	NLL	NLL	NLL	NLV	NLV	ID	2.0E+5	NLL	NLL	NLL	NLL	NLV	NLV	ID	4,300	820	770	ND	1,400
Chrysene (Q)	218019	NA	NLL	NLL	NLL	ID	ID	ID	2.0E+6	NLL	NLL	NLL	NLL	ID	ID	ID	11,000	2,700	1,900	ND	2,900
Dibenzo(a,h)anthracene (Q)	53703	NA	NLL	NLL	NLL	NLV	NLV	ID	2,000	NLL	NLL	NLL	NLL	NLV	NLV	ID	1,800	ND	**ND**	ND	ND
Fluoranthene	206440	NA	7.3E+5	5,500	7.3E+5	1.0E+9 (D)	7.4E+8	9.3E+9	4.6E+7	7.3E+5	7.3E+5	5,500	7.3E+5	1.0E+9 (D)	8.9E+8	4.1E+9	**25,000**	2,700	3,800	ND	**7,500**
Fluorene	86737	NA	3.9E+5	5,300	8.9E+5	5.8E+8	1.3E+8	9.3E+9	2.7E+7	3.9E+5	8.9E+5	5,300	8.9E+5	1.0E+9 (D)	1.5E+8	4.1E+9	2,600	ND	1,300	ND	**9,900**
Indeno(1,2,3-cd)pyrene (Q)	193395	NA	NLL	NLL	NLL	NLV	NLV	ID	20,000	NLL	NLL	NLL	NLL	NLV	NLV	ID	7,700	1,300	690	**ND**	1,700
2-Methylnaphthalene	91576	NA	57,000	ID	5.5E+6	ID	ID	ID	8.1E+6	57,000	1.7E+5	ID	5.5E+6	ID	ID	ID	620	ND	370	ND	3,500
Naphthalene	91203	NA	35,000	870	2.1E+6	2.5E+5	3.0E+5	2.0E+8	1.6E+7	35,000	1.0E+5	870	2.1E+6	4.7E+5	3.5E+5	8.8E+7	ND	ND	ND	ND	**3,700**
Phenanthrene	85018	NA	56,000	5,300	1.1E+6	3.8E+6	1.6E+5	6.7E+6	1.6E+6	56,000	1.6E+5	5,300	1.1E+6	5.1E+6	1.9E+5	2.9E+6	18,000	510	4,300	ND	**25,000**
Pyrene	129000	NA	4.8E+5	ID	4.8E+5	1.0E+9 (D)	6.5E+8	6.7E+9	2.9E+7	4.8E+5	4.8E+5	ID	4.8E+5	1.0E+9 (D)	7.8E+8	2.9E+9	21,000	3,300	2,800	ND	6,000
Total Metals Analysis (ug/Kg)																					
Arsenic	7440382	5,800	4,600	70,000 (X)	2.0E+6	NLV	NLV	7.2E+5	7,600	4,600	4,600	70,000 (X)	2.0E+6	NLV	NLV	9.1E+5	NA	**100,000**	**170,000**	4,000	**5,700**
Barium (B)	7440393	75,000	1.3E+6	(G,X)	1.0E+9 (D)	NLV	NLV	3.3E+8	3.7E+7	1.3E+6	1.3E+6	(G,X)	1.0E+9 (D)	NLV	NLV	1.5E+8	NA	**110,000**	**77,000**	54,000	NA
Cadmium (B)	7440439	1,200	6,000	(G,X)	2.3E+8	NLV	NLV	1.7E+6	5.5E+5	6,000	6,000	(G,X)	2.3E+8	NLV	NLV	2.2E+6	540	360	140	170	NA
Chromium (total) (B,H)	16065831	18,000 (total)	1.0E+9 (D)	(G,X)	1.0E+9 (D)	NLV	NLV	3.3E+8	7.9E+8	1.0E+9 (D)	1.0E+9 (D)	(G,X)	1.0E+9 (D)	NLV	NLV	1.5E+8	**21,000**	10,000	8,400	12,000	NA
Copper (B)	7440508	32,000	5.8E+6	(G)	1.0E+9 (D)	NLV	NLV	1.3E+8	2.0E+7	5.8E+6	5.8E+6	(G)	1.0E+9 (D)	NLV	NLV	5.9E+7	NA	**94,000**	27,000	17,000	NA
Lead (B)	7439921	21,000	7.0E+5	(G,X)	ID	NLV	NLV	1.0E+8	4.0E+5	7.0E+5	7.0E+5	(G,X)	ID	NLV	NLV	4.4E+7	**6,100,000**	**410,000**	**26,000**	**55,000**	NA
Mercury (Total) (B,Z)	Varies	130	1,700	50 (M); 1.2	47,000	46,000	52,000	2.0E+7	1.6E+5	1,700	1,700	50 (M); 1.2	47,000	89,000	62,000	8.8E+6	NA	**220**	ND	**140**	NA
Selenium (B)	7782492	410	4,000	400	7.8E+7	NLV	NLV	1.3E+8	2.6E+6	4,000	4,000	400	7.8E+7	NLV	NLV	5.9E+7	NA	**7,000**	**3,500**	**430**	NA
Silver (B)	7440224	1,000	4,500	100 (M); 27	2.0E+8	NLV	NLV	6.7E+6	2.5E+6	4,500	13,000	100 (M); 27	2.0E+8	NLV	NLV	2.9E+6	NA	**220**	ND	**120**	NA
Zinc (B)	7440666	47,000	2.4E+6	(G)	1.0E+9 (D)	NLV	NLV	ID	1.7E+8	2.4E+6	5.0E+6	(G)	1.0E+9 (D)	NLV	NLV	ID	NA	**89,000**	30,000	45,000	NA
Polychlorinated biphenyls (PCBs) (J,T)																					
Polychlorinated biphenyls (PCBs) (J,T)	1336363	NA	NLL	NLL	NLL	3.0E+6	2.4E+5	5.2E+6	(T)	NLL	NLL	NLL	NLL	1.6E+7	8.1E+5	6.5E+6	ND	NA	NA	NA	NA

Notes:

B - Background, as defined in R 299.5701(b), may be substituted if higher than the calculated cleanup criterion.

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.

D - Calculated criterion exceeds 100%, hence it is reduced to 100% or 1.0E+9 ppb.

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X - The groundwater surface water interface (GSI) criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.

ID - Insufficient data to develop criterion.

NA - Criterion or value is not available or, in the case of background and chemical abstract service numbers, not applicable.

NLL - Hazardous substance is not likely to leach under most soil conditions.

NLV - Hazardous substance is not likely to volatilize under most conditions.

ND - Non-detect

µg/Kg - micrograms per Kilogram

bold - Parameter exceeds indicated criterion

Table 1
Summary of Soil Analytical Results
Atwater Lofts
Atwater Street
Detroit, Michigan
AKT Peerless Project Number
5133D2-6-20

Sample Identification and Date		Statewide Default Background Levels	Groundwater Protection			Indoor Air	Ambient Air (Y)		Direct Contact	Groundwater Protection				Indoor Air	Ambient Air (Y)							
			Residential and Commerical I Drinking Water Protection Criteria & RBSLs	Residential and Commerical I Groundwater Surface Water Interface Protection Criteria & RBSLs	Residential and Commerical I Groundwater Contact Protection Criteria & RBSLs	Residential and Commerical I Soil Volatilization to Indoor Air Inhalation Criteria & RBSLs	Residential and Commerical I Infinite Source Volatile Soil Inhalation Criteria (VSIC) & RBSLs	Residential and Commerical I Particulate Soil Inhalation Criteria & RBSLs	Residential and Commerical I Direct Contact Criteria & RBSLs	Residential Drinking Water Protection Criteria & RBSLs	Industrial and Commercial Drinking Water Protection Criteria & RBSLs	Groundwater Surface Water Interface Protection Criteria & RBSLs	Groundwater Contact Protection Criteria & RBSLs	Soil Volatilization to Indoor Air Inhalation Criteria & RBSLs	Infinite Source Volatile Soil Inhalation Criteria (VSIC) & RBSLs	Particulate Soil Inhalation Criteria & RBSLs	B-8 (2-4 feet) 12.6.06	B-9 (0-0.5 feet) 12.6.06	B-10 (2-4 feet) 12.6.06	B-11 (2-4 feet) 12.6.06	B-12 (0-0.5 feet) 12.6.06
Analytes	**CAS#**																					
Volatile Organic Compounds (VOCs) (ug/Kg)																						
n-Butylbenzene	104518	NA	1,600	ID	1.2E+5	ID	ID	ID	2.5E+6	1,600	4,600	ID	1.2E+5	ID	ID	ID	ND	ND	ND	ND	ND
sec-Butylbenzene	135988	NA	1,600	ID	88,000	ID	ID	ID	2.5E+6	1,600	4,600	ID	88,000	ID	ID	ID	510	ND	ND	ND	ND
Naphthalene	91203	NA	35,000	870	2.1E+6	2.5E+5	3.0E+5	2.0E+8	1.6E+7	35,000	1.0E+5	870	2.1E+6	4.7E+5	3.5E+5	8.8E+7	ND	ND	ND	ND	ND
Toluene (I)	108883	NA	16,000	2,800	2.5E+5 (C)	2.5E+5 (C)	2.8E+6	2.7E+10	2.5E+5 (C)	16,000	16,000	2,800	2.5E+5 (C)	2.5E+5 (C)	3.3E+6	1.2E+10	ND	ND	ND	ND	55
Trichloroethylene	79016	NA	100	4,000 (X)	4.4E+5	7,100	78,000	1.8E+9	5.0E+5 (C,DD)	100	100	4,000 (X)	4.4E+5	37,000	2.6E+5	2.3E+9	ND	ND	ND	ND	120
1,2,4-Trimethylbenzene (I)	95636	NA	2,100	570	1.1E+5 (C)	1.1E+5 (C)	2.1E+7	8.2E+10	1.1E+5 (C)	2,100	2,100	570	1.1E+5 (C)	1.1E+5 (C)	2.5E+7	3.6E+10	ND	ND	ND	ND	ND
Xylenes (I)	1330207	NA	5,600	700	1.5E+5 (C)	1.5E+5 (C)	4.6E+7	2.9E+11	1.5E+5 (C)	5,600	5,600	700	1.5E+5 (C)	1.5E+5 (C)	5.4E+7	1.3E+11	ND	ND	ND	ND	ND
Remaining VOCs	Varies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	ND	ND	ND	ND
Polynuclear Aromatic Hydrocarbons (PNAs) (ug/Kg)																						
Acenaphthene	83329	NA	3.0E+5	4,400	9.7E+5	1.9E+8	8.1E+7	1.4E+10	4.1E+7	3.0E+5	8.8E+5	4,400	9.7E+5	3.5E+8	9.7E+7	6.2E+9	ND	ND	ND	ND	ND
Acenaphthylene	208968	NA	5,900	ID	4.4E+5	1.6E+6	2.2E+6	2.3E+9	1.6E+6	5,900	17,000	ID	4.4E+5	3.0E+6	2.7E+6	1.0E+9	ND	ND	ND	ND	ND
Anthracene	120127	NA	41,000	ID	41,000	1.0E+9 (D)	1.4E+9	6.7E+10	2.3E+8	41,000	41,000	ID	41,000	1.0E+9 (D)	1.6E+9	2.9E+10	ND	ND	ND	ND	ND
Benzo(a)anthracene (Q)	56553	NA	NLL	NLL	NLL	NLV	NLV	ID	20,000	NLL	NLL	NLL	NLL	NLV	NLV	ID	ND	ND	ND	370	ND
Benzo(a)pyrene (Q)	50328	NA	NLL	NLL	NLL	NLV	NLV	1.5E+6	2,000	NLL	NLL	NLL	NLL	NLV	NLV	1.9E+6	ND	ND	ND	ND	ND
Benzo(b)fluoranthene (Q)	205992	NA	NLL	NLL	NLL	ID	ID	ID	20,000	NLL	NLL	NLL	NLL	ID	ID	ID	ND	ND	ND	360	ND
Benzo(g,h,i)perylene	191242	NA	NLL	NLL	NLL	NLV	NLV	8.0E+8	2.5E+6	NLL	NLL	NLL	NLL	NLV	NLV	3.5E+8	ND	ND	ND	ND	ND
Benzo(k)fluoranthene (Q)	207089	NA	NLL	NLL	NLL	NLV	NLV	ID	2.0E+5	NLL	NLL	NLL	NLL	NLV	NLV	ID	ND	ND	ND	ND	ND
Chrysene (Q)	218019	NA	NLL	NLL	NLL	ID	ID	ID	2.0E+6	NLL	NLL	NLL	NLL	ID	ID	ID	ND	ND	ND	380	ND
Dibenzo(a,h)anthracene (Q)	53703	NA	NLL	NLL	NLL	NLV	NLV	ID	2,000	NLL	NLL	NLL	NLL	NLV	NLV	ID	ND	ND	ND	ND	ND
Fluoranthene	206440	NA	7.3E+5	5,500	7.3E+5	1.0E+9 (D)	7.4E+8	9.3E+9	4.6E+7	7.3E+5	7.3E+5	5,500	7.3E+5	1.0E+9 (D)	8.9E+8	4.1E+9	ND	510	ND	650	ND
Fluorene	86737	NA	3.9E+5	5,300	8.9E+5	5.8E+8	1.3E+8	9.3E+9	2.7E+7	3.9E+5	8.9E+5	5,300	8.9E+5	1.0E+9 (D)	1.5E+8	4.1E+9	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene (Q)	193395	NA	NLL	NLL	NLL	NLV	NLV	ID	20,000	NLL	NLL	NLL	NLL	NLV	NLV	ID	ND	ND	ND	ND	ND
2-Methylnaphthalene	91576	NA	57,000	ID	5.5E+6	ID	ID	ID	8.1E+6	57,000	1.7E+5	ID	5.5E+6	ID	ID	ID	ND	ND	ND	ND	ND
Naphthalene	91203	NA	35,000	870	2.1E+6	2.5E+5	3.0E+5	2.0E+8	1.6E+7	35,000	1.0E+5	870	2.1E+6	4.7E+5	3.5E+5	8.8E+7	ND	ND	ND	ND	ND
Phenanthrene	85018	NA	56,000	5,300	1.1E+6	2.8E+6	1.6E+5	6.7E+6	1.6E+6	56,000	1.6E+5	5,300	1.1E+6	5.1E+6	1.9E+5	2.9E+6	ND	ND	ND	450	ND
Pyrene	129000	NA	4.8E+5	ID	4.8E+5	1.0E+9 (D)	6.5E+8	6.7E+9	2.9E+7	4.8E+5	4.8E+5	ID	4.8E+5	1.0E+9 (D)	7.8E+8	2.9E+9	ND	450	ND	690	ND
Total Metals Analysis (ug/Kg)																						
Arsenic	7440382	5,800	4,600	70,000 (X)	2.0E+6	NLV	NLV	7.2E+5	7,600	4,600	4,600	70,000 (X)	2.0E+6	NLV	NLV	9.1E+5	**5,700**	**63,000**	**7,300**	**6,300**	3,300
Barium (B)	7440393	75,000	1.3E+6	(G,X)	1.0E+9 (D)	NLV	NLV	3.3E+8	3.7E+7	1.3E+6	1.3E+6	(G,X)	1.0E+9 (D)	NLV	NLV	1.5E+8	40,000	**92,000**	**120,000**	**100,000**	40,000
Cadmium (B)	7440439	1,200	6,000	(G,X)	2.3E+8	NLV	NLV	1.7E+6	5.5E+5	6,000	6,000	(G,X)	2.3E+8	NLV	NLV	2.2E+6	180	480	320	160	150
Chromium (total) (B,H)	16065831	18,000 (total)	1.0E+9 (D)	(G,X)	1.0E+9 (D)	NLV	NLV	3.3E+8	7.9E+8	1.0E+9 (D)	1.0E+9 (D)	(G,X)	1.0E+9 (D)	NLV	NLV	1.5E+8	8,700	**19,000**	12,000	9,800	7,400
Copper (B)	7440508	32,000	5.8E+6	(G)	1.0E+9 (D)	NLV	NLV	1.3E+8	2.0E+7	5.8E+6	5.8E+6	(G)	1.0E+9 (D)	NLV	NLV	5.9E+7	26,000	**50,000**	21,000	**81,000**	18,000
Lead (B)	7439921	21,000	7.0E+5	(G,X)	ID	NLV	NLV	1.0E+8	4.0E+5	7.0E+5	7.0E+5	(G,X)	ID	NLV	NLV	4.4E+7		**69,000**	**41,000**	**550,000**	**37,000**
Mercury (Total) (B,Z)	Varies	130	1,700	50 (Mi) 1,2	47,000	48,000	52,000	2.0E+7	1.6E+5	1,700	1,700	50 (Mi) 1,2	47,000	89,000	62,000	8.8E+6	**970**	**320**	**330**	**730**	**ND**
Selenium (B)	7782492	410	4,000	400	7.8E+7	NLV	NLV	1.3E+8	2.6E+6	4,000	4,000	400	7.8E+7	NLV	NLV	5.9E+7	**440**	**1,900**	**ND**	**510**	**750**
Silver (B)	7440224	1,000	4,500	100 (Mi) 27	2.0E+8	NLV	NLV	6.7E+5	2.5E+6	4,500	13,000	100 (Mi) 27	2.0E+8	NLV	NLV	2.9E+6	**230**	ND	**ND**	**140**	**ND**
Zinc (B)	7440666	47,000	2.4E+6	(G)	1.0E+9 (D)	NLV	NLV	ID	1.7E+8	2.4E+6	5.0E+6	(G)	1.0E+9 (D)	NLV	NLV	ID	**69,000**	**83,000**	**130,000**	**130,000**	3,700
Polychlorinated biphenyls (PCBs) (J,T)																						
Polychlorinated biphenyls (PCBs) (J,T)	1336363	NA	NLL	NLL	NLL	3.0E+6	2.4E+5	5.2E+6	(T)	NLL	NLL	NLL	NLL	1.6E+7	8.1E+5	6.5E+6	ND	ND	NA	NA	NA

Notes:

B - Background, as defined in R 299.5701(b), may be substituted if higher than the calculated cleanup criterion.

