Remedial Investigation and

Remedial Alternatives Analysis Report

(Volume 1 of 5)

Midler City Industrial Park Site Brownfield Cleanup

City of Syracuse
Onondaga County, New York

NYSDEC BROWNFIELD SITE # C734103

Prepared for
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Midler City Industrial Park Site
Remedial Investigation and Remedial Alternatives Analysis Report

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PIONEER MIDLER AVENUE SITE

REMEDIAL INVESTIGATION AND REMEDIAL ALTERNATIVES ANALYSIS REPORT

SECTION 1 - INTRODUCTION

1.1 Purpose and Organization of the Report

This Remedial Investigation (RI) and Remedial Alternatives Analysis (RAA) Report documents efforts to characterize environmental quality at the Midler City Industrial Park Site, in the City of Syracuse, New York. This report covers work performed under the New York State Department of Environmental Conservation's (NYSDEC's) "Brownfields Program" and addresses elements, as appropriate, established within the NYSDEC's Brownfield Cleanup Program. This report covers work completed through October 2007.

Section 4 of this report documents the multi-phased Remedial Investigation, which identified the nature and extent of soil and groundwater contamination to be associated with four well-defined source areas where chlorinated volatile organic compounds (CVOCs) were present at concentrations orders of magnitude greater than were present elsewhere at the site. Those source areas were the subject of the year-long Interim Remedial Measure (IRM) which is documented in the Octo~~Octo~~ber 2007 *Interim Remedial Measures Report* (separate report). Section 5 summarizes the IRM and documents the removal of CVOCs from within the source areas, significantly altering the nature and extent of site soil and groundwater CVOC impacts (note that ground water continues to be monitored as discussed in a separate document, the *Remedial Work Plan*). Section 6 of this report then discusses post-IRM conditions at the site, which are the basis of subsequent evaluations associated with human health (Section 7) and the remedial alternatives analysis (Section 8).

1.2 Site Background

The following sections provide background information associated with the site, including a description of the site, the history of the site, and a summary of previous investigations or remedial actions undertaken.

1.2.1 Site Description

The Midler City Industrial Park Site is approximately 22 acres and is located in the eastern portion of the City of Syracuse, as shown on Figure 1. The site was developed as an industrial facility in the late nineteenth century and was utilized as such through the mid-twentieth century. The Midler City Industrial Park Site is relatively flat and is bounded as follows:

- To the north by Interstate Route 690;
- To the east by property reportedly held by Sutton Investing Corporation and currently being for mulching/landscaping operation;
- To the south by property owned by CSX Transportation; and
- To the west by Midler Avenue.

Review of United States Geological Survey (USGS) mapping shows that the site lies at an elevation of approximately 410 feet above mean sea level and is located approximately 800 feet north of the former Erie Canal (now Erie Boulevard) and three miles east of Onondaga Creek. Surface drainage in the area is controlled via storm water structures, with the majority of flow toward the west, where subtle sloping topography would result in discharge to Onondaga Creek, which discharges to Lake Ontario via the Seneca/Oswego River system.

According to United States Department of Agriculture - Soil Conservation Service Soil Survey mapping for Onondaga County, the soils in the vicinity of the site are classified as "Cut and Fill Land". These soils have moderate to poor permeability and are characterized by seasonal high water tables. Review of surficial geologic mapping prepared by the New York State Geological Survey indicates that unconsolidated soils in the vicinity of the site consist of lacustrine silt and clay. Consistent with the topographic setting of the site, shallow groundwater flow in the area of the site would be expected to flow across the site generally from north to south.

Regional bedrock geologic mapping indicates that bedrock underlying the site consists of the Camillus and Syracuse formations of shale, do~~o~~lostone, gypsum, or salts, generally present at depths of greater than 100 feet. Groundwater within the deeper bedrock generally occurs within fractures, joint sets, and bedding planes.

Residents in the area of the site receive their domestic water from municipal service connections supplied by the City of Syracuse. The source of the municipal water supply is surface water from Lakes Skaneateles and Ontario.

1.2.2 Site History

The early history of the site was characterized by its use as an industrial site and its proximity to transportation infrastructure (railroads and previously, the Erie Canal). Former tenants of note include *Pierce, Butler, & Pierce Manufacturing Company*, a producer of heavy iron wares (boilers, radiators, piping, etc.) and *Prosperity Company,* a producer of laundry and dry cleaning equipment. Since being acquired in 1961 by Sutton Investing Company, the buildings had been utilized as general storage/operations (warehouse) rental space. The nature of these tenants was varied and included the following:

- Auto dealer storage of new and used vehicles
- Electrical contractor
- Landscape contractor
- Rack/storage/pallet system vendor
- Hardwood/plywood storage
- General contractors

Figure 2 identifies the major site structures as they existed at the beginning of the Remedial Investigation. Concurrent with the RI, Pioneer Midler Avenue, LLC proceeded with the demolition of buildings and structures as well as redevelopment of the site into a multi-tenant commercial property, anchored by a major home improvement chain store. An October 2007 *Demolition Closure Report*, including details regarding incidents associated with subsurface conditions (i.e., encounters with unanticipated subsurface structures), will be submitted under separate cover. Redevelopment of the site is well underway and various components are scheduled for completion in late 2007.

1.2.3 Previous Investigations

A Phase I Environmental Site Assessment (ESA) was completed by C&S for the Midler City Industrial Park Site in 1994. That ESA concluded that evidence of recognized environmental conditions existed within numerous areas at the site. In particular:

- Thirteen areas were identified as having the potential for petroleum contamination due to leakage or spillage;
- Four areas were associated with general debris disposal including ashes/cinders;
- Six areas were identified as having the potential for chemical contamination due to container leakage or spillage;
- Five areas were identified as having the potential for contamination associated with electrical transformer dielectric fluids; and
- Evidence of asbestos-containing materials was also observed at several locations on the site.

Prior to submitting the BCP application, Pioneer Midler, LLC undertook a preliminary investigation in July 2004 (Appendix B). The objective of that investigation was to assess specific areas of the Site that were identified in the 1994 Phase I ESA. The areas of interest for the July 2004 investigation included:

- The former pond;
- The former C&D fill area;
- Area Q – former location of a 12,000 gallon fuel oil underground storage tank (UST);
- Area S – former location of four partially buried fuel oil storage tanks ranging in size from 900 gallons to 20,000 gallons; and

- Existing electrical powerhouse and maintenance building.

The former pond and C&D areas as well as Area Q and Area S were investigated by making a series of test trench explorations with a track mounted excavator. At the electrical powerhouse, wipe samples were obtained for laboratory analysis to assess the presence or absence of polychlorinated biphenyls (PCBs). In addition to the test pit explorations made to assess specific environmental areas of potential concern, three additional trenches were made along the western boundary of the site. Those excavations were dug to assess shallow groundwater levels in the location where stormwater retention basins have been proposed for the future site development.

Documentation of field observations and analytical laboratory results was presented in a letter report (included in Appendix B to this Report) prepared by C&S Engineers, Inc. for Pioneer Midler Avenue, LLC. The following is a summary of findings relative to the July 2004 investigation.

Former Pond Area

- Ground surface to four feet below grade consisted of soil intermixed with scrap wood, foundry sand, bricks, asphalt, concrete, a cast iron sink, and discarded metal cans.
- 3.5 to 5.5 feet below grade, silty clay, marl, and peat were found.
- Laboratory analysis of two samples for PCBs and volatile organic compounds (VOCs) did not detect the presence of these compounds.

Former C&D Fill Area

- Ground surface to three feet below grade was fill material which did not exhibit discoloration, staining, or odors.
- Below three feet were foundry sands, slag, glass, scrap wood, metal, concrete, asphalt, and tar.
- Six feet below grade, white marl was encountered with peat above.
- Conventional headspace analysis performed in the field revealed the presence of volatile

organic vapors in one test trench.

- Laboratory analysis of samples taken from this area indicated the presence of acetone, 2-butanone, and tetrachloroethene. The tetrachloroethene was reported at a concentration of 160 μg/kg.

Area Q – Former 12,000 Gallon UST Location

- Foundry sand, slag, and marble stone fragments were encountered.
- No evidence of a UST was found.
- No physical evidence of staining or discoloration was detected. A petroleum odor was noted in the shallow soils of the boring.
- No samples for laboratory analysis were obtained.

Area S – Former Location of Four Partially Buried Tanks

- Foundry sand and slag were observed.
- No physical evidence of a UST was found.
- No volatile organic vapors, stained soil, or sheens were detected.

Electrical Powerhouse

- Wipe samples of surfaces within the Electrical Powerhouse revealed the presence of Aroclor 1260 at 5.5 μg/100 cm^2 on the floor and 1.3 μg/100 cm^2 on the front of one of the transformers.

West Area Trenches

- Fill materials consisting of slag, foundry sand, rocks, and a sand/silt mixture were found to a depth of approximately six feet below grade.
- Marl was encountered at depths ranging from three feet to ten feet below ground surface.
- No samples for laboratory analysis were obtained.

1.3 Report Organization

This RI Report utilizes the general format recommended in *Draft DER-10, Technical Guidance for Site Investigation and Remediation*. In order to provide a stand-alone document capable of identifying appropriate site remedial actions, the results of the RI, the Interim Remedial Measures, and of the previous investigative activities are included.

Tasks conducted as part of this RI were performed consistent with the NYSDEC's *Draft DER-10, Technical Guidance for Site Investigation and Remediation* and the NYSDEC's *Draft Brownfield Cleanup Program Guide.*

SECTION 2 - STUDY AREA INVESTIGATION

2.1 Introduction

This Section documents the activities undertaken during this Brownfields Investigation to evaluate the existence and extent of impacts to the Midler City Industrial Park Site from past industrial activities and waste management practices.

The initial round of RI activities was conducted from November 11, 2004 through November 29, 2004, during which eighteen soil borings, eight monitoring well installations, test pit excavations, and utility sediment/liquid sampling programs were conducted. During the week of January 24, 2005, six additional borings were made and completed as deeper interval monitoring wells. In March 2005, sixteen GeoProbe™ borings were made to delineate a chlorinated hydrocarbon impacted area east of Building 7, and seven borings completed as temporary monitoring wells were installed at locations inside site structures. In July 2005, four GeoProbe™ exploratory wells were made to investigate groundwater within the sand unit at the top of till. In late 2005 and early 2006, four permanent monitoring wells were installed within the sand at the top of till and sixty-nine GeoProbe™ borings were made to delineate potential source areas that had been identified during the previous work phases. An additional 54 borings were made during March and April 2006 to complete the delineation of the four source areas. Copies of boring logs, well installation logs, photoionization screening data, and other supporting data are provided in the various appendices to this report.

During the first phase of the investigation, C&S also provided an environmental monitor to observe the geotechnical drilling effort and the geotechnical test-pit excavation effort at the site, both of which were conducted concurrently with the RI. The geotechnical borings utilized continuous sampling methods for the initial twenty feet below the ground surface, during which each split-spoon sample was examined and headspace screened utilizing a PID; samples were selected from five geotechnical borings for laboratory analysis. Soil samples from six test pit locations were also submitted for laboratory analysis.

The NYSDEC-approved site Interim Remedial Measure (IRM), completed in October 2007, successfully removed chlorinated volatile organic compounds (CVOCs) from the source areas. The term *chlorinated volatile organic compounds*, as used in this report, refers to the suite of compounds made up of tetrachloroethene (PCE), trichloroethene (TCE), vinyl chloride (VC), cis-1,2-dichloroethene (cis-DCE), and trans-1,2-dichloroethene (trans-DCE).

The October 2007 *Interim Remedial Measures Report,* submitted under separate cover, documents the verification sampling program, consisting of soil borings at 59 locations to specified depths, associated sampling, and laboratory analysis for CVOCs. Section 5 of this report discusses the IRM.

2.2 Site Characterization Field Activities

This Section summarizes the field activities undertaken to characterize the site.

2.2.1 Preliminary Site Reconnaissance

The layout of the Midler City Industrial Park Site property is shown in Figure 2. The preliminary site reconnaissance consisted of reviewing historical documents from the Phase I ESA and physically orienting the areas of concern identified therein. A room-to-room walkthrough was conducted for site buildings to confirm or clarify historical information. Site utility maps were reviewed and accessible manhole/catch basin covers were removed in an effort to assess the orientation and construction of penetrations and connecting pipelines.

2.2.2 Surface Features

Site structures and utilities are the relevant surface features with respect to the investigation of the presence and migration of chemical constituents, or that may affect future uses of the site. Outside of the site structures, stored equipment of varied condition was scattered somewhat randomly around the eastern portion of the site. A deteriorated perimeter fence surrounded the site. There were entry gates at the western boundary of the site (off Midler Avenue).

There was no observed evidence of specific areas external to the buildings where the condition of surface features (e.g., stained soil or dead vegetation) indicated a recognized environmental condition. One existing tenant in Building 13 had oily equipment stored outside. Accumulated debris and extreme building deterioration (to the point where entry to some areas was not safe) precluded thorough physical inspection of Building 11; however, historical information suggested no concerns.

2.2.3 Contaminant Source Investigation

The contaminant source investigation focused on areas associated with past use of industrial chemicals, as indicated by the Phase I ESA and the previous site investigations. As part of the comprehensive site investigation, sediment and/or liquid samples were collected from subsurface utility locations (see Figure 3), as described in the following table:

Sediment and/or Liquid Sample from Utility Location	Location/Area of Concern
S–1, S–2, S–3	Stormwater catch basins
S–4	Sump in southeast corner of "Compressor Room"
S–5	Trench drain
S–6, S–7	Stormwater catch basins in alley
S–8	Diamond plate covered trench east of the overhead door.
S–9	Diamond plate covered trench and sump in former "Plating Building" as shown on 1960 mapping.
S-10	Sump in "Building 9"
S-11	Main storm sewer south of "Building 13"
S-12	Trench in western portion of "Building 3".

2.2.4 Soil and Vadose Zone Investigations

2.2.4.1 Summary

During the multiple investigation and IRM phases at the site, more than 300 hollow-stem auger or direct push soil borings were completed, with 32 being completed as permanent or temporary groundwater monitoring wells. Eighteen borings were completed during the initial phase of investigative activities (including eight completed as monitoring wells above the clay layer), six borings (all completed as monitoring wells to the top of the clay unit) were completed during the second phase, seven interior borings with temporary monitoring wells were also installed during the second phase, along with four deep borings (all completed as temporary monitoring wells) followed by installation of four permanent deep wells. The following additional activities were undertaken to assess soil and vadose zone conditions at the site:

- C&S observed continuous sampling and recorded PID measurements for the top twenty feet at each of the 36 geotechnical borings at the site. Five geotechnical soil boring locations (PB3, PB4, PB7, PB12, and LB8) were also sampled for laboratory analysis.
- Sixteen GeoProbe™ explorations were conducted in March 2005 to delineate the chlorinated hydrocarbon plume in the area around Phase 1 soil boring B-3.
- Three surface soil samples and six test pit samples were collected at locations designated based on their proximity to activities or structures associated with suspect environmental conditions.
- 123 additional GeoProbe™ borings were completed in late 2005 and early 2006 to complete delineation of the four source areas.
- GeoProbe™ borings for 59 IRM verification sample locations were made during the period from March 2007 through September 2007. Many of those locations were bored and sampled on multiple occasions.

Figure 3 provides the locations for all site soil borings, test pits, and surface soil samples, and monitoring wells.

Depending on accessibility of a particular boring location, the drilling equipment was either mounted on a truck or a custom-fabricated unit made for interior buildings or small space applications. Drilling spoils created at each borehole (except those completed as groundwater monitoring wells) were placed into the borehole of origin as backfill. Excess spoils including those generated at boreholes completed as groundwater monitoring wells were placed in 55-gallon drums for subsequent disposal.

Each borehole made by rotary drilling methods was sampled continuously (i.e., split spoons) in accordance with ASTM D1586-99. Retrieved soil samples were visually examined to assess subsurface conditions and physical properties of the strata. These properties included: color, moisture content, and visual evidence of discoloration or sheens. Additionally, representative soil samples were field screened for evidence of volatile organic vapors via conventional headspace analysis techniques using a photoionization detector (PID) equipped with a 10.6 eV lamp.

During the initial two phases of work, a minimum of one soil sample from each of the borings was collected for laboratory analysis. The sampling interval was determined in the field based on visual examination of the samples and the results of PID screening. In the absence of evidence of contamination, samples were retrieved from just above the water table. Analysis of the soil samples was for the Superfund Target Compound List (TCL) of parameters as specified in Exhibit C of the NYSDEC ASP.

2.2.4.2 Subsurface Investigations Phase 1, November – December 2004

The following table describes the locations for the Phase 1 environmental soil borings.

Soil Boring	Location/Area of Concern
B–1	Area previously identified in the 1994 Phase I ESA as the locations of an oil tank (1930 mapping) and an 8,000 gallon oil tank (1960 mapping).

Soil Boring	Location/Area of Concern
B–2	Former “Spray Oven and Dip Tank Degreaser” as shown on the 1960 mapping.
B–3	Former “Paint House” as shown on the 1960 mapping.
B–4	Interior courtyard area. 1960 mapping shows plating room was situated immediately south of courtyard.
B–5	Area previously identified in the 1994 Phase I ESA as being the location of “Paint Storage” as shown on the 1960 mapping.
B–6	Area previously identified in the Phase I ESA as the location of a 12,000 gallon fuel oil tank as shown on the 1960 mapping. This area was also investigated by test pit explorations in July 2004.
B–7, B–8, B–9	Fill area previously identified in 1994 Phase I ESA. This area was also investigated by test trench explorations in July 2004. VOC’s detected.
B–10	Plating Building as shown on the 1960 mapping.
PB3, PB4, PB7, PB12, LB-8.	Samples collected from geotechnical borings.