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.

D - Calculated criterion exceeds 100%, hence it is reduced to 100% or 1.0E+9 ppb.

G - Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.

H - Valence-specific chromium data (Cr III and Cr VI) shall be compared to the corresponding valence-specific cleanup criteria.

I - Hazardous substance may exhibit the characteristic of ignitability as defined in 40 C.F.R. Section 261.21 (revised as of July 1, 2001), which is adopted by reference in these rules and which is available for inspection

M - Calculated criterion is below the analyticals target detection limit, therefore, the criterion defaults to the target detection limit.

Q - Criteria for carcinogenic polycyclic aromatic hydrocarbons were developed using relative potential potencies to benzo(a)pyrene.

X - The groundwater surface water interface (GSI) criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.

ID - Insufficient data to develop criterion.

NA - Criterion or value is not available or, in the case of background and chemical abstract service numbers, not applicable.

NLL - Hazardous substance is not likely to leach under most soil conditions.

NLV - Hazardous substance is not likely to volatilize under most conditions.

ND - Non-detect

µg/Kg - micrograms per Kilogram

bold - Parameter exceeds indicated criterion

Table 1
Summary of Soil Analytical Results
Atwater Lofts
Atwater Street
Detroit, Michigan
AKT Peerless Project Number
5133D2-6-20

Sample Identification and Date		Statewide Default Background Levels	Groundwater Protection			Indoor Air	Ambient Air (Y)		Direct Contact	Groundwater Protection				Indoor Air	Ambient Air (Y)							
			Residential and Commerical I Drinking Water Protection Criteria & RBSLs	Residential and Commerical I Groundwater Surface Water Interface Protection Criteria & RBSLs	Residential and Commerical I Groundwater Contact Protection Criteria & RBSLs	Residential and Commerical I Soil Volatilization to Indoor Air Inhalation Criteria & RBSLs	Residential and Commerical I Infinite Source Volatile Soil Inhalation Criteria (VSIC) & RBSLs	Residential and Commerical I Particulate Soil Inhalation Criteria & RBSLs	Residential and Commerical I Direct Contact Criteria & RBSLs	Residential Drinking Water Protection Criteria & RBSLs	Industrial and Commercial Drinking Water Protection Criteria & RBSLs	Groundwater Surface Water Interface Protection Criteria & RBSLs	Groundwater Contact Protection Criteria & RBSLs	Soil Volatilization to Indoor Air Inhalation Criteria & RBSLs	Infinite Source Volatile Soil Inhalation Criteria (VSIC) & RBSLs	Particulate Soil Inhalation Criteria & RBSLs	B-12 (2-4 feet) 12.6.06	B-13 (2-4 feet) 12.6.06	B-14 (0-0.5 feet) 12.6.06	B-14 (2-4 feet) 12.6.06	B-15 (0-0.5 feet) 12.6.06
Analytes	**CAS#**																					
Volatile Organic Compounds (VOCs) (ug/Kg)																						
n-Butylbenzene	104518	NA	1,600	ID	1.2E+5	ID	ID	ID	2.5E+6	1,600	4,600	ID	1.2E+5	ID	ID	ID	ND	ND	ND	ND	ND
sec-Butylbenzene	135988	NA	1,600	ID	88,000	ID	ID	ID	2.5E+6	1,600	4,600	ID	88,000	ID	ID	ID	ND	ND	ND	ND	ND
Naphthalene	91203	NA	35,000	870	2.1E+6	2.5E+5	3.0E+5	2.0E+8	1.6E+7	35,000	1.0E+5	870	2.1E+6	4.7E+5	3.5E+5	8.8E+7	ND	ND	ND	ND	ND
Toluene (I)	108883	NA	16,000	2,800	2.5E+5 (C)	2.5E+5 (C)	2.8E+6	2.7E+10	2.5E+5 (C)	16,000	16,000	2,800	2.5E+5 (C)	2.5E+5 (C)	3.3E+6	1.2E+10	ND	ND	ND	ND	130
Trichloroethylene	79016	NA	100	4,000 (X)	4.4E+5	7,100	78,000	1.8E+9	5.0E+5 (C,DD)	100	100	4,000 (X)	4.4E+5	37,000	2.6E+5	2.3E+9	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene (I)	95636	NA	2,100	570	1.1E+5 (C)	1.1E+5 (C)	2.1E+7	8.2E+10	1.1E+5 (C)	2,100	2,100	570	1.1E+5 (C)	1.1E+5 (C)	2.5E+7	3.6E+10	ND	ND	ND	ND	120
Xylenes (I)	1330207	NA	5,600	700	1.5E+5 (C)	1.5E+5 (C)	4.6E+7	2.9E+11	1.5E+5 (C)	5,600	5,600	700	1.5E+5 (C)	1.5E+5 (C)	5.4E+7	1.3E+11	ND	ND	ND	ND	290
Remaining VOCs	Varies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	ND	ND	ND	ND
Polynuclear Aromatic Hydrocarbons (PNAs) (ug/Kg)																						
Acenaphthene	83329	NA	3.0E+5	4,400	9.7E+5	1.9E+8	8.1E+7	1.4E+10	4.1E+7	3.0E+5	8.8E+5	4,400	9.7E+5	3.5E+8	9.7E+7	6.2E+9	ND	ND	500	440	680
Acenaphthylene	208968	NA	5,900	ID	4.4E+5	1.6E+6	2.2E+6	2.3E+9	1.6E+6	5,900	17,000	ID	4.4E+5	3.0E+6	2.7E+6	1.0E+9	ND	ND	ND	ND	ND
Anthracene	120127	NA	41,000	ID	41,000	1.0E+9 (D)	1.4E+9	6.7E+10	2.3E+8	41,000	41,000	ID	41,000	1.0E+9 (D)	1.6E+9	2.9E+10	ND	ND	2,100	770	1,700
Benzo(a)anthracene (Q)	56553	NA	NLL	NLL	NLL	NLV	NLV	ID	20,000	NLL	NLL	NLL	NLL	NLV	NLV	ID	ND	ND	4,800	2,200	3,500
Benzo(a)pyrene (Q)	50328	NA	NLL	NLL	NLL	NLV	NLV	1.5E+6	2,000	NLL	NLL	NLL	NLL	NLV	NLV	1.9E+6	ND	ND	**4,800**	**2,100**	**3,500**
Benzo(b)fluoranthene (Q)	205992	NA	NLL	NLL	NLL	ID	ID	ID	20,000	NLL	NLL	NLL	NLL	ID	ID	ID	ND	ND	6,100	3,100	4,100
Benzo(g,h,i)perylene	191242	NA	NLL	NLL	NLL	NLV	NLV	8.0E+8	2.5E+6	NLL	NLL	NLL	NLL	NLV	NLV	3.5E+8	ND	ND	2,100	370	1,400
Benzo(k)fluoranthene (Q)	207089	NA	NLL	NLL	NLL	NLV	NLV	ID	2.0E+5	NLL	NLL	NLL	NLL	NLV	NLV	ID	ND	ND	2,600	990	1,500
Chrysene (Q)	218019	NA	NLL	NLL	NLL	ID	ID	ID	2.0E+6	NLL	NLL	NLL	NLL	ID	ID	ID	ND	ND	5,300	2,300	3,900
Dibenzo(a,h)anthracene (Q)	53703	NA	NLL	NLL	NLL	NLV	NLV	ID	2,000	NLL	NLL	NLL	NLL	NLV	NLV	ID	ND	ND	510	ND	330
Fluoranthene	206440	NA	7.3E+5	5,500	7.3E+5	1.0E+9 (D)	7.4E+8	9.3E+9	4.6E+7	7.3E+5	7.3E+5	5,500	7.3E+5	1.0E+9 (D)	8.9E+8	4.1E+9	ND	ND	**11,000**	3,400	**8,400**
Fluorene	86737	NA	3.9E+5	5,300	8.9E+5	5.8E+8	1.3E+8	9.3E+9	2.7E+7	3.9E+5	8.9E+5	5,300	8.9E+5	1.0E+9 (D)	1.5E+8	4.1E+9	ND	ND	680	ND	800
Indeno(1,2,3-cd)pyrene (Q)	193395	NA	NLL	NLL	NLL	NLV	NLV	ID	20,000	NLL	NLL	NLL	NLL	NLV	NLV	ID	ND	ND	2,400	580	1,600
2-Methylnaphthalene	91576	NA	57,000	ID	5.5E+6	ID	ID	ID	8.1E+6	57,000	1.7E+5	ID	5.5E+6	ID	ID	ID	ND	ND	ND	ND	ND
Naphthalene	91203	NA	35,000	870	2.1E+6	2.5E+5	3.0E+5	2.0E+8	1.6E+7	35,000	1.0E+5	870	2.1E+6	4.7E+5	3.5E+5	8.8E+7	ND	ND	ND	ND	ND
Phenanthrene	85018	NA	56,000	5,300	1.1E+6	2.8E+6	1.6E+5	6.7E+6	1.6E+6	56,000	1.6E+5	5,300	1.1E+6	5.1E+6	1.9E+5	2.9E+6	ND	340	**6,700**	2,100	**7,500**
Pyrene	129000	NA	4.8E+5	ID	4.8E+5	1.0E+9 (D)	6.5E+8	6.7E+9	2.9E+7	4.8E+5	4.8E+5	ID	4.8E+5	1.0E+9 (D)	7.8E+8	2.9E+9	ND	ND	8,100	3,500	6,600
Total Metals Analysis (ug/Kg)																						
Arsenic	7440382	5,800	4,600	70,000 (X)	2.0E+6	NLV	NLV	7.2E+5	7,600	4,600	4,600	70,000 (X)	2.0E+6	NLV	NLV	9.1E+5	**6,200**	**11,000**	**5,400**	**91,000**	**7,800**
Barium (B)	7440393	75,000	1.3E+6	(G,X)	1.0E+9 (D)	NLV	NLV	3.3E+8	3.7E+7	1.3E+6	1.3E+6	(G,X)	1.0E+9 (D)	NLV	NLV	1.5E+8	**77,000**	**210,000**	68,000	42,000	**150,000**
Cadmium (B)	7440439	1,200	6,000	(G,X)	2.3E+8	NLV	NLV	1.7E+6	5.5E+5	6,000	6,000	(G,X)	2.3E+8	NLV	NLV	2.2E+6	160	130	260	**3,000**	460
Chromium (total) (B,H)	16065831	38,000 (total)	1.0E+9 (D)	(G,X)	1.0E+9 (D)	NLV	NLV	3.3E+8	7.9E+8	1.0E+9 (D)	1.0E+9 (D)	(G,X)	1.0E+9 (D)	NLV	NLV	1.5E+8	12,000	**22,000**	8,800	12,000	15,000
Copper (B)	7440508	32,000	5.8E+6	(G)	1.0E+9 (D)	NLV	NLV	1.3E+8	2.0E+7	5.8E+6	5.8E+6	(G)	1.0E+9 (D)	NLV	NLV	5.9E+7	16,000	30,000	**140,000**	**820,000**	**170,000**
Lead (B)	7439921	21,000	7.0E+5	(G,X)	ID	NLV	NLV	1.0E+8	4.0E+5	7.0E+5	7.0E+5	(G,X)	ID	NLV	NLV	4.4E+7	**30,000**	**22,000**	**100,000**	**550,000**	**470,000**
Mercury (Total) (B,Z)	Varies	130	1,700	50 (M); 1.2	47,000	48,000	52,000	2.0E+7	1.6E+5	1,700	1,700	50 (M); 1.2	47,000	89,000	62,000	8.8E+6	ND	ND	**150**	**4,000**	**910**
Selenium (B)	7782492	410	4,000	400	7.8E+7	NLV	NLV	1.3E+8	2.6E+6	4,000	4,000	400	7.8E+7	NLV	NLV	5.9E+7	220	**2,400**	350	**8,400**	**920**
Silver (B)	7440224	1,000	4,500	100 (M); 27	2.0E+8	NLV	NLV	6.7E+6	2.5E+6	4,500	13,000	100 (M); 27	2.0E+8	NLV	NLV	2.9E+6	ND	ND	**110**	**340**	**730**
Zinc (B)	7440666	47,000	2.4E+6	(G)	1.0E+9 (D)	NLV	NLV	ID	1.7E+8	2.4E+6	5.0E+6	(G)	1.0E+9 (D)	NLV	NLV	ID	**75,000**	35,000	**110,000**	**990,000**	**210,000**
Polychlorinated biphenyls (PCBs) (J,T)																						
Polychlorinated biphenyls (PCBs) (J,T)	1336363	NA	NLL	NLL	NLL	3.0E+6	2.4E+5	5.2E+6	(T)	NLL	NLL	NLL	NLL	1.6E+7	8.1E+5	6.5E+6	ND	NA	NA	NA	NA

Notes:

B - Background, as defined in R 299.5701(b), may be substituted if higher than the calculated cleanup criterion.

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.

D - Calculated criterion exceeds 100%, hence it is reduced to 100% or 1.0E+9 ppb.

G - Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.

H - Valence-specific chromium data (Cr III and Cr VI) shall be compared to the corresponding valence-specific cleanup criteria.

I - Hazardous substance may exhibit the characteristic of ignitability as defined in 40 C.F.R. Section 261.21 (revised as of July 1, 2001), which is adopted by reference in these rules and which is available for inspection

M - Calculated criterion is below the analyticals target detection limit, therefore, the criterion defaults to the target detection limit.

Q - Criteria for carcinogenic polycyclic aromatic hydrocarbons were developed using relative potential potencies to benzo(a)pyrene.

X - The groundwater surface water interface (GSI) criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.

ID - Insufficient data to develop criterion.

NA - Criterion or value is not available or, in the case of background and chemical abstract service numbers, not applicable.

NLL - Hazardous substance is not likely to leach under most soil conditions.

NLV - Hazardous substance is not likely to volatilize under most conditions.

ND - Non-detect

µg/Kg - micrograms per Kilogram

bold - Parameter exceeds indicated criterion

Table 1
Summary of Soil Analytical Results
Atwater Lofts
Atwater Street
Detroit, Michigan
AKT Peerless Project Number
5133D2-6-20