Surface soil samples P-1 through P-3 (see Figure 3) were composite samples for PCB analysis, collected as part of the Phase 1 investigation from the following areas potentially associated with past use, storage or disposal of electrical transformers.

Surface Soil / Sediment for PCBs Only	Location/Area of Concern
P–1	Area Y, previously identified in the 1994 Phase I ESA as the location of “Transformer Poles”.
P–2	Area W - former transformer area.
P–3	Existing exterior electrical transformer yard.

A fourth planned surface soil sampling location was not sampled as there was no solid media within the vault. Liquid sample IL-3 was collected at that location.

The following six test pit soil samples were collected for laboratory analysis from the thirteen test pits (see Appendix A for test pit logs):

Test Pits	Location/Area of Concern
TP-4	Geotechnical test pit location selected for sampling based on observation of fuel oil emanating from the north (from under adjacent building)
TP-5	Geotechnical test pit location selected for sampling based on presence of a sheen on the water entering the test pit at approximately four feet below the ground surface.
TP-7	Area previously identified in the 1994 Phase I ESA as the location of an aboveground fuel oil tank, as shown on the 1930 mapping.
TP-12	Area previously identified in the Phase I ESA as being the location of two 500-gallon skid mounted tanks. One tank was labeled as gasoline and the other "Diesel Off Road."
TP-13	Area previously identified in the 1994 Phase I ESA as being the location of "Open Incinerators" as shown on the 1960 mapping.
TP -14	Area previously identified as the location of an underground storage tank.

2.2.4.3 Subsurface Investigation Phase 2, January – March 2005

Six additional Phase 2 borings into the deeper portion of the shallow aquifer above the clay layer were installed in January 2005 for completion as monitoring wells. Three of the six locations (MW-2D, MW-3D, and MW-4D) were selected as companion wells for Phase 1 installations, two of the six (MW-9D and MW-10D) were placed along the southern site boundary, and the final deeper well (MW-11D) was placed near Phase 1 boring B-3 where significant chlorinated hydrocarbons had been detected. The deeper borings were installed to determine soil quality, groundwater flow characteristics, and groundwater quality within that portion of the aquifer directly above the clay unit.

Sixteen GeoProbe™ soil explorations were performed as part of the Phase 2 investigation in March 2005 to:

- Delineate the chlorinated hydrocarbon plume identified at soil boring B-3 during the first phase of borings; and
- Verify the existence and depth to the top of the clay unit identified during the Phase 1 borings.

PID measurements and soil classifications were made at each of the GeoProbe™ locations and samples were selected for laboratory analysis based on those observations.

Also in March 2005, seven additional Phase 2 borings completed as temporary groundwater monitoring wells (locations identified with “SB” prefix on Figure 3) were installed at locations within site structures. These locations were selected based on historical information with the objective to:

- Investigate interior areas to determine source areas with respect to the chlorinated hydrocarbon impacts identified during the Phase 1 investigative activities;
- Delineate the chlorinated hydrocarbon plume within the sub-structure areas; and
- Verify the existence and depth to the top of the clay unit in sub-structure locations.

The interior soil boring locations were selected based on knowledge of previous activities in an area or on evidence of surface modifications, such as patched concrete, that may indicate removal of process equipment.

2.2.4.4 Subsurface Investigation Phase 3, July – February 2006

In July 2005, an investigation of the deep soils and aquifer was initiated. Four direct push borings (DW-1, DW-2, DW-3, and DW-4) were advanced to the top of the glacial till unit, with continuous sampling conducted from the top of the clay unit. Soil samples were collected consistent with the selection criteria developed during the Phase 1 and 2 installations. GeoProbe™ discreet interval sampling tools were utilized to assess the presence or absence of dissolved phase VOCs and dense non-aqueous phase liquids within the sandy strata which lie above the till. Permanent monitoring wells were installed at three of the four locations (DW-1, DW-2, and DW-3) in September 2005.

The final Phase 3 investigative activities completed in late 2005 and early 2006 included installation of an additional 123 GeoProbe™ soil explorations within the areas surrounding B-1 and B-5, MW-3D and north of B-3, to determine areal and vertical extent of impacted soils associated with the potential VOC source areas identified from the Phase 1 and Phase 2 investigation results.

2.2.5 Groundwater Investigations

Monitoring wells MW-1 through MW-8 were installed during the first round of RI activities at areas of interest. The locations were selected in agreement with NYSDEC preferences.

Monitoring Well	Location/Area of Concern
MW–1	Area previously identified in the 1994 Phase I ESA. Former location of a 500 gallon fuel oil tank as shown on the 1960 mapping.
MW–2	Perimeter monitoring well location.
MW-3	Area previously identified in the 1994 Phase I ESA as the location of a drum storage area and stained soil.
MW–4	Area previously identified in the 1994 Phase I ESA as the location of 55-gallon drums of flammable liquid in 1960.
MW–5	This well is to assess groundwater quality in the vicinity of the following areas identified in the 1994 Phase I ESA: Paint storage (1960 mapping) Lacquer and thinner storage (1960 mapping) Electrical transformer storage observed in 1994 Previously identified ash/cinder debris. Storage of containers holding roof tar, epoxy paint, and concrete additives as observed in 1994.
MW–6	This monitoring well has been placed adjacent to C&D fill area identified in the 1994 Phase I ESA. In addition, it will used to monitor the presence of tetrachloroethene that was detected during the July 2004 investigation.

MW–7	Area previously identified in the 1994 Phase I ESA as being the location of storage tanks situated on the ground surface. The origin of these tanks was suspected to be Area S. This is also a perimeter well and adjacent to the previously described C&D fill area. Additionally, the 1960 mapping shows this area as the location of a 275 gallon fuel oil aboveground storage tank (AST).
MW–8	Perimeter well and assessment of area previously identified in the 1994 Phase I ESA as the location of electrical transformers (1960 mapping). The 1960 mapping also shows a "Dip Tank" at the interior northwest corner of the current day "Building No. 2."

Consistent with the RI work plan, monitoring wells MW-1 through MW-8 were constructed with the screened interval straddling the water table.

After assessing the analytical results and field PID logs for the initial borings and monitoring wells, it was observed that impacts from chlorinated hydrocarbons appeared to be present at the site at depths below the level designated for the screened interval within the first eight monitoring wells. Specifically, the VOCs data for boring B-3 (14 ft. to 16 ft. below the ground surface), PID measurements from soil borings in the southern portion of the site, and the observed direction of groundwater flow across the site, indicated the possible presence of VOCs at depths from fourteen feet below the ground surface to the depth where a clay unit was encountered. To provide additional data regarding the presence of these compounds both in deeper soils and groundwater, and to further assess the presence of the clay unit, six Phase 2 monitoring wells were installed. These additional wells were screened across a deeper interval of the shallow aquifer than the Phase 1 monitoring wells, and were located as follows:

- MW-2D, MW-3D, and MW-4D were installed as "companion" wells to downgradient monitoring wells MW-2, MW-3, and MW-4, respectively.
- MW-11D was installed adjacent to boring B-3.
- MW-9D and MW-10D were installed within the City of Syracuse property immediately south of the site. In the east/west direction, the locations of MW-9D and MW-10D were selected to provide more complete data for soil and water quality along the downgradient (southern) site boundary.

Seven Phase 2 temporary monitoring wells were installed at locations ("SB" prefix) inside site structures during March 2005 to provide additional data characterizing conditions beneath the structures, to assist in delineating the chlorinated hydrocarbon plume identified immediately east of the structures, and to enhance the understanding of site groundwater flow patterns.

In the third phase of the RI (July 2005), four temporary deep "monitoring wells" ("DW" prefix) were installed to investigate groundwater quality within the sand unit(s) located directly above the glacial till in the south central portion of the site. After advancing a casing into a sand unit, groundwater was purged, the sampler inserted, and a sample collected utilizing a GeoProbe™ SP15 stainless steel groundwater sampling device. If more than one distinct sand unit was identified in the zone above the till, the process was repeated for each sand unit, resulting in multiple samples at some locations. The groundwater samples from this phase were analyzed for TCL VOCs. At the request of the NYSDEC, the samples were also analyzed for total chloride content to assist in establishing whether the overburden groundwater at the site, irrespective of VOC contamination, could potentially be an acceptable drinking water source.

Permanent deep monitoring wells (designated as "DAW" on Figure 3) were installed near the four temporary deep well locations (DW-1 through DW-4) as part of the Phase 3 work. These deep wells were installed by advancing an outer casing into the clay unit, and grouting in an inner casing through which the boring into the deeper aquifer was advanced. The monitoring wells were terminated at the top of the glacial till unit and screened to target the sand unit at the top of till. After installation, the deep wells were developed and sampled for VOCs and total chlorides.

During the latter stages of the RI, the following two additional monitoring wells were installed at the request of NYSDEC:

- MW-12D and MW-12DR, PVC and stainless steel monitoring wells, respectively, located in the "B-3" IRM treatment area and screened across the bottom of the peat/marl unit (MW-12D was a replacement well for MW-11D and MW-12DR was a replacement well for MW-12); and

- MW-13D, located immediately south of the "MW-3D" IRM treatment area and screened across the bottom of the peat/marl unit.

In May 2006, concurrent with the sampling of the "DAW' series wells, another round of sampling was also conducted for the remaining shallow overburden wells: MW-1, MW-2, MW-2D,MW-3, MW-3D, MW-4, MW-4D, MW-6, MW-7, MW-8, MW-9D, MW-10D, MW-12D, and MW-13D.

In April and July 2007, samples for VOCs analysis were collected from monitoring well MW-13D and in August 2007 a final round of RI groundwater sampling was conducted for the eight remaining site wells: MW-2, MW-2D, MW-7, MW-8, MW-9D, MW-10D, MW-12D, and MW-13D.

2.2.6 Soil Vapor Sampling

At the request of NYSDEC and the New York State Department of Health (NYSDOH), a soil vapor sampling and analysis effort was added to the RI work plan in February 2006. The February 2006 *Soil Vapor Sampling Work Plan* was developed consistent with NYSDOH's February 2005 Public Comment Draft *Guidance for Evaluating Soil Vapor Intrusion in New York State*. The work plan specified installation of ten temporary soil vapor probes with associated subsequent sampling for VOCs. The soil vapor probe installations and sampling were conducted on April 19-20, 2006. Soil vapor sampling locations ("SV" prefix) are shown on Figure 3.

SECTION 3 - PHYSICAL CHARACTERISTICS OF THE STUDY AREA

This Section provides the results of the field activities that were conducted to determine the physical characteristics of the site.

3.1 Surface Features

Figure 2 shows the locations of the structures that were present at the site when the project began. Structures occupied most of the central portion of the site from the northern site boundary nearly to the southern site boundary. There were limited natural features at the site: a landscaped area with several mature trees were present in the western portion of the site (within the perimeter) fence. Outside the perimeter fence to the west was an open area (paved or soil covered) that had been used for parking by a local automobile dealer. East of the buildings, open areas, sparsely vegetated or unevenly surfaced, were present. These areas were apparently associated with storage of surplus or idle equipment and supplies and may have been utilized as "fill areas" over the years of facility operation.

Structural Integrity Assessment

Based on the redevelopment plans for the site, all existing structures were demolished. Therefore, a structural integrity assessment was not included in the scope of the RI.

3.2 Surface Water Hydrology

There were no surface water bodies at the site. Stormwater at the site apparently infiltrated permeable surfaces or was conveyed overland via low-permeability surfaces. Storm sewers west of the site structures appeared to convey stormwater towards Midler Avenue. South of the former buildings, a main trunk storm sewer runs east to west along the southern site boundary, receiving inflow from within the facility. Ground surface elevations prior to site work indicated that site storm sewers likely converge with regional storm water drainage along Midler Avenue where they would flow southward to Erie Boulevard.

3.3 Geology

Regional bedrock geologic mapping indicates that bedrock underlying the site consists of the Camillus and Syracuse formations of shale, dolostone, gypsum, or salts, generally present at depths of greater than 100 feet. These formations were not encountered at the terminal depth of site borings associated with the RI. Based on those depths, the affect of these deposits on the fate and transport of site constituents is assumed to be insignificant.

3.4 Hydrogeology

The unconsolidated deposits at the Midler site consist of surficial fill, peat/marl, clay, sand, and glacier till. The peat/marl unit and the deeper sand unit are the main water-bearing units at the Midler site.

3.4.1 Peat/Marl Unit

Figures 7 through 14 provide groundwater contours for the site for eight gauging events between December 2004 and August 2007. The well gauging data are provided in Table 13. The groundwater contours were developed from groundwater surface elevations (measured at RI monitoring wells) utilizing a kriging routine within the proprietary modeling software *Surfer8*™. Assessment of the contours indicates:

- A generally southward flow of overburden groundwater at the site, with minor eastward and westward variations noted for the separate gauging events.
- No significant changes as additional monitoring wells, screened across deeper intervals within the subsurface, were installed and added to the data base.
- No significant changes if data from monitoring wells screened only across similar depth intervals were utilized to infer contours.

The preceding assessment indicates the presence of a relatively shallow, locally heterogeneous, hydrologic unit beneath the site, exhibiting an interpreted overburden groundwater surface that gently slopes to the south at a gradient of between 0.006 ft./ft. (as calculated between Phase 1 monitoring wells MW-8 and MW-3) and 0.0122 ft/ft (calculated average gradient for the four wells investigated by GeoLogic of Homer, NY [Appendix A]). The orientation of the groundwater surface is consistent with a slow southerly groundwater flow toward the location of the former Erie Canal, currently Eire Boulevard, a highly developed corridor which includes commercial, retail, light industrial, and other contaminated sites.

3.4.2 Sand Unit

The Phase 3 GeoProbe™ explorations ("DW" prefix on Figure 3) and permanent monitoring well installations ("DAW" prefix) were installed to assess conditions within generally more granular strata (just above the top of the glacial till unit – refer to boring logs), at depths ranging from 35.8 feet to 56.5 feet below the ground surface.

Groundwater samples from the DW series of temporary wells were collected from discreet intervals within each borehole casing utilizing a GeoProbe™ SP15 stainless steel groundwater sampling device. After sampling the groundwater from the terminal depth, the sampling device was removed from the casing and groundwater recovery at each location was tracked over time, utilizing measurements obtained by an electronic water level indicator. With the exception of temporary monitoring well DW-3, those measurements indicated recovery to levels similar to the static groundwater levels present in the shallower site wells. At DW-3, an "overpressure" condition was identified.

After installation, the permanent deep wells (DAW-1 through DAW -4) were purged by pumping with a peristaltic pump to establish natural groundwater conditions within the deeper strata. The permanent deep wells were developed and sampled consistent with the methods set forth in the work plan for those installations. Groundwater elevation data for these monitoring wells corroborated the data observed within the DW series wells, including the "overpressure" condition observed at DAW-3, which was estimated via measurement within a temporarily extended riser to be approximately 1.8 ft. As indicated on Figure IRM-2 in the Geologic NY, Inc. July 3, 2006 hydrogeology report (see Appendix B of this report), the groundwater elevations taken in the sand unit wells "suggest radial flow towards a trough in the center of the site with groundwater discharging to the east."

3.4.3 Hydraulic Conductivity Testing

In October 2005, C&S conducted hydraulic conductivity testing at four site monitoring wells. The hydraulic conductivity testing was conducted to provide permeability information for specific locations and to allow estimation of groundwater flow rates within the overburden at the site. Rising head slug tests were conducted at monitoring wells MW-3D, MW-9D, MW-10D, and MW-11D. Well recovery data were logged utilizing a *Hermit™ Data Logger* and analyzed using the Bouwer-Rice method in the software program *Aquifer Test for Windows*", version 2.57. The raw data and graphs resulting from the reduction of that data are provided in Appendix B. The resulting hydraulic conductivities for the four wells are provided below.

Monitoring Well ID	Hydraulic Conductivity (cm/sec)
MW-3D	2.01×10^{-5}
MW-9D	3.28×10^{-5}
MW-10D	3.74×10^{-5}
MW-11D	4.78×10^{-6}

Calculated from the above four tests, the average hydraulic conductivity for the site would be 2.38×10^{-5} cm/sec (4.69×10^{-5} ft/min).

In May 2006, GeoLogic conducted an independent investigation of the hydrogeological characteristics of the site, including rising and falling head hydraulic conductivity testing at four monitoring wells (MW-3D, MW-9D, MW-10D, and MW-12D). The GeoLogic report, provided in Appendix A, calculated an average hydraulic conductivity of 1.4×10^{-4} cm/sec for the locations investigated, along with a north to south direction of flow along a horizontal hydraulic gradient of 0.0122 ft/ft. The Geologic assessment estimated a groundwater velocity of 4.4 feet per year, and the following CVOC velocities:

- 3.1×10^{-2} feet per year for PCE;
- 1.0×10^{-1} feet per year for TCE;

- 1.0 x 10^{-1} feet per year for dichloroethenes (undifferentiated isomers); and
- 4.4 x 10^{-1} feet per year for vinyl chloride.

C&S performed a similar evaluation utilizing a range of Total Organic Carbon (TOC) values instead of an average value. Twelve subsurface soil samples were analyzed for TOC. The range of data for these twelve samples was 3.6% to 49.8% TOC, with an average of 10.80. Consistent with the Geologic report, and because of the high standard deviation, the low and high values were dropped resulting in a new range of 3.5% to 19.6% with an average of 8.0. The table below shows CVOC velocities for the different (minimum, mean, maximum) TOC concentrations.

Parameter	**CVOC velocity in feet/year**		
	Low (TOC = 3.5%)	**Mean (TOC = 8.0%)**	**High (TOC = 19.6%)**
PCE	0.07	0.03	0.01
TCE	0.23	0.10	0.04
DCEs	0.24	0.11	0.04
VC	0.86	0.44	0.18

3.5 Demography and Land Use

Based on available documentation, land use near the site has been primarily industrial and commercial in nature since the late nineteenth century. Although industrial activity in the area has declined in recent years, the area is likely to maintain a commercial character due to the proximity of Interstate Route 690 and Erie Boulevard. Urban residential areas to the north and south of the site (both of which are at higher elevations than the site), and access via I-690 from suburban areas would appear to indicate a continued strong commercial viability for the area.