Sample Identification and Date		Statewide Default Background Levels	Groundwater Protection			Indoor Air	Ambient Air (Y)		Direct Contact	Groundwater Protection				Indoor Air	Ambient Air (Y)								
			Residential and Commerical I Drinking Water Protection Criteria & RBSLs	Residential and Commerical I Groundwater Surface Water Interface Protection Criteria & RBSLs	Residential and Commerical I Groundwater Contact Protection Criteria & RBSLs	Residential and Commerical I Soil Volatilization to Indoor Air Inhalation Criteria & RBSLs	Residential and Commerical I Infinite Source Volatile Soil Inhalation Criteria (VSIC) & RBSLs	Residential and Commerical I Particulate Soil Inhalation Criteria & RBSLs	Residential and Commerical I Direct Contact Criteria & RBSLs	Residential Drinking Water Protection Criteria & RBSLs	Industrial and Commercial Drinking Water Protection Criteria & RBSLs	Groundwater Surface Water Interface Protection Criteria & RBSLs	Groundwater Contact Protection Criteria & RBSLs	Soil Volatilization to Indoor Air Inhalation Criteria & RBSLs	Infinite Source Volatile Soil Inhalation Criteria (VSIC) & RBSLs	Particulate Soil Inhalation Criteria & RBSLs	B-15 (6-8 feet) 12.6.06	B-16 (6-8 feet) 12.6.06	B-17 (3-4 feet) 12.6.06	B-17 (8-10 feet) 12.6.06	B-18 (2-4 feet) 12.6.06	B-18 (6-8 feet) 12.6.06
Analytes	**CAS#**																						
Volatile Organic Compounds (VOCs) (ug/Kg)																							
n-Butylbenzene	104518	NA	1,600	ID	1.2E+5	ID	ID	ID	2.5E+6	1,600	4,600	ID	1.2E+5	ID	ID	ID	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	135988	NA	1,600	ID	88,000	ID	ID	ID	2.5E+6	1,600	4,600	ID	88,000	ID	ID	ID	ND	ND	ND	ND	ND	ND
Naphthalene	91203	NA	35,000	870	2.1E+6	2.5E+5	3.0E+5	2.0E+8	1.6E+7	35,000	1.0E+5	870	2.1E+6	4.7E+5	3.5E+5	8.8E+7	ND	ND	1,700	ND	ND	ND
Toluene (I)	108883	NA	16,000	2,800	2.5E+5 (C)	2.5E+5 (C)	2.8E+6	2.7E+10	2.5E+5 (C)	16,000	16,000	2,800	2.5E+5 (C)	2.5E+5 (C)	3.3E+6	1.2E+10	ND	ND	170	ND	ND	ND
Trichloroethylene	79016	NA	100	4,000 (X)	4.4E+5	7,100	78,000	1.8E+9	5.0E+5 (C,DD)	100	100	4,000 (X)	4.4E+5	37,000	2.6E+5	2.3E+9	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene (I)	95636	NA	2,100	570	1.1E+5 (C)	1.1E+5 (C)	2.1E+7	8.2E+10	1.1E+5 (C)	2,100	2,100	570	1.1E+5 (C)	1.1E+5 (C)	2.5E+7	3.6E+10	ND	ND	150	ND	ND	ND
Xylenes (I)	1330207	NA	5,600	700	1.5E+5 (C)	1.5E+5 (C)	4.6E+7	2.9E+11	1.5E+5 (C)	5,600	5,600	700	1.5E+5 (C)	1.5E+5 (C)	5.4E+7	1.3E+11	ND	ND	430	ND	ND	ND
Remaining VOCs	Varies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	ND	ND	ND	ND	ND
Polynuclear Aromatic Hydrocarbons (PNAs) (ug/Kg)																							
Acenaphthene	83329	NA	3.0E+5	4,400	9.7E+5	1.9E+8	8.1E+7	1.4E+10	4.1E+7	3.0E+5	8.8E+5	4,400	9.7E+5	3.5E+8	9.7E+7	6.2E+9	ND	ND	ND	ND	ND	ND
Acenaphthylene	208968	NA	5,900	ID	4.4E+5	1.6E+6	2.2E+6	2.3E+9	1.6E+6	5,900	17,000	ID	4.4E+5	3.0E+6	2.7E+6	1.0E+9	ND	ND	ND	ND	ND	ND
Anthracene	120127	NA	41,000	ID	41,000	1.0E+9 (D)	1.4E+9	6.7E+10	2.3E+8	41,000	41,000	ID	41,000	1.0E+9 (D)	1.6E+9	2.9E+10	ND	ND	580	ND	ND	ND
Benzo(a)anthracene (Q)	56553	NA	NLL	NLL	NLL	NLV	NLV	ID	20,000	NLL	NLL	NLL	NLL	NLV	NLV	ID	ND	ND	940	ND	ND	ND
Benzo(a)pyrene (Q)	50328	NA	NLL	NLL	NLL	NLV	NLV	1.5E+6	2,000	NLL	NLL	NLL	NLL	NLV	NLV	1.9E+6	ND	ND	800	ND	ND	ND
Benzo(b)fluoranthene (Q)	205992	NA	NLL	NLL	NLL	ID	ID	ID	20,000	NLL	NLL	NLL	NLL	ID	ID	ID	ND	ND	920	ND	ND	ND
Benzo(g,h,i)perylene	191242	NA	NLL	NLL	NLL	NLV	NLV	8.0E+8	2.5E+6	NLL	NLL	NLL	NLL	NLV	NLV	3.5E+8	ND	ND	460	ND	ND	ND
Benzo(k)fluoranthene (Q)	207089	NA	NLL	NLL	NLL	NLV	NLV	ID	2.0E+5	NLL	NLL	NLL	NLL	NLV	NLV	ID	ND	ND	330	ND	ND	ND
Chrysene (Q)	218019	NA	NLL	NLL	NLL	ID	ID	ID	2.0E+6	NLL	NLL	NLL	NLL	ID	ID	ID	ND	ND	960	ND	ND	ND
Dibenzo(a,h)anthracene (Q)	53703	NA	NLL	NLL	NLL	NLV	NLV	ID	2,000	NLL	NLL	NLL	NLL	NLV	NLV	ID	ND	ND	ND	ND	ND	ND
Fluoranthene	206440	NA	7.3E+5	5,500	7.3E+5	1.0E+9 (D)	7.4E+8	9.3E+9	4.6E+7	7.3E+5	7.3E+5	5,500	7.3E+5	1.0E+9 (D)	8.9E+8	4.1E+9	ND	ND	2,100	ND	ND	ND
Fluorene	86737	NA	3.9E+5	5,300	8.9E+5	5.8E+8	1.3E+8	9.3E+9	2.7E+7	3.9E+5	8.9E+5	5,300	8.9E+5	1.0E+9 (D)	1.5E+8	4.1E+9	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene (Q)	193395	NA	NLL	NLL	NLL	NLV	NLV	ID	20,000	NLL	NLL	NLL	NLL	NLV	NLV	ID	ND	ND	470	ND	ND	ND
2-Methylnaphthalene	91576	NA	57,000	ID	5.5E+6	ID	ID	ID	8.1E+6	57,000	1.7E+5	ID	5.5E+6	ID	ID	ID	ND	ND	800	ND	ND	ND
Naphthalene	91203	NA	35,000	870	2.1E+6	2.5E+5	3.0E+5	2.0E+8	1.6E+7	35,000	1.0E+5	870	2.1E+6	4.7E+5	3.5E+5	8.8E+7	ND	ND	ND	ND	ND	ND
Phenanthrene	85018	NA	56,000	5,300	1.1E+6	2.8E+6	1.6E+5	6.7E+6	1.6E+6	56,000	1.6E+5	5,300	1.1E+6	5.1E+6	1.9E+5	2.9E+6	ND	ND	2,100	ND	ND	ND
Pyrene	129000	NA	4.8E+5	ID	4.8E+5	1.0E+9 (D)	6.5E+8	6.7E+9	2.9E+7	4.8E+5	4.8E+5	ID	4.8E+5	1.0E+9 (D)	7.8E+8	2.9E+9	ND	ND	1,900	ND	ND	ND
Total Metals Analysis (ug/Kg)																							
Arsenic	7440382	5,800	4,600	70,000 (X)	2.0E+6	NLV	NLV	7.2E+5	7,600	4,600	4,600	70,000 (X)	2.0E+6	NLV	NLV	9.1E+5	**4,900**	**6,800**	**19,000**	3,700	**11,000**	**4,900**
Barium (B)	7440393	75,000	1.3E+6	(G,X)	1.0E+9 (D)	NLV	NLV	3.3E+8	3.7E+7	1.3E+6	1.3E+6	(G,X)	1.0E+9 (D)	NLV	NLV	1.5E+8	69,000	**79,000**	72,000	47,000	63,000	56,000
Cadmium (B)	7440439	1,200	6,000	(G,X)	2.3E+8	NLV	NLV	1.7E+6	5.5E+5	6,000	6,000	(G,X)	2.3E+8	NLV	NLV	2.2E+6	80	150	350	130	180	150
Chromium (total) (B,H)	16065831	18,000 (total)	1.0E+9 (D)	(G,X)	1.0E+9 (D)	NLV	NLV	3.3E+8	7.9E+8	1.0E+9 (D)	1.0E+9 (D)	(G,X)	1.0E+9 (D)	NLV	NLV	1.5E+8	**18,000**	12,000	8,000	14,000	**19,000**	12,000
Copper (B)	7440508	32,000	5.8E+6	(G)	1.0E+9 (D)	NLV	NLV	1.3E+8	2.0E+7	5.8E+6	5.8E+6	(G)	1.0E+9 (D)	NLV	NLV	5.9E+7	16,000	22,000	**56,000**	15,000	21,000	15,000
Lead (B)	7439921	21,000	7.0E+5	(G,X)	ID	NLV	NLV	1.0E+8	4.0E+5	7.0E+5	7.0E+5	(G,X)	ID	NLV	NLV	4.4E+7	**27,000**	**84,000**	**100,000**	13,000	14,000	**71,000**
Mercury (Total) (B,Z)	Varies	130	1,700	50 (M); 1.2	47,000	48,000	52,000	2.0E+7	1.6E+5	1,700	1,700	50 (M); 1.2	47,000	89,000	62,000	8.8E+6	**330**	**180**	**1,400**	51	ND	**240**
Selenium (B)	7782492	410	4,000	400	7.8E+7	NLV	NLV	1.3E+8	2.6E+6	4,000	4,000	400	7.8E+7	NLV	NLV	5.9E+7	**400**	340	**2,000**	240	370	280
Silver (B)	7440224	1,000	4,500	100 (M); 27	2.0E+8	NLV	NLV	6.7E+6	2.5E+6	4,500	13,000	100 (M); 27	2.0E+8	NLV	NLV	2.9E+6	ND	ND	ND	**ND**	**ND**	ND
Zinc (B)	7440666	47,000	2.4E+6	(G)	1.0E+9 (D)	NLV	NLV	ID	1.7E+8	2.4E+6	5.0E+6	(G)	1.0E+9 (D)	NLV	NLV	ID	**49,000**	**56,000**	**160,000**	45,000	**56,000**	41,000
Polychlorinated biphenyls (PCBs) (J,T)																							
Polychlorinated biphenyls (PCBs) (J,T)	1336363	NA	NLL	NLL	NLL	3.0E+6	2.4E+5	5.2E+6	(T)	NLL	NLL	NLL	NLL	1.6E+7	8.1E+5	6.5E+6	NA	NA	NA	NA	NA	NA

Notes:

B - Background, as defined in R 299.5701(b), may be substituted if higher than the calculated cleanup criterion.

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.

D - Calculated criterion exceeds 100%, hence it is reduced to 100% or 1.0E+9 ppb.

G - Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.

H - Valence-specific chromium data (Cr III and Cr VI) shall be compared to the corresponding valence-specific cleanup criteria.

I - Hazardous substance may exhibit the characteristic of ignitability as defined in 40 C.F.R. Section 261.21 (revised as of July 1, 2001), which is adopted by reference in these rules and which is available for inspection

M - Calculated criterion is below the analyticals target detection limit, therefore, the criterion defaults to the target detection limit.

Q - Criteria for carcinogenic polycyclic aromatic hydrocarbons were developed using relative potential potencies to benzo(a)pyrene.

X - The groundwater surface water interface (GSI) criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.

ID - Insufficient data to develop criterion.

NA - Criterion or value is not available or, in the case of background and chemical abstract service numbers, not applicable.

NLL - Hazardous substance is not likely to leach under most soil conditions.

NLV - Hazardous substance is not likely to volatilize under most conditions.

ND - Non-detect

µg/Kg - micrograms per Kilogram

bold - Parameter exceeds indicated criterion

Table 2
Summary of Groundwater Analytical Results
Atwater Lofts
Atwater Street
Detroit, Michigan
AKT Peerless Project Number
5133D2-6-20

Sample Identification and Date		Residential & Commercial I Drinking Water Criteria & RBSLs	Industrial & Commercial II, III & IV Drinking Water Criteria & RBSLs	Groundwater Surface Water Interface Criteria & RBSLs	Residential & Commercial I Groundwater Volatilization to Indoor Air Inhalation Criteria & RBSLs	Industrial & Commercial II, III & IV Groundwater Volatilization to Indoor Air Inhalation Criteria & RBSLs	Groundwater Contact Criteria & RBSLs	B-2W 12/6/2006	B-3W 12/6/2006	B-4W 12/6/2006	B-5W 12/6/2006	B-6W 12/6/2006	B-7W 12/6/2006
Analytes	**CAS#**												
Volatile Organic Compounds (VOCs) (ug/L)													
Benzene (I)	71432	5.0 (A)	5.0 (A)	200 (X)	5,600	35,000	11,000	ND	ND	ND	ND	ND	4.9
n-Butylbenzene	104518	80	230	ID	ID	ID	5,900	ND	ND	ND	ND	ND	2.2
sec-Butylbenzene	135988	80	230	ID	ID	ID	4,400	ND	ND	ND	ND	ND	1.7
n-Propylbenzene (I)	103651	80	230	ID	ID	ID	15,000	ND	ND	ND	ND	ND	5.4
Toluene (I)	108883	790 (E)	790 (E)	140	5.3E+5 (S)	5.3E+5 (S)	5.3E+5 (S)	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene (I)	95636	63 (E)	63 (E)	17	56,000 (S)	56,000 (S)	56,000 (S)	ND	ND	ND	ND	ND	ND
Remaning VOCs	-	-	-	-	-	-	-	ND	ND	ND	ND	ND	ND
Polynuclear Aromatic Hydrocarbons (PNAs) (ug/L)													
Fluoranthene	206440	210 (S)	210 (S)	1.6	210 (S)	210 (S)	210 (S)	ND	ND	ND	ND	ND	1.3
Remaning PNAs								ND	ND	ND	ND	ND	ND
Total Metals Analysis (ug/L)													
Arsenic	7440382	10 (A)	10 (A)	150 (X)	NLV	NLV	4,300	**20**	**12**	**330**	NA	**160**	**210**
Barium (B)	7440393	2,000 (A)	2,000 (A)	(G,X)	NLV	NLV	1.4E+7	520	ND	460	NA	180	140
Cadmium (B)	7440439	5.0 (A)	5.0 (A)	(G,X)	NLV	NLV	1.9E+5	ND	ND	1.1	1.5	ND	ND
Chromium (III) (B,H)	16065831	100 (A)	100 (A)	(G,X)	NLV	NLV	2.9E+8	15	ND	62	76	10	11
Copper (B)	7440508	1,000 (E)	1,000 (E)	(G)	NLV	NLV	7.4E+6	94	32	110	NA	110	15
Lead (B)	7439921	4.0 (L)	4.0 (L)	(G,X)	NLV	NLV	ID	**670**	**70**	**160**	**610**	**320**	**23**
Mercury (Total) (B,Z)	Varies	2.0 (A)	2.0 (A)	0.0013	56 (S)	56 (S)	56 (S)	**1.3**	ND	**0.3**	NA	**0.2**	**0.4**
Selenium (B)	7782492	50 (A)	50 (A)	5.0	NLV	NLV	9.7E+5	ND	ND	**56**	NA	**5.1**	ND
Silver (B)	7440224	34	98	0.2 (M); 0.06	NLV	NLV	1.5E+6	**0.53**	ND	**0.6**	NA	ND	ND
Zinc (B)	7440666	2,400	5,000 (E)	(G)	NLV	NLV	1.1E+8	310	230	230	NA	140	67
Polychlorinated Biphenyls (ug/L)								NA	NA	NA	ND	NA	NA

A - Criterion is the state of Michigan drinking water standard established pursuant to section 5 of 1976 PA 399, MCL 325.1005.

B - Background, as defined in R 299.5701(b), may be substituted if higher than the calculated cleanup criterion.

G - Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.

H - Valence-specific chromium data (Cr III and Cr VI) shall be compared to the corresponding valence-specific cleanup criteria.

I - Hazardous substance may exhibit the characteristic of ignitability as defined in 40 C.F.R. Section 261.21 (revised as of July 1, 2001), which is adopted by reference in these rules and which is available for inspection at the Lansing office of the department, 525 West Allegan Street, Lansing, Michigan.

L - Criteria for lead are derived using a biologically based model, as allowed for under section 20120a(10) of the act, and are not calculated using the algorithms and assumptions specified in pathway-specific rules.

M - Calculated criterion is below the analyticals target detection limit, therefore, the criterion defaults to the target detection limit.

Q - Criteria for carcinogenic polycyclic aromatic hydrocarbons were developed using relative potential potencies to benzo(a)pyrene.

S - Criterion defaults to the hazardous substance-specific water solubility limit.

Z - Mercury is typically measured as total mercury.

AA - Comparison to these criteria may take into account an evaluation of whether the hazardous substances are absorbed to particulates rather than dissolved in water and whether filtered groundwater samples were used to evaluate groundwater.

ID - Insufficient data to develop criterion.

NLV - Hazardous substance is not likely to volatilize under most conditions.

ND - Non-detect

mg/Kg - micrograms per Kilogram

bold - Parameter exceeds indicated criterion

Table 2
Summary of Groundwater Analytical Results
Atwater Lofts
Atwater Street
Detroit, Michigan
AKT Peerless Project Number
5133D2-6-20

Sample Identification and Date		Residential & Commercial I Drinking Water Criteria & RBSLs	Industrial & Commercial II, III & IV Drinking Water Criteria & RBSLs	Groundwater Surface Water Interface Criteria & RBSLs	Residential & Commercial I Groundwater Volatilization to Indoor Air Inhalation Criteria & RBSLs	Industrial & Commercial II, III & IV Groundwater Volatilization to Indoor Air Inhalation Criteria & RBSLs	Groundwater Contact Criteria & RBSLs	B-10W 12/6/2006	B-11W 12/6/2006	B-13W 12/6/2006	B-14W 12/6/2006	B-16W 12/6/2006
Analytes	**CAS#**											
Volatile Organic Compounds (VOCs) (ug/L)												
Benzene (I)	71432	5.0 (A)	5.0 (A)	200 (X)	5,600	35,000	11,000	ND	ND	ND	ND	ND
n-Butylbenzene	104518	80	230	ID	ID	ID	5,900	ND	ND	ND	ND	ND
sec-Butylbenzene	135988	80	230	ID	ID	ID	4,400	ND	ND	ND	ND	ND
n-Propylbenzene (I)	103651	80	230	ID	ID	ID	15,000	ND	ND	ND	ND	ND
Toluene (I)	108883	790 (E)	790 (E)	140	5.3E+5 (S)	5.3E+5 (S)	5.3E+5 (S)	ND	ND	1.6	ND	ND
1,2,4-Trimethylbenzene (I)	95636	63 (E)	63 (E)	17	56,000 (S)	56,000 (S)	56,000 (S)	ND	ND	1.5	ND	ND
Remaning VOCs	-	-	-	-	-	-	-	ND	ND	ND	ND	ND
Polynuclear Aromatic Hydrocarbons (PNAs) (ug/L)												
Fluoranthene	206440	210 (S)	210 (S)	1.6	210 (S)	210 (S)	210 (S)	ND	ND	ND	ND	ND
Remaning PNAs	-	-	-	-	-	-	-	ND	ND	ND	ND	ND
Total Metals Analysis (ug/L)												
Arsenic	7440382	10 (A)	[illegible]	150 (X)	NLV	NLV	4,300	**25**	**110**	ND	91	**33**
Barium (B)	7440393	2,000 (A)	2,000 (A)	(G,X)	NLV	NLV	1.4E+7	ND	130	990	1500	1100
Cadmium (B)	7440439	5.0 (A)	5.0 (A)	(G,X)	NLV	NLV	1.9E+5	ND	ND	ND	1.8	ND
Chromium (III) (B,H)	16065831	100 (A)	100 (A)	(G,X)	NLV	NLV	2.9E+8	15	20	ND	43	39
Copper (B)	7440508	1,000 (E)	1,000 (E)	(G)	NLV	NLV	7.4E+6	110	92	5.4	450	150
Lead (B)	7439921	4.0 (L)	4.0 (L)	(G,X)	NLV	NLV	ID	**220**	**150**	**4.7**	**2100**	**680**
Mercury (Total) (B,Z)	Varies	2.0 (A)	2.0 (A)	0.00013	56 (S)	56 (S)	56 (S)	**0.8**	**0.6**	ND	6.3	**10**
Selenium (B)	7782492	50 (A)	50 (A)	5.0	NLV	NLV	9.7E+5	ND	**5.2**	ND	6.3	ND
Silver (B)	7440224	34	98	0.2 (M); 0.06	NLV	NLV	1.5E+6	ND	ND	**0.68**	1.3	**0.62**
Zinc (B)	7440666	2,400	5,000 (E)	(G)	NLV	NLV	1.1E+8	210	160	220	1600	370
Polychlorinated Biphenyls (ug/L)		-	-	-	-	-	-	NA	NA	NA	NA	NA

A - Criterion is the state of Michigan drinking water standard established pursuant to section 5 of 1976 PA 399, MCL 325.1005.

B - Background, as defined in R 299.5701(b), may be substituted if higher than the calculated cleanup criterion.

G - Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.

H - Valence-specific chromium data (Cr III and Cr VI) shall be compared to the corresponding valence-specific cleanup criteria.

I - Hazardous substance may exhibit the characteristic of ignitability as defined in 40 C.F.R. Section 261.21 (revised as of July 1, 2001), which is adopted by reference in these rules and which is available for inspection at the Lansing office of the department, 525 West Allegan Street, Lansing, Michigan.

L - Criteria for lead are derived using a biologically based model, as allowed for under section 20120a(10) of the act, and are not calculated using the algorithms and assumptions specified in pathway-specific rules.

M - Calculated criterion is below the analyticals target detection limit, therefore, the criterion defaults to the target detection limit.

Q - Criteria for carcinogenic polycyclic aromatic hydrocarbons were developed using relative potential potencies to benzo(a)pyrene.

S - Criterion defaults to the hazardous substance-specific water solubility limit.

Z - Mercury is typically measured as total mercury.

AA - Comparison to these criteria may take into account an evaluation of whether the hazardous substances are absorbed to particulates rather than dissolved in water and whether filtered groundwater samples were used to evaluate groundwater.

ID - Insufficient data to develop criterion.

NLV - Hazardous substance is not likely to volatilize under most conditions.

ND - Non-detect

mg/Kg - micrograms per Kilogram

bold - Parameter exceeds indicated criterion

Table 2
Summary of Groundwater Analytical Results
Atwater Lofts
Atwater Street
Detroit, Michigan
AKT Peerless Project Number
5133D2-6-20

Sample Identification and Date		Residential & Commercial I Drinking Water Criteria & RBSLs	Industrial & Commercial II, III & IV Drinking Water Criteria & RBSLs	Groundwater Surface Water Interface Criteria & RBSLs	Residential & Commercial I Groundwater Volatilization to Indoor Air Inhalation Criteria & RBSLs	Industrial & Commercial II, III & IV Groundwater Volatilization to Indoor Air Inhalation Criteria & RBSLs	Groundwater Contact Criteria & RBSLs	B-17W 12/11/2006	B-18W 12/6/2006
Analytes	**CAS#**								
Volatile Organic Compounds (VOCs) (ug/L)									
Benzene (I)	71432	5.0 (A)	5.0 (A)	200 (X)	5,600	35,000	11,000	ND	ND
n-Butylbenzene	104518	80	230	ID	ID	ID	5,900	ND	ND
sec-Butylbenzene	135988	80	230	ID	ID	ID	4,400	ND	ND
n-Propylbenzene (I)	103651	80	230	ID	ID	ID	15,000	ND	ND
Toluene (I)	108883	790 (E)	790 (E)	140	5.3E+5 (S)	5.3E+5 (S)	5.3E+5 (S)	ND	ND
1,2,4-Trimethylbenzene (I)	95636	63 (E)	63 (E)	17	56,000 (S)	56,000 (S)	56,000 (S)	ND	ND
Remaning VOCs	-	-	-	-	-	-	-	ND	ND
Polynuclear Aromatic Hydrocarbons (PNAs) (ug/L)									
Fluoranthene	206440	210 (S)	210 (S)	1.6	210 (S)	210 (S)	210 (S)	ND	ND
Remaning PNAs	-	-	-	-	-	-	-	ND	ND
Total Metals Analysis (ug/L)									
Arsenic	7440382	50 (A)	10 (A)	150 (X)	NLV	NLV	4,300	NA	**25**
Barium (B)	7440393	2,000 (A)	2,000 (A)	(G,X)	NLV	NLV	1.4E+7	NA	440
Cadmium (B)	7440439	5.0 (A)	5.0 (A)	(G,X)	NLV	NLV	1.9E+5	NA	ND
Chromium (III) (B,H)	16065831	100 (A)	100 (A)	(G,X)	NLV	NLV	2.9E+8	NA	23
Copper (B)	7440508	1,000 (E)	1,000 (E)	(G)	NLV	NLV	7.4E+6	NA	35
Lead (B)	7439921	4.0 (L)	4.0 (L)	(G,X)	NLV	NLV	ID	NA	**260**
Mercury (Total) (B,Z)	Varies	2.0 (A)	2.0 (A)	0.0013	56 (S)	56 (S)	56 (S)	NA	**0.7**
Selenium (B)	7782492	50 (A)	50 (A)	5.0	NLV	NLV	9.7E+5	NA	ND
Silver (B)	7440224	34	95	0.2 (M); 0.06	NLV	NLV	1.5E+6	NA	**0.25**
Zinc (B)	7440666	2,400	5,000 (E)	(G)	NLV	NLV	1.1E+8	NA	110
Polychlorinated Biphenyls (ug/L)		-	-	-	-	-	-	NA	NA

Notes:

A - Criterion is the state of Michigan drinking water standard established pursuant to section 5 of 1976 PA 399, MCL 325.1005.

B - Background, as defined in R 299.5701(b), may be substituted if higher than the calculated cleanup criterion.

G - Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.

H - Valence-specific chromium data (Cr III and Cr VI) shall be compared to the corresponding valence-specific cleanup criteria.

I - Hazardous substance may exhibit the characteristic of ignitability as defined in 40 C.F.R. Section 261.21 (revised as of July 1, 2001), which is adopted by reference in these rules and which is at the Lansing office of the department, 525 West Allegan Street, Lansing, Michigan.

L - Criteria for lead are derived using a biologically based model, as allowed for under section 20120a(10) of the act, and are not calculated using the algorithms and assumptions specified in pat

M - Calculated criterion is below the analyticals target detection limit, therefore, the criterion defaults to the target detection limit.

Q - Criteria for carcinogenic polycyclic aromatic hydrocarbons were developed using relative potential potencies to benzo(a)pyrene.

S - Criterion defaults to the hazardous substance-specific water solubility limit.

Z - Mercury is typically measured as total mercury.

AA - Comparison to these criteria may take into account an evaluation of whether the hazardous substances are absorbed to particulates rather than dissolved in water and whether filtered groun

ID - Insufficient data to develop criterion.

NLV - Hazardous substance is not likely to volatilize under most conditions.

ND - Non-detect

mg/Kg - micrograms per Kilogram

bold - Parameter exceeds indicated criterion

APPENDIX A

SOIL BORING LOGS

AKT PEERLESS
environmental services
607 Shelby Street, Suite 900, Detroit, MI 48226
Phone: (313) 962-9353 Fax: (313) 962-0966

BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

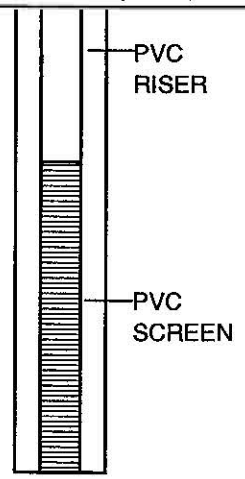
B-1

Drawn By: Janet Michaluk
Date: 12.22.06

DRILLING COMPANY:	FIBERTEC	WEATHER:	35 F CLOUDY
TECHNICIAN:	ANDY	BORING DEPTH:	10 FEET BGS
DATE DRILLED:	12.6.06	DEPTH TO GW:	4 FEET BGS
DRILLING METHOD:	GEOPROBE	SCREEN INTERVAL:	2.5-7.5 FEET BGS
FIELD GEOLOGIST:	MEGAN BAHORSKI	SCREEN MATERIAL:	1 INCH PVC

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE
			0		Brown	**FILL:** sand, clay, gravel	D
			0				
2				SP	Brown	**SAND:** gravel	M
			0				
4			0				▽
			0				S
6			0				M
			0				
8			0				
			0	CL	Grey	**CLAY:** gravel, soft, potential staining	D
10						End of boring at 10 feet bgs	
12							
14							
16							
18							
20							

TEMPORARY WELL DIAGRAM



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BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

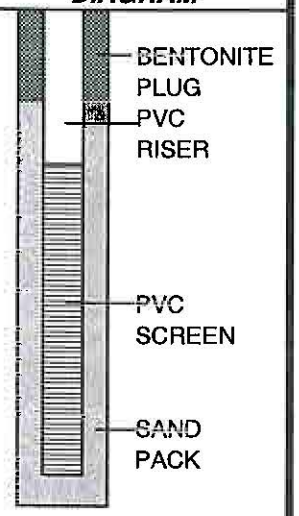
B-1/MW-300

Drawn By: Janet Michaluk
Date: 12.22.06

DRILLING COMPANY:	McDOWELL & ASSOCIATES	WEATHER:	45 F RAINY
TECHNICIAN:	RICHARD	BORING DEPTH:	8 FEET BGS
DATE DRILLED:	12.21.06	DEPTH TO GW:	4 FEET BGS
DRILLING METHOD:	HOLLOW-STEM AUGER	SCREEN INTERVAL:	2.5-7.5 FEET BGS
FIELD GEOLOGIST:	JANET MICHALUK	SCREEN MATERIAL:	2 INCH PVC

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE
					Brown	**FILL:** sand, clay, gravel	D
2				SP	Brown	**SAND:** gravel	M
4							▽ S
6							M
8						End of boring at 8 feet bgs	
10							
12							
14							
16							
18							
20							

PERMANENT WELL DIAGRAM



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BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

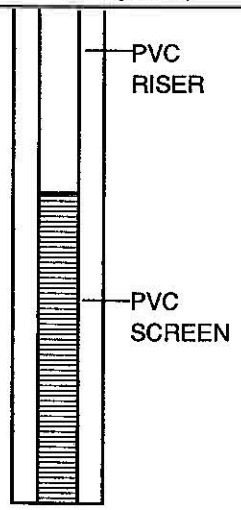
B-2

Drawn By: Janet Michaluk
Date: 12.22.06

DRILLING COMPANY:	FIBERTEC	WEATHER:	35 F CLOUDY
TECHNICIAN:	FRED	BORING DEPTH:	8 FEET BGS
DATE DRILLED:	12.6.06	DEPTH TO GW:	7 FEET BGS
DRILLING METHOD:	GEOPROBE	SCREEN INTERVAL:	3-8 FEET BGS
FIELD GEOLOGIST:	JANET MICHALUK	SCREEN MATERIAL:	1 INCH PVC

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE
			0		Brown	**FILL:** masonry debris, sand, gravel, clay	D
			0.1				
2		80		CL	Brown	**CLAY:** gravel, mottled, medium stiff	D
			0				
4			0				D
			0				
6		80	0	CL	Grey/ Black	**CLAY:** gravel, mottled, medium stiff, potential staining	M
			0				▽
8						End of boring at 8 feet bgs	S
10							
12							
14							
16							
18							
20							

TEMPORARY WELL DIAGRAM



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BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

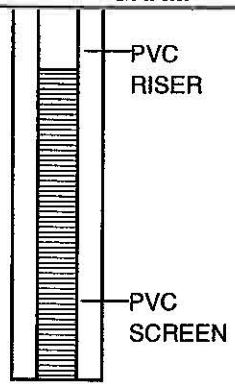
B-3

Drawn By: Janet Michaluk
Date: 12.22.06

DRILLING COMPANY:	FIBERTEC	WEATHER:	35 F CLOUDY
TECHNICIAN:	ANDY	BORING DEPTH:	6 FEET BGS
DATE DRILLED:	12.6.06	DEPTH TO GW:	4 FEET BGS
DRILLING METHOD:	GEOPROBE	SCREEN INTERVAL:	1-6 FEET BGS
FIELD GEOLOGIST:	MEGAN BAHORSKI	SCREEN MATERIAL:	1 INCH PVC

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE
			0		Brown	**FILL:** sand (fine to coarse grained), gravel, brick	D
			0				
2			1.2				D
			0				M
4			1.6				▽
			1.6				S M
6						Refusal at 6 feet bgs	
8							
10							
12							
14							
16							
18							
20							

TEMPORARY WELL DIAGRAM



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BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

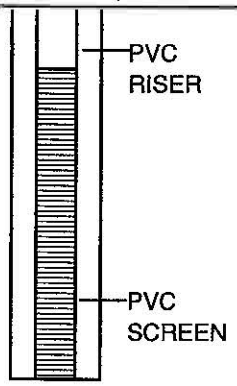
B-4

Drawn By: Janet Michaluk
Date: 12.22.06

DRILLING COMPANY:	FIBERTEC	WEATHER:	35 F CLOUDY
TECHNICIAN:	FRED	BORING DEPTH:	6 FEET BGS
DATE DRILLED:	12.6.06	DEPTH TO GW:	4 FEET BGS
DRILLING METHOD:	GEOPROBE	SCREEN INTERVAL:	1-6 FEET BGS
FIELD GEOLOGIST:	JANET MICHALUK	SCREEN MATERIAL:	1 INCH PVC

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE
			0.3		Brown	**FILL:** sand (fine grained), masonry debris	D
			0.2				
2		75	0.2				D
			0				M
4			0				▽
		25	0				S
6						Refusal at 6 feet bgs	M
8							
10							
12							
14							
16							
18							
20							

TEMPORARY WELL DIAGRAM



Duplicate Water Sample Taken

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Phone: (313) 962-9353 Fax: (313) 962-0966

BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

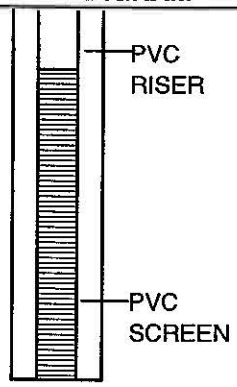
B-5

Drawn By: Janet Michaluk
Date: 12.22.06

DRILLING COMPANY:	FIBERTEC	WEATHER:	35 F CLOUDY
TECHNICIAN:	ANDY	BORING DEPTH:	6 FEET BGS
DATE DRILLED:	12.6.06	DEPTH TO GW:	3 FEET BGS
DRILLING METHOD:	GEOPROBE	SCREEN INTERVAL:	1-6 FEET BGS
FIELD GEOLOGIST:	MEGAN BAHORSKI	SCREEN MATERIAL:	1 INCH PVC

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE
			1.1		Black/ Brown	**FILL:** sand, gravel, masonry debris	D
2			0				
			0				M
			0				▽
4							S
			0				
			1.5			potential staining	M
6						Refusal at 6 feet bgs	
8							
10							
12							
14							
16							
18							
20							

TEMPORARY WELL DIAGRAM



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BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

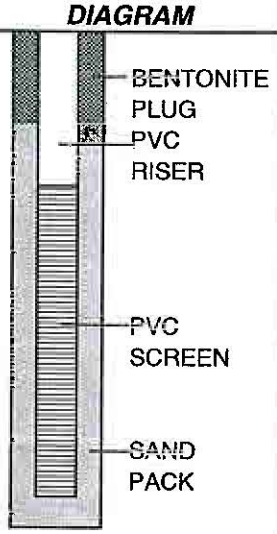
B-5/MW-200

Drawn By: Janet Michaluk
Date: 12.22.06

DRILLING COMPANY:	McDOWELL & ASSOCIATES	WEATHER:	45 F RAINY
TECHNICIAN:	RICHARD	BORING DEPTH:	8 FEET BGS
DATE DRILLED:	12.21.06	DEPTH TO GW:	3 FEET BGS
DRILLING METHOD:	HOLLOW-STEM AUGER	SCREEN INTERVAL:	2.5-7.5 FEET BGS
FIELD GEOLOGIST:	JANET MICHALUK	SCREEN MATERIAL:	2 INCH PVC

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE
					Black/ Brown	**FILL:** sand, gravel, masonry debris	D
2							M
4							S
6							M
							D
8						End of boring at 8 feet bgs	
10							
12							
14							
16							
18							
20							

PERMANENT WELL DIAGRAM



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BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