SECTION 4 - NATURE AND EXTENT OF CONTAMINATION

This section discusses the results of the RI sampling with respect to the nature and extent of contamination of environmental media.

4.1 Surface and Subsurface Soils

More than 300 environmental borings, geotechnical borings, probes, test pits, and surface soil samplings were conducted at the site including, as follows:

- Soil samples from more than 200 environmental borings and 5 geotechnical borings were submitted for laboratory analysis.
- Soil descriptions and field PID measurements from the all of the above soil boring and test pit locations.
- Six soil grab samples from test pits.
- Three surface soil grab samples analyzed for PCBs and pesticides. Due to the assumption that the site would be covered with buildings, ~~–~~ pavement, and soil during development, only three samples were deemed necessary by the State.

The following general lithology for the site was compiled from the investigation boring logs (Appendix A), and is depicted via generalized geologic cross sections in Figure 16 (see Figure 15 for cross section locations):

- The top three to eight feet is predominantly fill material, consisting of a foundry sand matrix with organic and inorganic debris.
- A peat or peat/marl layer underlies the fill to a depth of 14 to 30 feet. The depth of this layer generally increases in the southern part of the site, except along the western boundary.
- A soft clay layer underlies the peat or peat/marl layer. The clay layer is of variable thickness, sometimes observed for thirty or more feet uninterrupted, and sometimes only present mixed with silt or peat. Data portraying the depth to, and thickness of, the clay unit are presented on Figure 16.

- Mixed sand, gravel, and silt layers of varying thicknesses were observed below the clay layer at most locations, underlain by a glacial till. The depth to the till generally increases to the south, ranging from as shallow as 15 feet along the northern site boundary to more than 51 feet along the southern boundary. At most locations, a discernible sand unit is present just above the glacial till.

Tables 1 through 8B provide summaries of the analytical data resulting from the subsurface soil sampling. These data indicate that VOCs were detected at concentrations exceeding NYSDEC TAGM 4046 RSCOs at the following soil boring locations and depths:

Phase 1 Subsurface Soil Sample Locations

- B-1 (4-6 ft. depth)
- B-3 (14-16 ft. depth)
- B-5 (6-8 ft. depth)
- B-10 (3-6 ft. depth)

Phase 2 Subsurface Soil Sample Locations

- MW-11D (20-22 ft. depth)
- GP-2 (12-16 ft. depth)
- GP-3 (16-19 ft. depth and 19-19.5 ft. depth)
- GP-4 (3-8 ft. depth)
- GP-9 (8-10.5 ft. depth)
- GP-14 (18.5-19.5 ft. depth)
- GP-15 (24-25 ft. depth)
- SB 12-1 (16-18 ft. depth)
- SB 13-2 (12-14 ft. depth and 20-22 ft. depth)

Phase 3 Subsurface Soil Sample Locations

- GPD-2 (15.8-17.5 ft. depth)
- GPD-3 (4-8 ft. depth, 15-17 ft. depth, 17-20 ft. depth, and 23-26 ft. depth)
- GPD-5 (14-15.2 ft. depth and 16-18 ft. depth)

- GPD-6 (4-8 ft. depth, 12-13 ft. depth, and 13-15 ft. depth)
- GPD-10 (4-7.6 ft. depth)
- GPD-14 (7-9.8 ft. depth)
- GPD-19 (3-4 ft. depth and 7-11 ft. depth)
- GPD-21 (15-18.2 ft. depth)
- GPD 26 (4-7 ft. depth and 11-15 ft. depth)
- GPD-27 (7-11 ft. depth)
- GPD-32 (11-15 ft. depth)
- GPD-33 (15-18 ft. depth)
- GPD-34 (7-11 ft. depth and 15-17 ft. depth)
- GPD-36 (11-15 ft.depth)
- GPD-37 (7-11 ft. depth and 15-18.3 ft. depth)
- GPD-38 (17-19 ft.depth)
- GPD-41 (7-11 ft. depth)
- GPD-42 (11-15 ft. depth)
- GPD 43 (11-15 ft. depth)
- GPD-44 (4-7 ft. depth)
- GPD-47 (11-15 ft. depth)
- GPD-49 (11-15 ft. depth and 15-17 ft. depth)
- GPD-51 (15-18.2 ft. depth)
- GPD-52 (15-17.5 ft. depth)
- GPD-57 (0.5-4 ft. depth)
- GPD-59 (11-14.3 ft. depth and 14.3-15 ft. depth)
- GPD-61 (15-17.8 ft. depth)
- GPD-64 (11-15 ft. depth)
- GPD-66 (11-15 ft. depth)
- GPD-67 (11-15 ft. depth)
- DW-4 (6-8 ft. depth and 16-18.5 ft. depth)

The analytical sample from Phase 1 test pit TP-14 (4-5 ft depth) also indicated the presence of VOCs at concentrations exceeding RSCOs.

Figure 4 presents the locations and VOC concentrations for the Phase 1 and Phase 2 soil samples that exceed RSCOs for VOCs. Figure 5 presents the locations and VOC concentrations for Phase 3 soil samples that exceed RSCOs for VOCs. At most of the locations where VOCs were detected at concentrations exceeding RSCOs, the compounds detected were predominantly chlorinated hydrocarbons (e.g., trichloroethene [TCE], tetrachloroethene [PCE], and several degradation products of TCE and PCE). Chlorinated VOC concentrations exceeding RSCOs were identified as deep as twenty-five feet below the ground surface in an area defined by borings B-3, GP-3, MW-11D, GP-15, and GPD-3, GPD-4, GPD-6, GPD-51, and GPD-52. Samples exhibiting the highest levels of VOCs were GPD-3-4-8 (PCE concentration of 1,000,000,000 μg/kg), GPD-3-17-20 (PCE concentration of 23,000,000 μg/kg), and GP-3-16-19 (PCE concentration of 13,000,000 μg/kg). Borings GP-3 and GPD-3 are located along the eastern end of Building 7 (former Paint House) and appear to be the centroid of the site's largest and most significantly impacted source area for chlorinated VOCs, hereafter referred to as the "B-3 Area".

Two additional potential chlorinated VOC source areas were identified by Phase 1 soil borings and delineated during subsequent investigative activities. Brief descriptions of these secondary source areas, each identified by its Phase 1 sample location, follow:

"B-1 Area": Located along the northern edge of Building 13, and extending under the building, this area is defined by the analytical data for borings B-1, DW-4, GPD-19, GPD-26, and GPD-28 and by test pit TP-14. The PCE/TCE impacts in these areas are relatively shallow (<19 ft. below the ground surface). Samples exhibiting the most significant impacts were GPD-26-11-15 (PCE concentration of 2,500,000 μg/kg), DW-4-16-18.5 (PCE concentration of 600,000 μg/kg), GPD-26-4-7 (PCE concentration of 210,000 μg/kg), and TP-14-4-5 (PCE concentration of 83,000 μg/kg). South of the B-1 area, a relatively large area is characterized by widespread detections of PCE/TCE degradation compounds (primarily vinyl chloride), with concentrations less than 5,000 μg/kg.

"B-5 Area": Located east of Building 12, this area is defined by borings B-5, GPD-14, GPD-49, and GPD-66. Maximum depth of observed PCE/TCE impacts in this area is 17 feet. The magnitude of the maximum PCE/TCE concentrations in this area are approximately three orders of magnitude less than the maximum concentrations within the other two source areas, ranging from 7,100 µg/kg PCE and 5,800 µg/kg TCE for sample GPD-14-7-9.8 to 1,200 µg/kg PCE and 2,600 ug/kg TCE for GPD-66-11-15.

"MW-3D Area": The initial RI soil sample from this boring did not exhibit significant CVOC impact, but the groundwater sample from this location exceeded Class GA standards for several parameters. During October 2005, a dense non-aqueous phase liquid (DNAPL) exhibiting the olfactory characteristics of PCE was observed in this MW-3D. Subsequent laboratory analysis confirmed that the DNAPL was PCE. Additional borings in this area confirmed the presence of elevated levels of CVOCs in a small area around MW-3D.

Approximately 125 feet to the south of the B-3 area, VOC data from Phase 2 boring SB 12-1 indicate reduced PCE and TCE concentrations at the 16-18 foot depth interval, although the concentrations remain greater than RSCOs (5,000 µg/kg PCE and 1,800 ug/kg TCE). Further south, soils VOC data and PID measurements for MW-3, MW-3D, SB 13-4, AND MW-10D soils data indicate detectable levels of the degradation products of the predominant site chlorinated hydrocarbons (TCE and PCE), with concentrations generally less than RSCOs.

At Phase 1 soil boring location B-10, the VOCs detected at concentrations exceeding RSCOs were xylenes, acetone, 2-butanone, and 4-methyl-2-pentanone. These compounds are associated with petroleum or ketones, and have different environmental characteristics from the chlorinated hydrocarbons. Due to auger refusal, boring B-10 was terminated at a depth of six feet. Boring B-10 is located at the northern edge of the "B-3 area" described above

Semivolatile organic compounds were detected at concentrations exceeding RSCOs in many of the Phase 1 subsurface soil samples. The semivolatile compounds detected are generally polycyclic aromatic hydrocarbons (PAHs), a class of compounds associated with incomplete combustion of fossil fuels. These compounds bind tightly to soils and have limited solubility and low volatility, factors that limit their exposure pathways. At the Midler Avenue site, PAH concentrations exhibit a general pattern of declining with depth. Although Phase 3 sampling focused on VOCs, two Phase 3 borings investigated areas where analyses from Phase 1 geotechnical borings indicated several PAH compounds exceeded RSCOs; the results from boring SVGP-1-7-10 (see Table 8) indicated one PAH compound exceeded the applicable RSCO (Benzo(a)pyrene detected at 380 µg/kg versus the RSCO of 61 µg/kg).

Three pesticide compounds were detected at concentrations exceeding RSCOs in the Phase 1 soil sample from the 2-4 foot depth interval at soil boring PB-7 (maximum concentration of 160 ug/kg for endosulfan vs. RSCO of 100 ug/kg. Dieldrin was detected at a concentration of 73 ug/kg in the sample collected from the 2-4 foot depth interval at soil boring MW-4. Otherwise, pesticides/PCBs were not detected at concentrations exceeding RSCOs in subsurface soil samples.

Inorganic parameters were not detected at concentrations significantly exceeding RSCOs or site background in subsurface soil samples.

Wet chemistry results indicate slightly basic soil pH at the site with soils at B-2 exhibiting a more extreme basic pH of 11.1 Standard Units. Cyanide was not-detected in subsurface soils at a 4 ppm detection limit, except at MW-1 where it was detected 6.03 ppm. There is no RSCO in TAGM 4046 for cyanide in soils.

Table 9 provides the PCBs/Pesticides data for the three surface soil samples collected during the Phase 1 investigation. These data indicate that one pesticide compound (heptachlor epoxide) was detected at a concentration of 35 ug/kg (RSCO of 20 ug/kg) at sample location P-1, collected to the east of Building 1, and one pesticide compound (dieldrin) was detected at a concentration of 90 ug/kg (RSCO of 44 ug/kg) at sample location P-2, located north of Building 2.

Between September 2005 and March 2006, 123 additional borings with associated sampling for VOCs were conducted to delineate the final treatment areas to be addressed in the IRM. Figure 3 includes these supplemental sampling locations, which are designated with the prefixes “GPD” (2005) and “GP” followed by the source area (3, B1, B3, or 5), followed by the sequential boring number within that area. Table 10 provides the CVOCs data for all these borings.

IRM Soil Verification Samples

Section 5 discusses the IRM for the site, during which three of the four delineated source areas (the “B-1”, “B-3”,and “MW-3D” Areas) were treated via application of In-Situ Thermal Desorption. The fourth source area (“B-5” Area) was excavated and the soils placed within the “B-1” and “B-3” Areas for treatment. The May 2006 *Interim Remedial Measures Work Plan* documented the development of site specific clean-up objectives (SSCOs) and set forth the requirements for post-treatment verification sampling, which was conducted between March 2007 and September 2007. The October 2007 *Interim Remedial Measures Report* provides the full documentation of that portion of the project, including the verification sample locations and results.

For purposes of further discussion regarding the nature and extent of CVOC soil contamination within the four treatment areas, the IRM soil verification sampling results provide the relevant data. Table 2 from the October 2007 *Interim Remedial Measures Report* provides the summary verification sampling data. Figure 17 of this report provides all of the soil data points (IRM verification samples from within IRM treatment areas and RI sample results from outside the treatment areas) where the concentration of one or more CVOC parameters exceeds the respective SSCO for that parameter.

4.2 Potential Sources of Contamination (Site Utility Sediments and Liquids)

Consistent with the work plan for the site, C&S collected eight liquid and ten sediment samples from subsurface utility sumps, pits, manholes and trenches. Assessment of these data is useful in determining potential source areas for site contaminants and to facilitate determinations as to whether the wastes may be classified as hazardous wastes (solid materials) for purposes of disposal. For liquids, the degree of impact affects the type and extent of treatment that may be required prior to discharge. An additional use for these data is in incorporating appropriate worker health and safety requirements into the remedial program for the site.

Tables 10 and 11 provide summaries of the analytical data resulting from the site utility sampling for sediments and liquids, respectively. These data indicate that volatile organic compounds in sediments were detected at levels that may meet hazardous waste criteria for TCE and PCE for the samples S-5 and S-10. Sample S-5 was associated with dry sediments collected from an extensive system of trenches in Building 13; there is no liquid sample associated with these trenches. Sample S-10 was collected from the sump in Building 9; liquid sample IL-10, which also exhibits chlorinated hydrocarbon impacts, is also associated with this sump.

Semivolatile organic compounds were not detected in sediment samples at concentrations indicative of potential hazardous waste materials. Likewise, liquid samples exhibit only trace detections of semivolatile compounds. Pesticides were not detected at concentrations indicative of potential hazardous waste materials. PCBs were detected in four sediment samples, but the concentrations do not indicate potential hazardous waste materials. Liquid samples exhibited only trace detections of pesticides and no detectable PCBs. Inorganic parameters in sediments were detected at levels that may meet “hazardous waste” criteria for cadmium for the samples S-5 and S-9. Locations S-5, S-10, and S-12 also exhibit potential “hazardous waste” characteristics with respect to lead and chromium. Wet chemistry results do not indicate potential hazardous waste levels for any of the sediment samples.

4.3 Groundwater

A total of 32 groundwater monitoring wells (including temporary wells and replacement wells) were installed and sampled during the RI. Figure 3 provides the locations of all monitoring wells and Table 13 provides the depths of borings and well screen intervals for monitoring wells utilized for gauging events. Groundwater elevations were measured by C&S personnel on eight occasions between December 2004 and on August 2007 to aid in the creation of groundwater contour maps (see Figures 7 through 14). Section 3.4 provides a detailed discussion of site hydrogeology.

Overburden Monitoring Wells – Phase 1 Groundwater Analytical Data

Table 14 provides a summary of the analytical data resulting from the Phase 1 groundwater sampling. Figure 6 presents groundwater analytical data that exceeds NYSDEC's Class GA Groundwater Standards.

For the eight Phase 1 monitoring wells, VOCs were detected at concentrations exceeding NYSDEC Class GA Groundwater Standards or Guidance in the groundwater sample obtained from monitoring well MW-3. The compounds detected at levels exceeding Class GA Groundwater Standards were cis-1,2-dichloroethene, trans-1,2-dichloroethene, and vinyl chloride. These are degradation products of TCE and PCE. Since MW-3 is downgradient of the area where chlorinated hydrocarbons were detected in soil, the compounds and levels detected appear be indicative of natural attenuation/degradation of those compounds.

Semivolatile Organic Compounds were detected at concentrations slightly exceeding NYSDEC Class GA Groundwater Standards or Guidance (based on estimated "J" values) in the groundwater samples obtained from monitoring wells MW-3, MW-4, MW-7, and MW-8. Pesticides/PCBs were not detected at concentrations exceeding NYSDEC Class GA Groundwater Standards or Guidance in the groundwater samples. Inorganic parameters were not detected at concentrations significantly exceeding NYSDEC Class GA Groundwater Standards or Guidance in the groundwater samples.

Overburden Monitoring Wells – Phase 2 Groundwater Analytical Data

Table 14 provides a summary of the analytical data resulting from the Phase 2 sampling of exterior monitoring wells. The Phase 2 exterior monitoring well locations were selected to provide data associated with groundwater quality at the top of the clay unit in the area where chlorinated VOCs had been detected in soil during Phase 1 sampling (B-3) and in areas downgradient of that area. For the six Phase 2 monitoring wells, volatile organic compounds were detected at concentrations exceeding NYSDEC Class GA Groundwater Standards or Guidance in the groundwater samples obtained from monitoring wells:

- MW-3D
- MW-9D
- MW-10D
- MW-11D

The groundwater VOCs data indicate that at monitoring wells MW-9D and MW-10D the VOCs detected were low concentrations of TCE/PCE degradation products. VOC detections in samples collected from MW-3D and MW-11D indicate the presence of TCE and PCE, as well as degradation products, at concentrations exceeding Class GA Groundwater Standards.

Table 16 provides a summary of the analytical data resulting from the Phase 2 groundwater samples collected from the temporary wells installed within the site buildings. These data indicate concentrations of TCE/PCE and/or associated degradation products exceeding Class GA Groundwater Standards at the following locations:

- SB 12-1
- SB 13-2
- SB 13-4

Each of the above locations lies between the suspected source area (MW-11D) and exterior downgradient monitoring well locations. The chlorinated VOCs detected were predominantly degradation products (vinyl chloride and cis-1,2-dichloroethene), again apparently indicative of natural attenuation/degradation of TCE and PCE, which are present at significantly reduced concentrations compared to the upgradient locations.