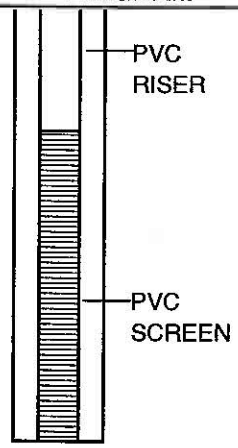
B-6

Drawn By: Janet Michaluk
Date: 12.22.06

DRILLING COMPANY:	FIBERTEC	WEATHER:	35 F CLOUDY
TECHNICIAN:	FRED	BORING DEPTH:	7 FEET BGS
DATE DRILLED:	12.6.06	DEPTH TO GW:	6 FEET BGS
DRILLING METHOD:	GEOPROBE	SCREEN INTERVAL:	2-7 FEET BGS
FIELD GEOLOGIST:	JANET MICHALUK	SCREEN MATERIAL:	1 INCH PVC

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE
			1.2		Brown/ Black	**FILL:** masonry debris, clay, asphalt	D
			1.2				
2		75	1.6				D
			0.8				
4			1.2				D
		75	0.8				M
6			0.8				▽
							S
						Refusal at 7 feet bgs	
8							
10							
12							
14							
16							
18							
20							

TEMPORARY WELL DIAGRAM



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BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

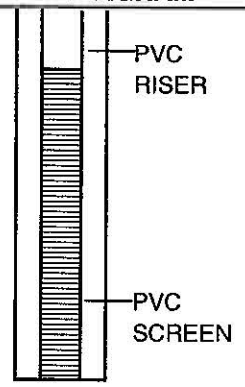
B-7(1)

Drawn By: Janet Michaluk
Date: 12.22.06

DRILLING COMPANY:	FIBERTEC	WEATHER:	35 F CLOUDY
TECHNICIAN:	ANDY	BORING DEPTH:	25 FEET BGS
DATE DRILLED:	12.6.06	DEPTH TO GW:	2.5 FEET BGS
DRILLING METHOD:	GEOPROBE	SCREEN INTERVAL:	1-6 FEET BGS
FIELD GEOLOGIST:	MEGAN BAHORSKI	SCREEN MATERIAL:	1 INCH PVC

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE
			1.5		Brown	**FILL:** sand, gravel, masonry debris	D
			1.5			potential staining	
2			1.5				M
			1.5				▽
4			1.5		Black	**FILL:** clay	S
			1.5				M
6			1.4				D
			1.4				D
8			1.4				
			1.4				D
10			1.4				
			1.4		Grey/ Black	**FILL:** clay, potential staining and odor	D
12			1.4				
			1.4				D
14			1.4				
			1.4				D
16			1.7				
			1.7				D
18			1.7				
			1.7		Black	**FILL:** gravel, sand, masonry debris	D
20			1.7				D

TEMPORARY WELL DIAGRAM



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BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

B-7(2)

Drawn By: Janet Michaluk
Date: 12.22.06

DRILLING COMPANY:	FIBERTEC	WEATHER:	35 F CLOUDY
TECHNICIAN:	ANDY	BORING DEPTH:	25 FEET BGS
DATE DRILLED:	12.6.06	DEPTH TO GW:	2.5 FEET BGS
DRILLING METHOD:	GEOPROBE	SCREEN INTERVAL:	1-6 FEET BGS
FIELD GEOLOGIST:	MEGAN BAHORSKI	SCREEN MATERIAL:	1 INCH PVC

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE	TEMPORARY WELL DIAGRAM
					Black	gravel, sand, masonry debris	D	
22							D	
24							D	
						End of boring at 25 feet bgs		
26								
28								
30								
32								
34								
36								
38								
40								

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Phone: (313) 962-9353 Fax: (313) 962-0966

BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

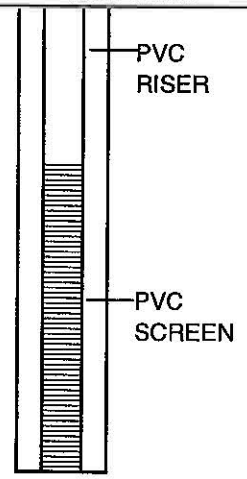
B-8

Drawn By: Janet Michaluk
Date: 12.22.06

DRILLING COMPANY:	FIBERTEC	WEATHER:	35 F CLOUDY
TECHNICIAN:	FRED	BORING DEPTH:	20 FEET BGS
DATE DRILLED:	12.6.06	DEPTH TO GW:	4 FEET BGS
DRILLING METHOD:	GEOPROBE	SCREEN INTERVAL:	2.5-7.5 FEET BGS
FIELD GEOLOGIST:	JANET MICHALUK	SCREEN MATERIAL:	1 INCH PVC

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE
			15		Black/ Brown	**FILL:** sand, cobble, wood debris potential staining and odor 0-6 feet bgs	D
			9				
2		75	14				D
			12				M
4			3				▽
			3				S
6		75					M
			4	CL	Brown/ Grey	**CLAY:** mottled, stiff potential staining and odor 6-14 feet bgs	D
			4				
8			2				D
			2				
10		90	1				D
			2				
12			3.8				D
			3.2				
14		90	2	CL	Brown	**CLAY:** medium stiff	D
			2				
16			1.8	CL	Grey	**CLAY:** soft	D
			1.8				
18		50	1.8				D
			1.8				
20						End of boring at 20 feet bgs	

TEMPORARY WELL DIAGRAM



Did not produce sufficient water to sample

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BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

B-9

Drawn By: Janet Michaluk
Date: 12.22.06

DRILLING COMPANY:	FIBERTEC	WEATHER:	35 F CLOUDY
TECHNICIAN:	ANDY	BORING DEPTH:	6 FEET BGS
DATE DRILLED:	12.6.06	DEPTH TO GW:	NA
DRILLING METHOD:	GEOPROBE	SCREEN INTERVAL:	NA
FIELD GEOLOGIST:	MEGAN BAHORSKI	SCREEN MATERIAL:	NA

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE	TEMPORARY WELL DIAGRAM
			1.2		Brown/ Black	**FILL:** gravel, cobble	D	
			1.2					
2			1.2				D	
			1.2					
4			1.2				D	
			1.2					
6						Refusal at 6 feet bgs		
8								
10								
12								
14								
16								
18								
20								

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BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

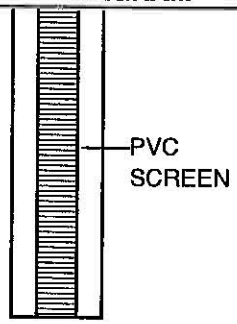
B-10

Drawn By: Janet Michaluk
Date: 12.22.06

DRILLING COMPANY:	FIBERTEC	WEATHER:	35 F CLOUDY
TECHNICIAN:	FRED	BORING DEPTH:	5 FEET BGS
DATE DRILLED:	12.6.06	DEPTH TO GW:	4 FEET BGS
DRILLING METHOD:	GEOPROBE	SCREEN INTERVAL:	0-5 FEET BGS
FIELD GEOLOGIST:	JANET MICHALUK	SCREEN MATERIAL:	1 INCH PVC

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE
			2		Brown	**FILL:** masonry debris, sand, cobbles, clay	D
			2				
2		90					
			2				D
			2				M
4							▽
		10	2				S
						Refusal at 5 feet bgs	
6							
8							
10							
12							
14							
16							
18							
20							

TEMPORARY WELL DIAGRAM



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BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

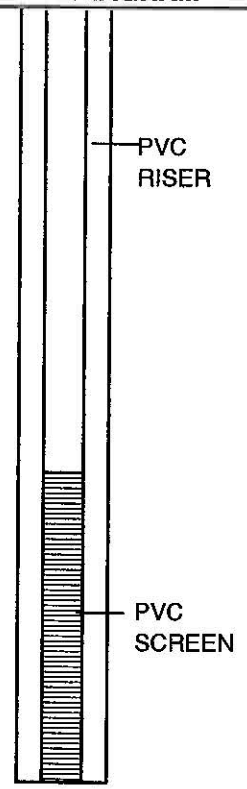
B-11

Drawn By: Janet Michaluk
Date: 12.26.06

DRILLING COMPANY:	FIBERTEC	WEATHER:	35 F CLOUDY
TECHNICIAN:	ANDY	BORING DEPTH:	20 FEET BGS
DATE DRILLED:	12.6.06	DEPTH TO GW:	10 FEET BGS
DRILLING METHOD:	GEOPROBE	SCREEN INTERVAL:	7.5-12.5 FEET BGS
FIELD GEOLOGIST:	MEGAN BAHORSKI	SCREEN MATERIAL:	1 INCH PVC

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE
			1.9		Black	**FILL:** sand, clay, gravel, potential staining	D
			1.9				
2			1.9				M
			1.9	CL	Black/ Grey	**CLAY:** gravel, medium stiff potential staining 2-4 feet	
4			1.9				M
			1.9				D
			1.8				
6			1.8				D
			1.5				
8			1.5				D
			1.4				
10			1.7				▽ ═
							S
			1.8				M
12			1.7				M
							D
			1.4				
14			1.4				D
			1.4				
16			1.7				D
			1.8				
18			1.8				D
			1.8				
20						End of boring at 20 feet bgs	

TEMPORARY WELL DIAGRAM



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BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

B-12

Drawn By: Janet Michaluk
Date: 12.26.06

DRILLING COMPANY:	FIBERTEC	WEATHER:	35 F CLOUDY
TECHNICIAN:	FRED	BORING DEPTH:	5 FEET BGS
DATE DRILLED:	12.6.06	DEPTH TO GW:	4 FEET BGS
DRILLING METHOD:	GEOPROBE	SCREEN INTERVAL:	NA
FIELD GEOLOGIST:	JANET MICHALUK	SCREEN MATERIAL:	NA

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE	TEMPORARY WELL DIAGRAM
			2		Brown	**FILL:** sand, masonry debris, gravel	D	
			2					
2		90						
			2				D	
			2				M	
4							▽	
		10	2				S	
						Refusal at 5 feet bgs		
6								
8								
10								
12								
14								
16								
18								
20								

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BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

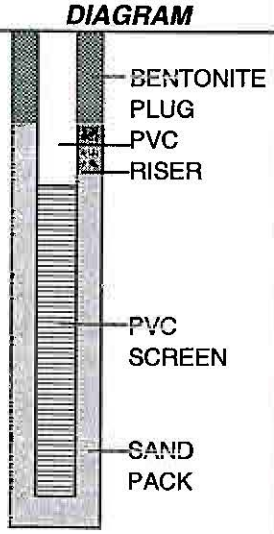
B-12/MW-500

Drawn By: Janet Michaluk
Date: 12.26.06

DRILLING COMPANY:	McDOWELL & ASSOCIATES	WEATHER:	45 F RAINY
TECHNICIAN:	RICHARD	BORING DEPTH:	8 FEET BGS
DATE DRILLED:	12.21.06	DEPTH TO GW:	4 FEET BGS
DRILLING METHOD:	HOLLOW-STEM AUGER	SCREEN INTERVAL:	2.5-7.5 FEET BGS
FIELD GEOLOGIST:	JANET MICHALUK	SCREEN MATERIAL:	2 INCH PVC

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE
					Brown	**FILL:** sand, masonry debris, gravel	D
2							D
							M
4							▽
							S
							M
6							D
				CL	Grey	**CLAY:** soft	
8						End of boring at 8 feet bgs	
10							
12							
14							
16							
18							
20							

PERMANENT WELL DIAGRAM



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BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

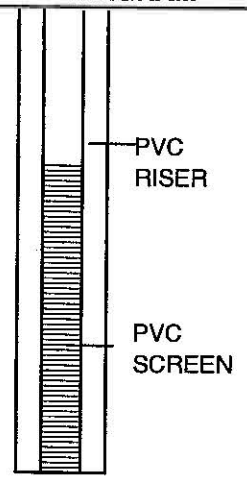
B-13

Drawn By: Janet Michaluk
Date: 12.26.06

DRILLING COMPANY:	FIBERTEC	WEATHER:	35 F CLOUDY
TECHNICIAN:	ANDY	BORING DEPTH:	20 FEET BGS
DATE DRILLED:	12.6.06	DEPTH TO GW:	4 FEET BGS
DRILLING METHOD:	GEOPROBE	SCREEN INTERVAL:	2.5-7.5 FEET BGS
FIELD GEOLOGIST:	MEGAN BAHORSKI	SCREEN MATERIAL:	1 INCH PVC

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE
			1		Grey	**FILL:** sand, gravel	D
			1				
2			1.5				D
			1.5				M
4			2				▽
			2				S M
6			1.8		Grey	**FILL:** wood, sand	D
			1.8				
8			1.7	CL	Grey	**CLAY:** sand, gravel, medium stiff	D
			1.7				
10			1.8				
			1.8				
12			1.8				
			1.8				
14			1.8				
			1.8				
16			1.8	CL	Grey	**CLAY:** soft	
			1.8				
18			2				
			1.7				
20						End of boring at 20 feet bgs	

TEMPORARY WELL DIAGRAM



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BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

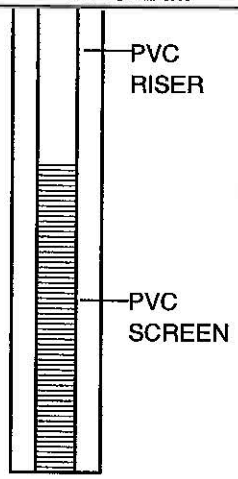
B-14

Drawn By: Janet Michaluk
Date: 12.26.06

DRILLING COMPANY:	FIBERTEC	WEATHER:	35 F CLOUDY
TECHNICIAN:	FRED	BORING DEPTH:	12 FEET BGS
DATE DRILLED:	12.6.06	DEPTH TO GW:	4 FEET BGS
DRILLING METHOD:	GEOPROBE	SCREEN INTERVAL:	2.5-7.5 FEET BGS
FIELD GEOLOGIST:	JANET MICHALUK	SCREEN MATERIAL:	1 INCH PVC

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE
			2		Black/ Grey	**FILL:** sand, clay, cobble, gravel, wood	D
			2				
2		90					
			2			potential staining and odor 2-4 feet bgs	D
			2				M
4							▽
			2				
			2				S
6		50					M
			2				D
			2				
8							
			2				D
			2				
10		90					
			2				D
			2				
12				CL	Grey	**CLAY:** gravel, medium stiff	
						End of boring at 12 feet bgs	
14							
16							
18							
20							

TEMPORARY WELL DIAGRAM



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BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

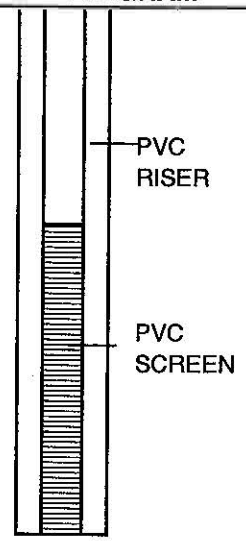
B-15

Drawn By: Janet Michaluk
Date: 12.26.06

DRILLING COMPANY:	FIBERTEC	WEATHER:	35 F CLOUDY
TECHNICIAN:	ANDY	BORING DEPTH:	10 FEET BGS
DATE DRILLED:	12.6.06	DEPTH TO GW:	6 FEET BGS
DRILLING METHOD:	GEOPROBE	SCREEN INTERVAL:	3.5-8.5 FEET BGS
FIELD GEOLOGIST:	MEGAN BAHORSKI	SCREEN MATERIAL:	1 INCH PVC

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE
			0		Brown	**FILL:** clay, masonry debris, sand, gravel	D
			0				
2			0				D
			0				
4			0				D
			1.7				M
6			1.7				▽
			1.7				S
8			1.7				M
			1.7				D
10						End of boring at 10 feet bgs	
12							
14							
16							
18							
20							

TEMPORARY WELL DIAGRAM



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BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

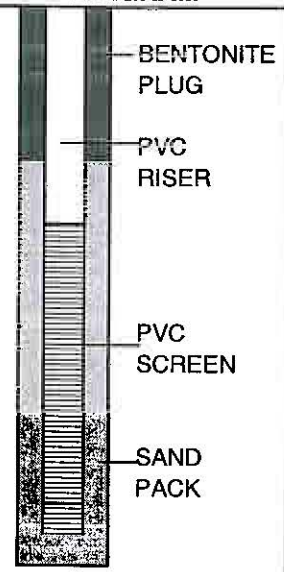
B-15/MW-400

Drawn By: Janet Michaluk
Date: 12.26.06

DRILLING COMPANY:	McDOWELL & ASSOCIATES	WEATHER:	45 F RAINY
TECHNICIAN:	RICHARD	BORING DEPTH:	9 FEET BGS
DATE DRILLED:	12.21.06	DEPTH TO GW:	6 FEET BGS
DRILLING METHOD:	HOLLOW-STEM AUGER	SCREEN INTERVAL:	3.5-8.5 FEET BGS
FIELD GEOLOGIST:	JANET MICHALUK	SCREEN MATERIAL:	2 INCH PVC

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE
					Brown	**FILL:** clay, masonry debris, sand, gravel	D
2							D
4							D
6							M ▽
							S
8							M
							D
						End of boring at 9 feet bgs	
10							
12							
14							
16							
18							
20							

PERMANENT WELL DIAGRAM



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BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