Overburden Monitoring Wells – Phase 3 Phase Groundwater Analytical Data

Table 17 provides a summary of the analytical data resulting from the Phase 3 groundwater samples collected from the temporary deep monitoring wells ("DW" prefix); Table 18 provides the analytical data from the Phase 3 permanent deep monitoring wells ("DAW" prefix). At one of the four Phase 3 temporary monitoring wells (DW-2), several chlorinated VOCs were detected at concentrations exceeding their respective Class GA Groundwater Standards or Guidance Values. In the groundwater sample from DW-2, PCE was detected at a concentration of 11 ug/l (Class GA Groundwater Standard of 5 ug/l), cis-1,2-dichloroethene was detected at a concentration of 36 ug/l (Class GA Groundwater Standard of 5 ug/l), and 1,2-dibromo-3-chloropropane was detected at a concentration of 1.1 ug/l (Class GA Groundwater Standard of 0.04 ug/l).

To assist in establishing whether the overburden groundwater at the site, irrespective of VOC contamination, could potentially be an acceptable drinking water source, the Phase 3 groundwater samples were also analyzed for total chloride content. Those data, included in Table 16, indicate that in three of the four temporary deep wells, total chloride content exceeded the NYSDEC's Class GA Groundwater Standard of 250 mg/l.

To confirm deep groundwater quality, the three permanent monitoring wells (DAW-1, DAW-2, and DAW-3) were installed in September 2005, at the approximate locations of temporary monitoring wells DW-1, DW-2, and DW-3, respectively. The analytical results for VOCs and total chlorides for the groundwater samples collected from these monitoring wells are presented in Table 18. The VOC detections and concentrations are consistent with the data from the earlier temporary deep sand unit wells. A fourth deep monitoring well (DAW-4) was installed in April 2006 in the north-central portion of the site (Figure 3); May 2006 sampling of that well indicated that no VOCs were present at concentrations exceeding Class GA Standards (Table 20).

Overburden Monitoring Wells – August 2007 Groundwater Analytical Data

In August 2007, at the conclusion of the IRM, another round of groundwater samples was collected from the eight remaining monitoring wells, including upgradient wells, wells from within or near the IRM thermal treatment areas, and wells near the downgradient site boundary. Table 20 includes the data for this final RI groundwater sampling event, which indicate that, with respect to CVOCs, both the upgradient wells and the downgradient wells near the site boundary exhibited similar conditions to the previous (RI) results. The monitoring well from within a thermal treatment area (MW-12D) exhibited dramatically reduced levels (compared to pre-IRM conditions) of both highly chlorinated CVOCs and degradation compounds. A monitoring well from immediately outside a thermal treatment area (MW-13D) exhibited increased levels of one degradation compound (vinyl chloride).

In or near the IRM treatment areas, concentrations of several ketones (principally acetone and 2-butanone) in soil and groundwater were observed to increase during the IRM. The synthesis of these compounds during thermal treatment of soils has been documented and is apparently principally the result of physical/chemical reactions associated with humic acids present in the soils and the applied heat from the remedial system. The concentrations of these compounds are expected to decline relatively quickly as the subsurface cools.

4.4 Soil Vapor Sampling Results

Table 20 provides the VOCs data generated from the April 2006 soil vapor sampling effort and the associated Data Usability Summary Report (DUSR) is included in Appendix C. The soil vapor probe installations and sampling were conducted by Centek Laboratories of Syracuse, New York. The soil vapor data were submitted to NYSDEC and NYSDOH in May 2006, following receipt from the laboratory. The data did not indicate the presence of significant CVOC concentrations within site soil vapors, although the detectable presence of chemical compounds usually associated with ambient air (e.g., Freon) indicated the technical difficulties of sampling soil vapors at the shallow depths required at this site because of the high water table beneath the site

SECTION 5 - INTERIM REMEDIAL MEASURES

The July 2006 *IRM Work Plan* established site-specific clean-up objectives (SSCOs) for four CVOC parameters which were the focus of the IRM. The SSCOs, shown in the table below, were calculated using NYSDEC's methodology from the Technical and Guidance Memorandum (TAGM) #4046, utilizing site groundwater characteristics and Total Organic Carbon (TOC) data.

CVOC Parameter	**Midler SSCO**
PCE	5,600
TCE	2,800
Vinyl chloride	800
trans-1,2-Dichloroethene	1,200

All units in µg/kg

To establish practical IRM thermal treatment areas, a range of areas characterized by total CVOC concentration were considered. That analysis indicated that the vast majority of CVOC mass was associated with PCE within limited source areas that would be removed under any scenario targeting 100,000 µg/kg total CVOCs or less. Therefore, the adopted target concentration of 31,200 ug/kg total CVOCs represented an extremely conservative approach with respect to mass CVOC removals within the identified source areas. The IRM goal was to achieve, within each of the four identified treatment areas, an average concentration for each individual CVOC parameter that was less than its respective SSCO. The IRM verification data (Table 3, IRM Report) indicate that the remedial goal was achieved.

Table 4 from the October 2007 IRM Report provides an analysis of pre-IRM and post-IRM data for total CVOCs in the four treatment areas, and calculated the following:

Area	Pre-IRM Average Concentration (ug/kg)	Post-IRM Average Concentration (ug/kg)
"B-3"	18,927,326	9,430

"B-1"	4,481,576	8,002
"MW-3D"	1,306,250	4,951
"B-5"	57,745	3,513

Those data indicated that 99.95 % of the CVOCs in the "B-3" Area, 99.82 % of the CVOCs in the "B-1" Area, 99.62 % of the CVOCs in the "3-D" Area, and 93.92% of the CVOCs in the "B-5" Area were destroyed during the IRM. For the combined treatment areas (using a weighted average), 99.92% of CVOCs were destroyed during the IRM.

SECTION 6 - POST-IRM CONDITIONS

The extent of CVOC impacts at the site was significantly altered by the year-long IRM. The thermal destruction of more than 99.9% of CVOCs from within the source areas has left a site characterized by dispersed locations where CVOC impacts are present at concentrations orders of magnitude less than those present before the IRM. In addition to those documented reductions within the source areas, the IRM created dynamic conditions within the subsurface, likely associated with enhanced biodegradation of CVOCs, which will persist for months into the "cool-down" period.

Within the IRM treatment areas, there were 21 verification sampling locations where one or more individual CVOC parameters were detected at concentrations exceeding the respective SSCO (out of a total of 59 verification sampling locations). Likewise, there were approximately 36 RI sample locations (out of the hundreds of locations sampled) from outside of the delineated treatment areas where one or more individual CVOC parameters were present at levels exceeding respective SSCOs. VOCs data for these IRM and RI locations are presented in Tables 1 through 8 (RI) and Table 19 (IRM) and the locations are shown on Figures 3B and 17. Although these data represent a conservative estimate of present conditions, they are the relevant data for further discussion regarding the nature and extent of CVOC soil contamination, human health implications, and further remedial alternatives.

SECTION 7 - QUALITATIVE HUMAN HEALTH EXPOSURE ASSESSMENT

Completion of a Qualitative Human Health Exposure Assessment (Qualitative HHEA) following NYSDOH guidance is a requirement of the Brownfield Site Investigation / Remedial Alternatives Assessment process, as set forth in Appendix 3B of the NYSDEC's Draft *DER-10, Technical Guidance for Site Investigations and Remediation*. For the Pioneer Midler Avenue project, it is appropriate that the Qualitative HHEA be completed following the IRM, so that the assessment considers the effectiveness of the IRM at mitigating exposure risks at the site. Summary data generated during the Brownfield RI, the IRM, and during site redevelopment activities, are all considered in this assessment. The following subsections identify and assess:

- Contaminant sources within soil and groundwater at the site:
- Contaminant release and transport mechanisms;
- Potential points and routes of exposure;
- Human receptor populations; and
- Conclusions regarding exposure pathways.

7.1 Contaminant Sources in Soil

Subsurface Soils

As indicated above, the IRM data indicate that the IRM remedial objectives were achieved and that the average concentration of each CVOC within each of the source areas is less than the respective SSCO. RI/IRM data indicate that soils with individual CVOC concentrations exceeding the respective SSCO may exist both within the source areas and within areas that were not addressed during the IRM. The soil sampling locations where concentrations of one or more individual CVOCs may exceed the respective SSCO are shown on Figure 17.

Surface Soils

The urban fill surface soils originally at the site surface are presently almost completely covered by the site development (e.g., buildings, pavement, soil). Upon the completion of development, the site's urban fill surface soils are expected to be completely covered. These types of urban fill soils are commonly contaminated with a class of compounds known as polycyclic (or polynuclear) aromatic hydrocarbons (PAHs). PAHs are a group of over 100 different chemicals that are formed during the incomplete burning of coal, oil and gas, garbage, or other organic substances like tobacco or charbroiled meat.