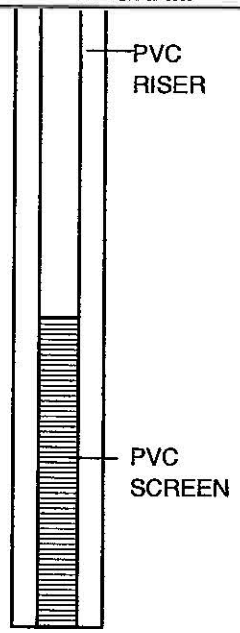
B-16

Drawn By: Janet Michaluk
Date: 12.26.06

DRILLING COMPANY:	FIBERTEC	WEATHER:	35 F CLOUDY
TECHNICIAN:	FRED	BORING DEPTH:	16 FEET BGS
DATE DRILLED:	12.6.06	DEPTH TO GW:	8 FEET BGS
DRILLING METHOD:	GEOPROBE	SCREEN INTERVAL:	5-10 FEET BGS
FIELD GEOLOGIST:	JANET MICHALUK	SCREEN MATERIAL:	1 INCH PVC

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE
			1.7		Brown	**FILL:** clay, sand, gravel, masonry debri	D
			1.5	CL	Brown	**CLAY:** medium stiff, mottled	
2		60	1.6				D
			1.8				
4			1.8				D
			1.7				
6		50	15				D
			1.6				M
8			1.5				▽ S
			1.6				M
10		100	1.7	SM	Brown	**SAND:** fine grained	D
			1.8				
12			1.7	CL	Grey	**CLAY:** soft	D
			1.7				
14		60	1.8				D
			1.7				
16						End of boring at 16 feet bgs	
18							
20							

TEMPORARY WELL DIAGRAM



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BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

B-17

Drawn By: Janet Michaluk
Date: 12.26.06

DRILLING COMPANY:	FIBERTEC	WEATHER:	35 F CLOUDY
TECHNICIAN:	ANDY	BORING DEPTH:	10 FEET BGS
DATE DRILLED:	12.6.06	DEPTH TO GW:	4 FEET BGS
DRILLING METHOD:	GEOPROBE	SCREEN INTERVAL:	NA
FIELD GEOLOGIST:	MEGAN BAHORSKI AND JANET MICHALUK	SCREEN MATERIAL:	NA

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE	TEMPORARY WELL DIAGRAM
			1.6		Black	**FILL:** sand, gravel, cement, masonry debis	D	
			1.6					
2			1.6				D	
		70	1.6					
			1.6				M	
4							▽	
			1.6				S	
			1.6				M	
6								
			1.6				D	
		90	1.6					
8								
			1.6				D	
			1.6					
10						End of boring at 10 feet bgs		
12								
14								
16								
18								
20								

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BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

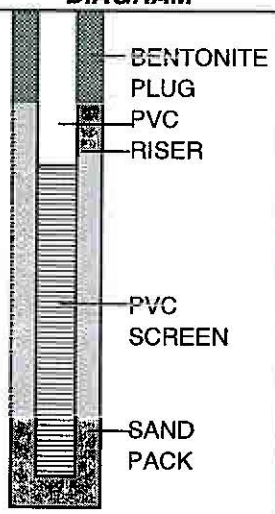
B-17/MW-100

Drawn By: Janet Michaluk
Date: 12.26.06

DRILLING COMPANY:	McDOWELL & ASSOCIATES	WEATHER:	45 F RAINY
TECHNICIAN:	RICHARD	BORING DEPTH:	8 FEET BGS
DATE DRILLED:	12.21.06	DEPTH TO GW:	4 FEET BGS
DRILLING METHOD:	HOLLOW-STEM AUGER	SCREEN INTERVAL:	2.5-7.5 FEET BGS
FIELD GEOLOGIST:	JANET MICHALUK	SCREEN MATERIAL:	2 INCH PVC

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE
					Black	**FILL:** sand, gravl, cement, masonry debris	D
2							D
4							M ▽
6							S M
							D
8						End of boring at 8 Feet Bgs	
10							
12							
14							
16							
18							
20							

PERMANENT WELL DIAGRAM



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BORING LOG

ATWATER LOFTS
EAST ATWATER STREET
DETROIT, MICHIGAN
PROJECT NUMBER: 5133D

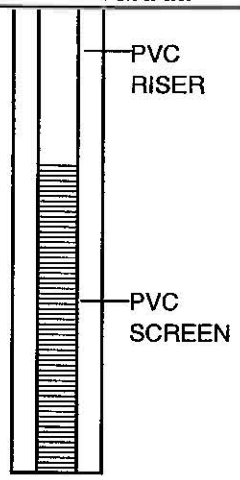
B-18

Drawn By: Janet Michaluk
Date: 12.26.06

DRILLING COMPANY:	FIBERTEC	WEATHER:	35 F CLOUDY
TECHNICIAN:	FRED	BORING DEPTH:	12 FEET BGS
DATE DRILLED:	12.6.06	DEPTH TO GW:	4 FEET BGS
DRILLING METHOD:	GEOPROBE	SCREEN INTERVAL:	2.5-7.5 FEET BGS
FIELD GEOLOGIST:	JANET MICHALUK	SCREEN MATERIAL:	1 INCH PVC

DEPTH FEET	SAMPLE INTERVAL	% RECOVERY	PID VALUE	USCS SOIL CLASS.	COLOR	GEOLOGIC DESCRIPTION	MOISTURE
			2.1		Brown	**FILL:** sand, masonry debris	D
			2.1				
2		100					
			2.1		Greenish/ Grey	**FILL:** clay (medium stiff, mottled) potential staining 2-4 feet bgs	D
			2.1				M
4							▽
			2.2		Black	**FILL:** sand (fine to medium grained)	S
			2				
6		75					M
			2.1	CL	Grey	**CLAY:** medium stiff	D
			2.1				
8							
			2				D
			2				
10		100			Brown	2 inch silt seam	D
			2.1				
			2.1				
12						End of boring at 12 feet bgs	
14							
16							
18							
20							

TEMPORARY WELL DIAGRAM



APPENDIX B

LABORATORY ANALYTICAL REPORT

Fibertec
environmental
services

Thursday, December 14, 2006

Fibertec Project Number: 20955
Project Identification: Atwater/5133d-6-20
Submittal Date: 12/6/2006

Ms. Megan Bahorski
AKT Peerless Environ. Svcs, Inc. - Detroit
607 Shelby Street
Suite 550
Detroit, MI 48226

Dear Ms. Bahorski,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed as requested and the results compiled in the enclosed report.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345. Please note samples will be disposed of 30 days after reporting date.

Sincerely,

Kylem Crandell for

Daryl P. Strandbergh
Laboratory Director

DPS/kc

Enclosures

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Ground Water**
Fibertec Project Number:	**21021**	Sample Number:	**21021-002**

Client Sample Information

Project Identification:	**5133d-6-20**	Client Sample Description:	**B-17W**
Project Number:	**NA**	Client Sample Number:	**2**
Sample Date:	**12/11/2006**	Chain of Custody Number:	**63601**

Comments:

Definitions:

ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analy.
Volatile Organic Compounds (VOCs) by GC/MS (EPA 5030B/EPA 8260B) (Sample pH = 6)								
Acetone	ND	µg/L	50	1	V306L12B	12/13/2006	12/13/2006	JAS
Acrylonitrile	ND	µg/L	2.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Benzene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Bromobenzene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Bromochloromethane	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Bromodichloromethane	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Bromoform	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Bromomethane	ND	µg/L	5.0	1	V306L12B	12/13/2006	12/13/2006	JAS
2-Butanone	ND	µg/L	25	1	V306L12B	12/13/2006	12/13/2006	JAS
n-Butylbenzene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
sec-Butylbenzene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
tert-Butylbenzene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Carbon Disulfide	ND	µg/L	5.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Carbon Tetrachloride	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Chlorobenzene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Chloroethane	ND	µg/L	5.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Chloroform	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Chloromethane	ND	µg/L	5.0	1	V306L12B	12/13/2006	12/13/2006	JAS
2-Chlorotoluene	ND	µg/L	5.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Dibromochloromethane	ND	µg/L	5.0	1	V306L12B	12/13/2006	12/13/2006	JAS

Fibertec environmental services

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Ground Water**
Fibertec Project Number:	**21021**	Sample Number:	**21021-002**

Client Sample Information

Project Identification:	**5133d-6-20**	Client Sample Description:	**B-17W**
Project Number:	**NA**	Client Sample Number:	**2**
Sample Date:	**12/11/2006**	Chain of Custody Number:	**63601**

Comments:

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyt
Volatile Organic Compounds (VOCs) by GC/MS (EPA 5030B/EPA 8260B) (Sample pH = 6)								
1,2-Dibromo-3-chloropropane	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Dibromomethane	ND	µg/L	5.0	1	V306L12B	12/13/2006	12/13/2006	JAS
1,2-Dichlorobenzene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
1,3-Dichlorobenzene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
1,4-Dichlorobenzene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Dichlorodifluoromethane	ND	µg/L	5.0	1	V306L12B	12/13/2006	12/13/2006	JAS
1,1-Dichloroethane	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
1,2-Dichloroethane	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
1,1-Dichloroethene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
cis-1,2-Dichloroethene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
trans-1,2-Dichloroethene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
1,2-Dichloropropane	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
cis-1,3-Dichloropropene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
trans-1,3-Dichloropropene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Ethylbenzene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Ethylene Dibromide	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
2-Hexanone	ND	µg/L	50	1	V306L12B	12/13/2006	12/13/2006	JAS
Methyl Iodide	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Isopropylbenzene	ND	µg/L	5.0	1	V306L12B	12/13/2006	12/13/2006	JAS
4-Methyl-2-pentanone	ND	µg/L	50	1	V306L12B	12/13/2006	12/13/2006	JAS

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Ground Water**
Fibertec Project Number:	**21021**	Sample Number:	**21021-002**

Client Sample Information

Project Identification:	**5133d-6-20**	Client Sample Description:	**B-17W**
Project Number:	**NA**	Client Sample Number:	**2**
Sample Date:	**12/11/2006**	Chain of Custody Number:	**63601**

Comments:

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Anal.
Volatile Organic Compounds (VOCs) by GC/MS (EPA 5030B/EPA 8260B) (Sample pH = 6)								
Methylene Chloride	ND	µg/L	5.0	1	V306L12B	12/13/2006	12/13/2006	JAS
MTBE	ND	µg/L	5.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Naphthalene	ND	µg/L	5.0	1	V306L12B	12/13/2006	12/13/2006	JAS
n-Propylbenzene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Styrene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
1,1,2,2-Tetrachloroethane	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Tetrachloroethene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Toluene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
1,2,4-Trichlorobenzene	ND	µg/L	5.0	1	V306L12B	12/13/2006	12/13/2006	JAS
1,1,1-Trichloroethane	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
1,1,2-Trichloroethane	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Trichloroethene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Trichlorofluoromethane	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
1,2,3-Trichloropropane	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
1,2,4-Trimethylbenzene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
1,3,5-Trimethylbenzene	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
nyl Chloride	ND	µg/L	1.0	1	V306L12B	12/13/2006	12/13/2006	JAS
Xylenes	ND	µg/L	3.0	1	V306L12B	12/13/2006	12/13/2006	JAS

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Ground Water**
Fibertec Project Number:	**21021**	Sample Number:	**21021-002A**

Client Sample Information

Project Identification:	**5133d-6-20**	Client Sample Description:	**B-17W**
Project Number:	**NA**	Client Sample Number:	**2**
Sample Date:	**12/11/2006**	Chain of Custody Number:	**63601**

Comments:

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Anal
Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3535/EPA 8270C)								
Acenaphthene	ND	µg/L	5.0	1	42446	12/13/2006	12/15/2006	AMJ
Acenaphthylene	ND	µg/L	5.0	1	42446	12/13/2006	12/15/2006	AMJ
Anthracene	ND	µg/L	5.0	1	42446	12/13/2006	12/15/2006	AMJ
Benzo(a)anthracene	ND	µg/L	1.0	1	42446	12/13/2006	12/15/2006	AMJ
Benzo(a)pyrene	ND	µg/L	1.0	1	42446	12/13/2006	12/15/2006	AMJ
Benzo(b)fluoranthene	ND	µg/L	1.0	1	42446	12/13/2006	12/15/2006	AMJ
Benzo(ghi)perylene	ND	µg/L	1.0	1	42446	12/13/2006	12/15/2006	AMJ
Benzo(k)fluoranthene	ND	µg/L	1.0	1	42446	12/13/2006	12/15/2006	AMJ
Chrysene	ND	µg/L	1.0	1	42446	12/13/2006	12/15/2006	AMJ
Dibenzo(a,h)anthracene	ND	µg/L	2.0	1	42446	12/13/2006	12/15/2006	AMJ
Fluoranthene	ND	µg/L	1.0	1	42446	12/13/2006	12/15/2006	AMJ
Fluorene	ND	µg/L	5.0	1	42446	12/13/2006	12/15/2006	AMJ
Indeno(1,2,3-cd)pyrene	ND	µg/L	2.0	1	42446	12/13/2006	12/15/2006	AMJ
2-Methylnaphthalene	ND	µg/L	5.0	1	42446	12/13/2006	12/15/2006	AMJ
Phenanthrene	ND	µg/L	2.0	1	42446	12/13/2006	12/15/2006	AMJ
Pyrene	ND	µg/L	5.0	1	42446	12/13/2006	12/15/2006	AMJ

Fibertec environmental services

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Soil/Solid**
Fibertec Project Number:	**20955**	Sample Number:	**20955-002A**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-2 (1-3)**
Project Number:	**5133d-6-20**	Client Sample Number:	**2**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 12.3%.**

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Dry Weight Determination (ASTM D 2974-87)								
Percent Moisture (Water Content)	**12**	%	0.1	1	NA	12/8/2006	12/11/2006	BMG
Arsenic by ICP/MS (EPA 3050B/EPA 6020)								
Arsenic	**14000**	µg/kg	100	1	42427	12/11/2006	12/11/2006	JAG
Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3550B/EPA 8270C)								
Acenaphthene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Acenaphthylene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Anthracene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Benzo(a)anthracene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Benzo(a)pyrene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Benzo(b)fluoranthene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Benzo(ghi)perylene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Benzo(k)fluoranthene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Chrysene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Dibenzo(a,h)anthracene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Fluoranthene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Fluorene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Indeno(1,2,3-cd)pyrene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
1ethylnaphthalene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Naphthalene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Phenanthrene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Soil/Solid**
Fibertec Project Number:	**20955**	Sample Number:	**20955-002A**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-2 (1-3)**
Project Number:	**5133d-6-20**	Client Sample Number:	**2**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 12.3%.**

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3550B/EPA 8270C)								
Pyrene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Soil/Solid**
Fibertec Project Number:	**20955**	Sample Number:	**20955-003**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-2 (5-7)**
Project Number:	**5133d-6-20**	Client Sample Number:	**3**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 18.4%.**

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) (Estimated result for 1,2-dichloroethane, compound failed low on CCV)								
Acetone	ND	µg/kg	1000	1	VB06L08A	12/6/2006	12/8/2006	JAS
Acrylonitrile	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
Benzene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Bromobenzene	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
Bromochloromethane	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
Bromodichloromethane	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
Bromoform	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
Bromomethane	ND	µg/kg	200	1	VB06L08A	12/6/2006	12/8/2006	JAS
2-Butanone	ND	µg/kg	750	1	VB06L08A	12/6/2006	12/8/2006	JAS
n-Butylbenzene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
sec-Butylbenzene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
tert-Butylbenzene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Carbon Disulfide	ND	µg/kg	250	1	VB06L08A	12/6/2006	12/8/2006	JAS
Carbon Tetrachloride	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Chlorobenzene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Chloroethane	ND	µg/kg	250	1	VB06L08A	12/6/2006	12/8/2006	JAS
Chloroform	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
loromethane	ND	µg/kg	250	1	VB06L08A	12/6/2006	12/8/2006	JAS
2-Chlorotoluene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Dibromochloromethane	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Soil/Solid**
Fibertec Project Number:	**20955**	Sample Number:	**20955-003**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-2 (5-7)**
Project Number:	**5133d-6-20**	Client Sample Number:	**3**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 18.4%.**

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
olatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) (Estimated result for 1,2-dichloroethane, compound failed low on CCV)								
1,2-Dibromo-3-chloropropane	ND	µg/kg	10	1	VB06L08A	12/6/2006	12/8/2006	JAS
Dibromomethane	ND	µg/kg	250	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,2-Dichlorobenzene	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,3-Dichlorobenzene	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,4-Dichlorobenzene	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
Dichlorodifluoromethane	ND	µg/kg	250	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,1-Dichloroethane	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,2-Dichloroethane	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,1-Dichloroethene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
cis-1,2-Dichloroethene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
trans-1,2-Dichloroethene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,2-Dichloropropane	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
cis-1,3-Dichloropropene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
trans-1,3-Dichloropropene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Ethylbenzene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Ethylene Dibromide	ND	µg/kg	20	1	VB06L08A	12/6/2006	12/8/2006	JAS
2-Hexanone	ND	µg/kg	2500	1	VB06L08A	12/6/2006	12/8/2006	JAS
thyl Iodide	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
Isopropylbenzene	ND	µg/kg	250	1	VB06L08A	12/6/2006	12/8/2006	JAS
4-Methyl-2-pentanone	ND	µg/kg	2500	1	VB06L08A	12/6/2006	12/8/2006	JAS

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Soil/Solid**
Fibertec Project Number:	**20955**	Sample Number:	**20955-003**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-2 (5-7)**
Project Number:	**5133d-6-20**	Client Sample Number:	**3**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 18.4%.**

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) (Estimated result for 1,2-dichloroethane, compound failed low on CCV)								
Methylene Chloride	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
MTBE	ND	µg/kg	250	1	VB06L08A	12/6/2006	12/8/2006	JAS
Naphthalene	ND	µg/kg	330	1	VB06L08A	12/6/2006	12/8/2006	JAS
n-Propylbenzene	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
Styrene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,1,1,2-Tetrachloroethane	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,1,2,2-Tetrachloroethane	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Tetrachloroethene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Toluene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,2,4-Trichlorobenzene	ND	µg/kg	330	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,1,1-Trichloroethane	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,1,2-Trichloroethane	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Trichloroethene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Trichlorofluoromethane	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,2,3-Trichloropropane	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,2,4-Trimethylbenzene	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,3,5-Trimethylbenzene	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
nyl Chloride	ND	µg/kg	40	1	VB06L08A	12/6/2006	12/8/2006	JAS
Xylenes	ND	µg/kg	150	1	VB06L08A	12/6/2006	12/8/2006	JAS

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Soil/Solid**
Fibertec Project Number:	**20955**	Sample Number:	**20955-003A**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-2 (5-7)**
Project Number:	**5133d-6-20**	Client Sample Number:	**3**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 18.4%.**

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Dry Weight Determination (ASTM D 2974-87)								
Percent Moisture (Water Content)	**18**	%	0.1	1	NA	12/8/2006	12/11/2006	BMG
Michigan 10 Elements by ICP/MS (EPA 3050B/EPA 6020)								
Arsenic	**7400**	µg/kg	100	1	42427	12/11/2006	12/11/2006	JAG
Barium	**79000**	µg/kg	1000	1	42427	12/11/2006	12/11/2006	JAG
Cadmium	**370**	µg/kg	50	1	42427	12/11/2006	12/11/2006	JAG
Chromium	**18000**	µg/kg	500	1	42427	12/11/2006	12/11/2006	JAG
Copper	**18000**	µg/kg	1000	1	42427	12/11/2006	12/11/2006	JAG
Lead	**22000**	µg/kg	1000	1	42427	12/11/2006	12/11/2006	JAG
Selenium	**430**	µg/kg	200	1	42427	12/11/2006	12/11/2006	JAG
Silver	ND	µg/kg	100	1	42427	12/11/2006	12/11/2006	JAG
Zinc	**65000**	µg/kg	1000	1	42427	12/11/2006	12/11/2006	JAG
Mercury by CVAAS (EPA 7471A)								
Mercury	**56**	µg/kg	50	1	42423	12/11/2006	12/11/2006	PAM
Polychlorinated Biphenyls (PCBs) (EPA 3550B/EPA 8082)								
Aroclor-1016	ND	µg/kg	330	1	42405	12/8/2006	12/11/2006	BDA
Aroclor-1221	ND	µg/kg	330	1	42405	12/8/2006	12/11/2006	BDA
Aroclor-1232	ND	µg/kg	330	1	42405	12/8/2006	12/11/2006	BDA
Aroclor-1242	ND	µg/kg	330	1	42405	12/8/2006	12/11/2006	BDA
Aroclor-1248	ND	µg/kg	330	1	42405	12/8/2006	12/11/2006	BDA
Aroclor-1254	ND	µg/kg	330	1	42405	12/8/2006	12/11/2006	BDA

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Soil/Solid**
Fibertec Project Number:	**20955**	Sample Number:	**20955-003A**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-2 (5-7)**
Project Number:	**5133d-6-20**	Client Sample Number:	**3**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 18.4%.**

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Polychlorinated Biphenyls (PCBs) (EPA 3550B/EPA 8082)								
Aroclor-1260	ND	µg/kg	330	1	42405	12/8/2006	12/11/2006	BDA
Aroclor-1262	ND	µg/kg	330	1	42405	12/8/2006	12/11/2006	BDA
Aroclor-1268	ND	µg/kg	330	1	42405	12/8/2006	12/11/2006	BDA
Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3550B/EPA 8270C)								
Acenaphthene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Acenaphthylene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Anthracene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Benzo(a)anthracene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Benzo(a)pyrene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Benzo(b)fluoranthene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Benzo(ghi)perylene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Benzo(k)fluoranthene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Chrysene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Dibenzo(a,h)anthracene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Fluoranthene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Fluorene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Indeno(1,2,3-cd)pyrene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Methylnaphthalene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Phenanthrene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Pyrene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ

Fibertec environmental services

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Ground Water**
Fibertec Project Number:	**20955**	Sample Number:	**20955-004**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-2W**
Project Number:	**5133d-6-20**	Client Sample Number:	**4**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments:

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds (VOCs) by GC/MS (EPA 5030B/EPA 8260B)								
Acetone	ND	µg/L	50	1	VA06L08B	12/9/2006	12/9/2006	BJK
Acrylonitrile	ND	µg/L	2.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Benzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Bromobenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Bromochloromethane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Bromodichloromethane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Bromoform	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Bromomethane	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
2-Butanone	ND	µg/L	25	1	VA06L08B	12/9/2006	12/9/2006	BJK
n-Butylbenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
sec-Butylbenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
tert-Butylbenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Carbon Disulfide	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Carbon Tetrachloride	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Chlorobenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Chloroethane	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Chloroform	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
ıloromethane	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
2-Chlorotoluene	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Dibromochloromethane	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK

Fibertec environmental services

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Ground Water**
Fibertec Project Number:	**20955**	Sample Number:	**20955-004**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-2W**
Project Number:	**5133d-6-20**	Client Sample Number:	**4**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments:

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds (VOCs) by GC/MS (EPA 5030B/EPA 8260B)								
1,2-Dibromo-3-chloropropane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Dibromomethane	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,2-Dichlorobenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,3-Dichlorobenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,4-Dichlorobenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Dichlorodifluoromethane	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,1-Dichloroethane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,2-Dichloroethane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,1-Dichloroethene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
cis-1,2-Dichloroethene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
trans-1,2-Dichloroethene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,2-Dichloropropane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
cis-1,3-Dichloropropene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
trans-1,3-Dichloropropene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Ethylbenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Ethylene Dibromide	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
2-Hexanone	ND	µg/L	50	1	VA06L08B	12/9/2006	12/9/2006	BJK
ethyl Iodide	ND	µg/L	3.0	3	VA06L08B	12/9/2006	12/9/2006	BJK
Isopropylbenzene	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
4-Methyl-2-pentanone	ND	µg/L	50	1	VA06L08B	12/9/2006	12/9/2006	BJK

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Ground Water**
Fibertec Project Number:	**20955**	Sample Number:	**20955-004**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-2W**
Project Number:	**5133d-6-20**	Client Sample Number:	**4**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments:

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FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
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X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds (VOCs) by GC/MS (EPA 5030B/EPA 8260B)								
Methylene Chloride	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
MTBE	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Naphthalene	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
n-Propylbenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Styrene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,1,2,2-Tetrachloroethane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Tetrachloroethene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Toluene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,2,4-Trichlorobenzene	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,1,1-Trichloroethane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,1,2-Trichloroethane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Trichloroethene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Trichlorofluoromethane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,2,3-Trichloropropane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,2,4-Trimethylbenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,3,5-Trimethylbenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
inyl Chloride	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Xylenes	ND	µg/L	3.0	1	VA06L08B	12/9/2006	12/9/2006	BJK

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Ground Water**
Fibertec Project Number:	**20955**	Sample Number:	**20955-004A**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-2W**
Project Number:	**5133d-6-20**	Client Sample Number:	**4**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments:

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FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
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X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Polychlorinated Biphenyls (PCBs) (EPA 3535/EPA 8082)								
Aroclor-1016	ND	µg/L	0.20	1	42338	12/11/2006	12/12/2006	BDA
Aroclor-1221	ND	µg/L	0.20	1	42338	12/11/2006	12/12/2006	BDA
Aroclor-1232	ND	µg/L	0.20	1	42338	12/11/2006	12/12/2006	BDA
Aroclor-1242	ND	µg/L	0.20	1	42338	12/11/2006	12/12/2006	BDA
Aroclor-1248	ND	µg/L	0.20	1	42338	12/11/2006	12/12/2006	BDA
Aroclor-1254	ND	µg/L	0.20	1	42338	12/11/2006	12/12/2006	BDA
Aroclor-1260	**0.53**	µg/L	0.20	1	42338	12/11/2006	12/12/2006	BDA
Aroclor-1262	ND	µg/L	0.20	1	42338	12/11/2006	12/12/2006	BDA
Aroclor-1268	ND	µg/L	0.20	1	42338	12/11/2006	12/12/2006	BDA
Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3535/EPA 8270C)								
Acenaphthene	ND	µg/L	5.0	1	42407	12/8/2006	12/11/2006	LAN
Acenaphthylene	ND	µg/L	5.0	1	42407	12/8/2006	12/11/2006	LAN
Anthracene	ND	µg/L	5.0	1	42407	12/8/2006	12/11/2006	LAN
Benzo(a)anthracene	ND	µg/L	1.0	1	42407	12/8/2006	12/11/2006	LAN
Benzo(a)pyrene	ND	µg/L	1.0	1	42407	12/8/2006	12/11/2006	LAN
Benzo(b)fluoranthene	ND	µg/L	1.0	1	42407	12/8/2006	12/11/2006	LAN
Benzo(ghi)perylene	ND	µg/L	1.0	1	42407	12/8/2006	12/11/2006	LAN
enzo(k)fluoranthene	ND	µg/L	1.0	1	42407	12/8/2006	12/11/2006	LAN
Chrysene	ND	µg/L	1.0	1	42407	12/8/2006	12/11/2006	LAN
Dibenzo(a,h)anthracene	ND	µg/L	2.0	1	42407	12/8/2006	12/11/2006	LAN

Fibertec environmental services

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Ground Water**
Fibertec Project Number:	**20955**	Sample Number:	**20955-004A**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-2W**
Project Number:	**5133d-6-20**	Client Sample Number:	**4**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments:

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E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3535/EPA 8270C)								
Fluoranthene	ND	µg/L	1.0	1	42407	12/8/2006	12/11/2006	LAN
Fluorene	ND	µg/L	5.0	1	42407	12/8/2006	12/11/2006	LAN
Indeno(1,2,3-cd)pyrene	ND	µg/L	2.0	1	42407	12/8/2006	12/11/2006	LAN
2-Methylnaphthalene	ND	µg/L	5.0	1	42407	12/8/2006	12/11/2006	LAN
Phenanthrene	ND	µg/L	2.0	1	42407	12/8/2006	12/11/2006	LAN
Pyrene	ND	µg/L	5.0	1	42407	12/8/2006	12/11/2006	LAN

Fibertec environmental services

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Ground Water**
Fibertec Project Number:	**20955**	Sample Number:	**20955-004B**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-2W**
Project Number:	**5133d-6-20**	Client Sample Number:	**4**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments:

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Michigan 10 Elements by ICP/MS, Total (EPA 3005A/EPA 6020)								
Arsenic	**20**	µg/L	5.0	1	42428	12/11/2006	12/11/2006	JAG
Barium	**520**	µg/L	100	1	42428	12/11/2006	12/11/2006	JAG
Cadmium	ND	µg/L	1.0	1	42428	12/11/2006	12/11/2006	JAG
Chromium	**15**	µg/L	10	1	42428	12/11/2006	12/11/2006	JAG
Copper	**94**	µg/L	4.0	1	42428	12/11/2006	12/11/2006	JAG
Lead	**670**	µg/L	3.0	1	42428	12/11/2006	12/11/2006	JAG
Selenium	ND	µg/L	5.0	1	42428	12/11/2006	12/11/2006	JAG
Silver	**0.53**	µg/L	0.20	1	42428	12/11/2006	12/11/2006	JAG
Zinc	**310**	µg/L	50	1	42428	12/11/2006	12/11/2006	JAG
Mercury by CVAAS, Total (EPA 7470A)								
Mercury	**1.3**	µg/L	0.20	1	42421	12/11/2006	12/11/2006	PAM

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Soil/Solid**
Fibertec Project Number:	**20955**	Sample Number:	**20955-006**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-4 (2-4)**
Project Number:	**5133d-6-20**	Client Sample Number:	**6**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 14.9%.**

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) (Estimated result for 1,2-dichloroethane, compound failed low on CCV)								
Acetone	ND	µg/kg	1000	1	VB06L08A	12/6/2006	12/8/2006	JAS
Acrylonitrile	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
Benzene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Bromobenzene	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
Bromochloromethane	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
Bromodichloromethane	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
Bromoform	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
Bromomethane	ND	µg/kg	200	1	VB06L08A	12/6/2006	12/8/2006	JAS
2-Butanone	ND	µg/kg	750	1	VB06L08A	12/6/2006	12/8/2006	JAS
n-Butylbenzene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
sec-Butylbenzene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
tert-Butylbenzene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Carbon Disulfide	ND	µg/kg	250	1	VB06L08A	12/6/2006	12/8/2006	JAS
Carbon Tetrachloride	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Chlorobenzene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Chloroethane	ND	µg/kg	250	1	VB06L08A	12/6/2006	12/8/2006	JAS
Chloroform	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
loromethane	ND	µg/kg	250	1	VB06L08A	12/6/2006	12/8/2006	JAS
2-Chlorotoluene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Dibromochloromethane	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Soil/Solid**
Fibertec Project Number:	**20955**	Sample Number:	**20955-006**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-4 (2-4)**
Project Number:	**5133d-6-20**	Client Sample Number:	**6**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 14.9%.**

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) (Estimated result for 1,2-dichloroethane, compound failed low on CCV)								
1,2-Dibromo-3-chloropropane	ND	µg/kg	10	1	VB06L08A	12/6/2006	12/8/2006	JAS
Dibromomethane	ND	µg/kg	250	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,2-Dichlorobenzene	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,3-Dichlorobenzene	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,4-Dichlorobenzene	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
Dichlorodifluoromethane	ND	µg/kg	250	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,1-Dichloroethane	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,2-Dichloroethane	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,1-Dichloroethene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
cis-1,2-Dichloroethene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
trans-1,2-Dichloroethene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,2-Dichloropropane	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
cis-1,3-Dichloropropene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
trans-1,3-Dichloropropene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Ethylbenzene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Ethylene Dibromide	ND	µg/kg	20	1	VB06L08A	12/6/2006	12/8/2006	JAS
2-Hexanone	ND	µg/kg	2500	1	VB06L08A	12/6/2006	12/8/2006	JAS
ethyl Iodide	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
Isopropylbenzene	ND	µg/kg	250	1	VB06L08A	12/6/2006	12/8/2006	JAS
4-Methyl-2-pentanone	ND	µg/kg	2500	1	VB06L08A	12/6/2006	12/8/2006	JAS

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Soil/Solid**
Fibertec Project Number:	**20955**	Sample Number:	**20955-006**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-4 (2-4)**
Project Number:	**5133d-6-20**	Client Sample Number:	**6**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 14.9%.**

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B) (Estimated result for 1,2-dichloroethane, compound failed low on CCV)								
Methylene Chloride	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
MTBE	ND	µg/kg	250	1	VB06L08A	12/6/2006	12/8/2006	JAS
Naphthalene	ND	µg/kg	330	1	VB06L08A	12/6/2006	12/8/2006	JAS
n-Propylbenzene	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
Styrene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,1,1,2-Tetrachloroethane	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,1,2,2-Tetrachloroethane	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Tetrachloroethene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Toluene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,2,4-Trichlorobenzene	ND	µg/kg	330	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,1,1-Trichloroethane	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,1,2-Trichloroethane	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Trichloroethene	ND	µg/kg	50	1	VB06L08A	12/6/2006	12/8/2006	JAS
Trichlorofluoromethane	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,2,3-Trichloropropane	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,2,4-Trimethylbenzene	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
1,3,5-Trimethylbenzene	ND	µg/kg	100	1	VB06L08A	12/6/2006	12/8/2006	JAS
nyl Chloride	ND	µg/kg	40	1	VB06L08A	12/6/2006	12/8/2006	JAS
Xylenes	ND	µg/kg	150	1	VB06L08A	12/6/2006	12/8/2006	JAS

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Soil/Solid**
Fibertec Project Number:	**20955**	Sample Number:	**20955-006A**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-4 (2-4)**
Project Number:	**5133d-6-20**	Client Sample Number:	**6**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 14.9%.**

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Dry Weight Determination (ASTM D 2974-87)								
Percent Moisture (Water Content)	**15**	%	0.1	1	NA	12/8/2006	12/11/2006	BMG
Michigan 10 Elements by ICP/MS (EPA 3050B/EPA 6020)								
Arsenic	**2400**	µg/kg	100	1	42427	12/11/2006	12/11/2006	JAG
Barium	**24000**	µg/kg	1000	1	42427	12/11/2006	12/11/2006	JAG
Cadmium	ND	µg/kg	50	1	42427	12/11/2006	12/11/2006	JAG
Chromium	**6100**	µg/kg	500	1	42427	12/11/2006	12/11/2006	JAG
Copper	**3900**	µg/kg	1000	1	42427	12/11/2006	12/11/2006	JAG
Lead	**4200**	µg/kg	1000	1	42427	12/11/2006	12/11/2006	JAG
Selenium	ND	µg/kg	200	1	42427	12/11/2006	12/11/2006	JAG
Silver	ND	µg/kg	100	1	42427	12/11/2006	12/11/2006	JAG
Zinc	**13000**	µg/kg	1000	1	42427	12/11/2006	12/11/2006	JAG
Mercury by CVAAS (EPA 7471A)								
Mercury	ND	µg/kg	50	1	42423	12/11/2006	12/11/2006	PAM
Polychlorinated Biphenyls (PCBs) (EPA 3550B/EPA 8082)								
Aroclor-1016	ND	µg/kg	330	1	42405	12/8/2006	12/11/2006	BDA
Aroclor-1221	ND	µg/kg	330	1	42405	12/8/2006	12/11/2006	BDA
Aroclor-1232	ND	µg/kg	330	1	42405	12/8/2006	12/11/2006	BDA
Aroclor-1242	ND	µg/kg	330	1	42405	12/8/2006	12/11/2006	BDA
Aroclor-1248	ND	µg/kg	330	1	42405	12/8/2006	12/11/2006	BDA
Aroclor-1254	ND	µg/kg	330	1	42405	12/8/2006	12/11/2006	BDA

Fibertec environmental services

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Soil/Solid**
Fibertec Project Number:	**20955**	Sample Number:	**20955-006A**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-4 (2-4)**
Project Number:	**5133d-6-20**	Client Sample Number:	**6**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 14.9%.**

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Polychlorinated Biphenyls (PCBs) (EPA 3550B/EPA 8082)								
Aroclor-1260	ND	µg/kg	330	1	42405	12/8/2006	12/11/2006	BDA
Aroclor-1262	ND	µg/kg	330	1	42405	12/8/2006	12/11/2006	BDA
Aroclor-1268	ND	µg/kg	330	1	42405	12/8/2006	12/11/2006	BDA
Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3550B/EPA 8270C)								
Acenaphthene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Acenaphthylene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Anthracene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Benzo(a)anthracene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Benzo(a)pyrene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Benzo(b)fluoranthene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Benzo(ghi)perylene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Benzo(k)fluoranthene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Chrysene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Dibenzo(a,h)anthracene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Fluoranthene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Fluorene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Indeno(1,2,3-cd)pyrene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
^ Methylnaphthalene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
..enanthrene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ
Pyrene	ND	µg/kg	330	1	42406	12/8/2006	12/11/2006	AMJ

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Ground Water**
Fibertec Project Number:	**20955**	Sample Number:	**20955-007**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-4W**
Project Number:	**5133d-6-20**	Client Sample Number:	**7**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments:

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds (VOCs) by GC/MS (EPA 5030B/EPA 8260B) (Low surrogate recovery for 4-bromofluorobenzene (87%))								
Acetone	ND	µg/L	50	1	VA06L08B	12/9/2006	12/9/2006	BJK
Acrylonitrile	ND	µg/L	2.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Benzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Bromobenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Bromochloromethane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Bromodichloromethane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Bromoform	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Bromomethane	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
2-Butanone	ND	µg/L	25	1	VA06L08B	12/9/2006	12/9/2006	BJK
n-Butylbenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
sec-Butylbenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
tert-Butylbenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Carbon Disulfide	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Carbon Tetrachloride	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Chlorobenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Chloroethane	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Chloroform	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
'hloromethane	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
2-Chlorotoluene	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Dibromochloromethane	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Ground Water**
Fibertec Project Number:	**20955**	Sample Number:	**20955-007**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-4W**
Project Number:	**5133d-6-20**	Client Sample Number:	**7**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments:

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds (VOCs) by GC/MS (EPA 5030B/EPA 8260B) (Low surrogate recovery for 4-bromofluorobenzene (87%))								
1,2-Dibromo-3-chloropropane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Dibromomethane	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,2-Dichlorobenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,3-Dichlorobenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,4-Dichlorobenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Dichlorodifluoromethane	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,1-Dichloroethane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,2-Dichloroethane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,1-Dichloroethene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
cis-1,2-Dichloroethene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
trans-1,2-Dichloroethene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,2-Dichloropropane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
cis-1,3-Dichloropropene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
trans-1,3-Dichloropropene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Ethylbenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Ethylene Dibromide	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
2-Hexanone	ND	µg/L	50	1	VA06L08B	12/9/2006	12/9/2006	BJK
Methyl Iodide	ND	µg/L	3.0	3	VA06L08B	12/9/2006	12/9/2006	BJK
Isopropylbenzene	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
4-Methyl-2-pentanone	ND	µg/L	50	1	VA06L08B	12/9/2006	12/9/2006	BJK

Fibertec environmental services

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Ground Water**
Fibertec Project Number:	**20955**	Sample Number:	**20955-007**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-4W**
Project Number:	**5133d-6-20**	Client Sample Number:	**7**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments:

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds (VOCs) by GC/MS (EPA 5030B/EPA 8260B) (Low surrogate recovery for 4-bromofluorobenzene (87%))								
Methylene Chloride	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
MTBE	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Naphthalene	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
n-Propylbenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Styrene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,1,2,2-Tetrachloroethane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Tetrachloroethene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Toluene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,2,4-Trichlorobenzene	ND	µg/L	5.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,1,1-Trichloroethane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,1,2-Trichloroethane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Trichloroethene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Trichlorofluoromethane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,2,3-Trichloropropane	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,2,4-Trimethylbenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
1,3,5-Trimethylbenzene	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Vinyl Chloride	ND	µg/L	1.0	1	VA06L08B	12/9/2006	12/9/2006	BJK
Xylenes	ND	µg/L	3.0	1	VA06L08B	12/9/2006	12/9/2006	BJK

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Ground Water**
Fibertec Project Number:	**20955**	Sample Number:	**20955-007A**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-4W**
Project Number:	**5133d-6-20**	Client Sample Number:	**7**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments:

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3535/EPA 8270C)								
Acenaphthene	ND	µg/L	5.0	1	42407	12/8/2006	12/11/2006	LAN
Acenaphthylene	ND	µg/L	5.0	1	42407	12/8/2006	12/11/2006	LAN
Anthracene	ND	µg/L	5.0	1	42407	12/8/2006	12/11/2006	LAN
Benzo(a)anthracene	ND	µg/L	1.0	1	42407	12/8/2006	12/11/2006	LAN
Benzo(a)pyrene	ND	µg/L	1.0	1	42407	12/8/2006	12/11/2006	LAN
Benzo(b)fluoranthene	ND	µg/L	1.0	1	42407	12/8/2006	12/11/2006	LAN
Benzo(ghi)perylene	ND	µg/L	1.0	1	42407	12/8/2006	12/11/2006	LAN
Benzo(k)fluoranthene	ND	µg/L	1.0	1	42407	12/8/2006	12/11/2006	LAN
Chrysene	ND	µg/L	1.0	1	42407	12/8/2006	12/11/2006	LAN
Dibenzo(a,h)anthracene	ND	µg/L	2.0	1	42407	12/8/2006	12/11/2006	LAN
Fluoranthene	ND	µg/L	1.0	1	42407	12/8/2006	12/11/2006	LAN
Fluorene	ND	µg/L	5.0	1	42407	12/8/2006	12/11/2006	LAN
Indeno(1,2,3-cd)pyrene	ND	µg/L	2.0	1	42407	12/8/2006	12/11/2006	LAN
2-Methylnaphthalene	ND	µg/L	5.0	1	42407	12/8/2006	12/11/2006	LAN
Phenanthrene	ND	µg/L	2.0	1	42407	12/8/2006	12/11/2006	LAN
Pyrene	ND	µg/L	5.0	1	42407	12/8/2006	12/11/2006	LAN

Fibertec environmental services

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Ground Water**
Fibertec Project Number:	**20955**	Sample Number:	**20955-007B**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-4W**
Project Number:	**5133d-6-20**	Client Sample Number:	**7**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments:

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Michigan 10 Elements by ICP/MS, Total (EPA 3005A/EPA 6020)								
Arsenic	**330**	µg/L	5.0	1	42428	12/11/2006	12/11/2006	JAG
Barium	**460**	µg/L	100	1	42428	12/11/2006	12/11/2006	JAG
Cadmium	**1.1**	µg/L	1.0	1	42428	12/11/2006	12/11/2006	JAG
Chromium	**62**	µg/L	10	1	42428	12/11/2006	12/11/2006	JAG
Copper	**110**	µg/L	4.0	1	42428	12/11/2006	12/11/2006	JAG
Lead	**160**	µg/L	3.0	1	42428	12/11/2006	12/11/2006	JAG
Selenium	**56**	µg/L	5.0	1	42428	12/11/2006	12/11/2006	JAG
Silver	**0.60**	µg/L	0.20	1	42428	12/11/2006	12/11/2006	JAG
Zinc	**230**	µg/L	50	1	42428	12/11/2006	12/11/2006	JAG
Mercury by CVAAS, Total (EPA 7470A)								
Mercury	**0.30**	µg/L	0.20	1	42421	12/11/2006	12/11/2006	PAM

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Soil/Solid**
Fibertec Project Number:	**20955**	Sample Number:	**20955-009**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-6 (4-6)**
Project Number:	**5133d-6-20**	Client Sample Number:	**9**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 24.6%.**

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B)								
Acetone	ND	µg/kg	1000	1	VB06L10A	12/6/2006	12/10/2006	BAG
Acrylonitrile	ND	µg/kg	100	1	VB06L10A	12/6/2006	12/10/2006	BAG
Benzene	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
Bromobenzene	ND	µg/kg	100	1	VB06L10A	12/6/2006	12/10/2006	BAG
Bromochloromethane	ND	µg/kg	100	1	VB06L10A	12/6/2006	12/10/2006	BAG
Bromodichloromethane	ND	µg/kg	100	1	VB06L10A	12/6/2006	12/10/2006	BAG
Bromoform	ND	µg/kg	100	1	VB06L10A	12/6/2006	12/10/2006	BAG
Bromomethane	ND	µg/kg	200	1	VB06L10A	12/6/2006	12/10/2006	BAG
2-Butanone	ND	µg/kg	750	1	VB06L10A	12/6/2006	12/10/2006	BAG
n-Butylbenzene	**300**	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
sec-Butylbenzene	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
tert-Butylbenzene	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
Carbon Disulfide	ND	µg/kg	250	1	VB06L10A	12/6/2006	12/10/2006	BAG
Carbon Tetrachloride	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
Chlorobenzene	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
Chloroethane	ND	µg/kg	250	1	VB06L10A	12/6/2006	12/10/2006	BAG
Chloroform	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
Chloromethane	ND	µg/kg	250	1	VB06L10A	12/6/2006	12/10/2006	BAG
2-Chlorotoluene	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
Dibromochloromethane	ND	µg/kg	100	1	VB06L10A	12/6/2006	12/10/2006	BAG

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Soil/Solid**
Fibertec Project Number:	**20955**	Sample Number:	**20955-009**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-6 (4-6)**
Project Number:	**5133d-6-20**	Client Sample Number:	**9**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 24.6%.**

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B)								
1,2-Dibromo-3-chloropropane	ND	µg/kg	10	1	VB06L10A	12/6/2006	12/10/2006	BAG
Dibromomethane	ND	µg/kg	250	1	VB06L10A	12/6/2006	12/10/2006	BAG
1,2-Dichlorobenzene	ND	µg/kg	100	1	VB06L10A	12/6/2006	12/10/2006	BAG
1,3-Dichlorobenzene	ND	µg/kg	100	1	VB06L10A	12/6/2006	12/10/2006	BAG
1,4-Dichlorobenzene	ND	µg/kg	100	1	VB06L10A	12/6/2006	12/10/2006	BAG
Dichlorodifluoromethane	ND	µg/kg	250	1	VB06L10A	12/6/2006	12/10/2006	BAG
1,1-Dichloroethane	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
1,2-Dichloroethane	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
1,1-Dichloroethene	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
cis-1,2-Dichloroethene	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
trans-1,2-Dichloroethene	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
1,2-Dichloropropane	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
cis-1,3-Dichloropropene	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
trans-1,3-Dichloropropene	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
Ethylbenzene	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
Ethylene Dibromide	ND	µg/kg	20	1	VB06L10A	12/6/2006	12/10/2006	BAG
2-Hexanone	ND	µg/kg	2500	1	VB06L10A	12/6/2006	12/10/2006	BAG
Methyl Iodide	ND	µg/kg	100	1	VB06L10A	12/6/2006	12/10/2006	BAG
Isopropylbenzene	ND	µg/kg	250	1	VB06L10A	12/6/2006	12/10/2006	BAG
4-Methyl-2-pentanone	ND	µg/kg	2500	1	VB06L10A	12/6/2006	12/10/2006	BAG

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Soil/Solid**
Fibertec Project Number:	**20955**	Sample Number:	**20955-009**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-6 (4-6)**
Project Number:	**5133d-6-20**	Client Sample Number:	**9**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 24.6%.**

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds (VOCs) by GC/MS, 5035 (EPA 5035/EPA 8260B)								
Methylene Chloride	ND	µg/kg	100	1	VB06L10A	12/6/2006	12/10/2006	BAG
MTBE	ND	µg/kg	250	1	VB06L10A	12/6/2006	12/10/2006	BAG
Naphthalene	ND	µg/kg	330	1	VB06L10A	12/6/2006	12/10/2006	BAG
n-Propylbenzene	ND	µg/kg	100	1	VB06L10A	12/6/2006	12/10/2006	BAG
Styrene	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
1,1,1,2-Tetrachloroethane	ND	µg/kg	100	1	VB06L10A	12/6/2006	12/10/2006	BAG
1,1,2,2-Tetrachloroethane	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
Tetrachloroethene	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
Toluene	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
1,2,4-Trichlorobenzene	ND	µg/kg	330	1	VB06L10A	12/6/2006	12/10/2006	BAG
1,1,1-Trichloroethane	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
1,1,2-Trichloroethane	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
Trichloroethene	ND	µg/kg	50	1	VB06L10A	12/6/2006	12/10/2006	BAG
Trichlorofluoromethane	ND	µg/kg	100	1	VB06L10A	12/6/2006	12/10/2006	BAG
1,2,3-Trichloropropane	ND	µg/kg	100	1	VB06L10A	12/6/2006	12/10/2006	BAG
1,2,4-Trimethylbenzene	ND	µg/kg	100	1	VB06L10A	12/6/2006	12/10/2006	BAG
1,3,5-Trimethylbenzene	ND	µg/kg	100	1	VB06L10A	12/6/2006	12/10/2006	BAG
Vinyl Chloride	ND	µg/kg	40	1	VB06L10A	12/6/2006	12/10/2006	BAG
Xylenes	ND	µg/kg	150	1	VB06L10A	12/6/2006	12/10/2006	BAG

Analytical Laboratory Report

Client Identification:	**AKT Peerless Environ. Svcs, Inc. - Detroit**	Sample Matrix:	**Soil/Solid**
Fibertec Project Number:	**20955**	Sample Number:	**20955-009A**

Client Sample Information

Project Identification:	**Atwater**	Client Sample Description:	**B-6 (4-6)**
Project Number:	**5133d-6-20**	Client Sample Number:	**9**
Sample Date:	**12/6/2006**	Chain of Custody Number:	**62981**

Comments: **All Results Reported On Dry Weight Basis. Percent Moisture = 24.6%.**

Definitions: **ND = Not Detected at or above the reporting limit; RL = Reporting Limit; NA = Not Applicable/Not Available**
FF = Field Filtered; B = Analyte detected in blank; TIC = Tentatively Identified Compound;
E = Estimated value; J = Analyte positively identified - estimated value
X - Spike recovery distorted due to elevated sample target analyte concentration (>=4X the amount spiked)
Y - Spike unrecoverable due to sample dilution.

Analyte	Result	Units	Report Limit	Dilution Factor	Prep Batch	Prep Date/Time	Analysis Date/Time	Analyst
Dry Weight Determination (ASTM D 2974-87)								
Percent Moisture (Water Content)	**25**	%	0.1	1	NA	12/8/2006	12/11/2006	BMG
Michigan 10 Elements by ICP/MS (EPA 3050B/EPA 6020)								
Arsenic	**100000**	µg/kg	100	1	42427	12/11/2006	12/12/2006	JAG
Barium	**110000**	µg/kg	1000	1	42427	12/11/2006	12/11/2006	JAG
Cadmium	**360**	µg/kg	50	1	42427	12/11/2006	12/11/2006	JAG
Chromium	**10000**	µg/kg	500	1	42427	12/11/2006	12/11/2006	JAG
Copper	**94000**	µg/kg	1000	1	42427	12/11/2006	12/12/2006	JAG
Lead	**410000**	µg/kg	1000	1	42427	12/11/2006	12/11/2006	JAG
Selenium	**7000**	µg/kg	200	1	42427	12/11/2006	12/11/2006	JAG
Silver	**220**	µg/kg	100	1	42427	12/11/2006	12/11/2006	JAG
Zinc	**89000**	µg/kg	1000	1	42427	12/11/2006	12/11/2006	JAG
Mercury by CVAAS (EPA 7471A)								
Mercury	**220**	µg/kg	50	1	42423	12/11/2006	12/11/2006	PAM
Polynuclear Aromatic Hydrocarbons (PNAs) (EPA 3550B/EPA 8270C)								
Acenaphthene	ND	µg/kg	330	1	42406	12/8/2006	12/12/2006	AMJ
Acenaphthylene	ND	µg/kg	330	1	42406	12/8/2006	12/12/2006	AMJ
Anthracene	ND	µg/kg	330	1	42406	12/8/2006	12/12/2006	AMJ
Benzo(a)anthracene	**1700**	µg/kg	330	1	42406	12/8/2006	12/12/2006	AMJ
nzo(a)pyrene	**1500**	µg/kg	330	1	42406	12/8/2006	12/12/2006	AMJ
Benzo(b)fluoranthene	**2700**	µg/kg	330	1	42406	12/8/2006	12/12/2006	AMJ