7.2 Contaminant Sources in Groundwater

At the conclusion of the IRM, groundwater samples were collected from the eight remaining monitoring wells, including upgradient wells, from within or near the IRM thermal treatment areas, and wells near the downgradient site boundary. The data indicated that, with respect to CVOCs, both the upgradient wells and the downgradient wells near the site boundary exhibited similar conditions to the pre-IRM results. A monitoring well from within a thermal treatment area (MW-12D) exhibited dramatically reduced levels (compared to pre-IRM conditions) of both highly chlorinated CVOCs and degradation compounds. A monitoring well from immediately outside a thermal treatment area (MW-13D) exhibited increased levels of one degradation compound (vinyl chloride). The level of vinyl chloride is expected to decrease significantly from microbial degradation.

In or near the IRM treatment areas, concentrations of several ketones (principally acetone and 2-butanone) in soil and groundwater were observed to increase during the IRM. The synthesis of these compounds during thermal treatment of soils has been documented at other sites and is apparently principally the result of physical/chemical reactions associated with humic acids present in the soils and the applied heat from the remedial system. The concentrations of these compounds would be expected to decline relatively quickly as the subsurface cools. For the purpose of this qualitative HHEA, these volatile organic compounds will be considered to be associated with the same potential migration pathways and receptors as the CVOCs discussed.

The table below lists the fate and transport parameters for acetone, 2-butanone, and MIBK. These data indicate that these compounds are volatile, very soluble in water, and readily degradable in the subsurface. Once formed, they will be quickly removed via the following pathways:

- Volatilization from water to air and/or steam,
- Biodegradation in the cooler areas surrounding the actively heated treatment zone, and
- Advective flux with the groundwater and dilution due to mixing and dispersion.

Selected Fate and Transport Parameters for Acetone, 2-Butanone, and MIBK.

	Acetone	2-Butanone	MIBK
Henry's Law Constant (atm-m^3/mole)	3.8×10^{-5}	1.1×10^{-5}	1.4×10^{-4}
Aqueous solubility (mg/L)	Miscible	259,000	20,000
Soil half-life	High: 168 hrs Low: 24 hrs Avg.: 96 hrs	High: 168 hrs Low: 24 hrs Avg.: 96 hrs	High: 168 hrs Low: 24 hrs Avg.: 96 hrs
Groundwater half-life	High: 336 hrs Low: 48 hrs Avg.: 192 hrs	High: 336 hrs Low: 48 hrs Avg.: 192 hrs	High: 336 hrs Low: 48 hrs Avg.: 192 hrs

Source: Howard P.H. 1991, Handbook of Environmental Degradation Rates; and Howard P.H. 1997, Handbook of Environmental Fate and Exposure Data for Organic Chemicals.

As the treatment zone cools, the rate of formation of acetone, MEK, and MIBK will decrease while the removal rates remain relatively constant (i.e., volatilization, biodegradation, and advective flux). This will result in a reduction in the concentrations measured in soil and groundwater over time as the site cools to ambient temperatures.

7.3 Release and Transport Mechanisms (Soil and Groundwater)

Groundwater surface elevations at the Pioneer Midler Avenue site are within several feet, with some seasonal variation, of the ground surface. Above the groundwater table, vadose zone materials, whether native or imported fill materials, have not been found to be significantly impacted by CVOCs. The discussion of release and transport mechanisms is therefore associated with the saturated overburden. The potential transport mechanisms for site CVOC contaminants would be:

- Partitioning between soil and groundwater; and
- Subsurface migration of the contaminant plume;

The potential release mechanism would be as soil vapor or atmospheric vapor, the occurrence of which would be most likely in the case of impacted soil disturbance or via use of extracted groundwater. It should be noted that, based on the destruction of more than 99.9% of CVOCs within the soil in source areas during the IRM, the degree of partitioning and the likelihood of significant vapor release are significantly reduced compared to pre-IRM conditions.

For PAHs in soils, the compounds are most likely to stick tightly to soil particles and not partition to groundwater or soil vapor.

Groundwater at the site, or in the vicinity of the site, is not used as a drinking water source. Downgradient of the site, properties are commercial in nature and served by the public water system. Since the area is a fully developed urban area with long-established public drinking water sources from remote surface waters, future withdrawal and use of the groundwater from beneath the site is not necessary. Furthermore, it is assumed that institutional controls would be available to restrict use of site groundwater. Therefore, the only feasible transport mechanism for groundwater is via migration to off-site receptors. RI hydrogeologic investigations (Appendix B) indicate an average groundwater velocity of approximately 4.4 feet/year at the site, and associated CVOC transport velocities 5 to 330 times slower than groundwater velocity. The RI site characterization of multiple CVOC release points and CVOC distribution within the subsurface appears to be consistent with those velocities and with the historical time-frame over which the contaminants were likely to have been released. These summary groundwater characteristics for the site, and all observations to date, indicate that CVOCs from the site would not migrate an appreciable distance downgradient before significant natural attenuation, principally via reductive dechlorination, would be likely to occur.

7.4 Potential Points and Routes of Exposure

The most likely point of direct human exposure to CVOCs in soils would be in the case where impacted soils were disturbed. In that case exposure would be possible via dermal absorption, inhalation of dust, or inhalation of soil vapors. Barring soil disturbance, migration of soil vapors to an ambient indoor environment constitutes another potential route of exposure.

The most likely point of direct human exposure to PAHs in soils would be in the case where impacted soils were disturbed. In that case exposure would be possible via inhalation of dust.

With respect to groundwater, a possible point or route of exposure could occur if impacted groundwater were withdrawn from the subsurface for use. In that unlikely case, the route of exposure could be ingestion, inhalation of vapors, or dermal absorption.

7.5 Potential Receptor Populations

The redeveloped use of the Pioneer Midler Avenue Site will be as a retail shopping facility. Public patrons of the redeveloped facility or workers performing typical occupational procedures would not contact contaminated soils or groundwater and would not be potential direct receptor populations. Therefore, the only feasible receptors with respect to soils or groundwater would be:

- Workers involved with installing or repairing facilities which might extend into PAH or CVOC-impacted soils or groundwater;
- Patrons or workers at the site who could be exposed to CVOC vapors within the indoor environment at the site.

This analysis concludes that there is no likely exposure scenario associated with withdrawal and use of groundwater at with the site. However, it is appropriate for a site remedy to include measures to assure that site groundwater will not be withdrawn and used for any purpose, as well as measures to monitor groundwater conditions at the downgradient site boundary to confirm that conditions over time do not change to the extent that additional potential receptor populations could be identified.

7.6 Conclusions Regarding Exposure Pathways

The preceding exposure assessment indicates that the plausible exposure pathways identified are:

- The future on-site worker who may contact impacted soils or groundwater; and
- The future on-site patron or worker who could be exposed to CVOC vapors within an interior environment.

With regard to future construction workers contacting deep soils or groundwater after the redevelopment of the site, it is assumed that the Site Management Plan will be adopted that will bind the owner to inform future site workers as to the potential presence of CVOCs within site media and require their employers to provide adequate health and safety monitoring and, if required, personal protective equipment.

With regard to the potential exposure to CVOC vapors, the NYSDEC and NYSDOH require that structures at the Site be equipped with a sub-slab depressurization system (SSDS) designed consistent with NYSDOH guidelines that will actively route soil vapors from beneath the structure to the ambient outdoor environment and provide the ability to monitor vapor quality below the building slab.

This exposure assessment indicates that further assessment of remedial alternatives for the site should consider the potential human exposure pathways identified. Any adopted remedy must include adequate measures to mitigate the identified threats to the health of future site patrons, workers, and the general public. Furthermore, the adopted remedy should, to the extent feasible, provide measures to assure that significantly contaminated site groundwater will not migrate off-site or be withdrawn and used for any purpose. There should also be measures to monitor groundwater conditions at the downgradient site boundary to confirm that conditions over time do not change to the extent that additional potential receptor populations could be identified.

SECTION 8 - REMEDIAL ALTERNATIVES ANALYSIS

8.1 Introduction

This section identifies remedial technologies that are available to address soil and groundwater impacted by CVOCs, and discusses the feasibility of incorporating one or more of these technologies as part of the final remedy at the Pioneer Midler Avenue site. This alternatives analysis follows the methodology set forth in Section 4 of the NYSDEC's Draft *DER-10 Technical Guidance for Site Investigation and Remediation* and is based on post-IRM site conditions and identified risks to human health or the environment, as identified and discussed in previous sections of this report. Alternatives were evaluated relative to the following criteria (with descriptions as provided in DER-10):

1. *Overall Protection of Public Health and the Environment.* This criterion is an evaluation of the remedy's ability to protect public health and the environment, assessing how risks posed through each existing or potential pathway of exposure are eliminated, reduced or controlled through removal, treatment, engineering controls or institutional controls.
2. *Compliance with Standards, Criteria, and Guidance (SCGs).* Compliance with SCGs addresses whether or not a remedy will meet applicable environmental laws, regulations, standards, and guidance.
3. *Long-term Effectiveness and Permanence.* This criterion evaluates the long-term effectiveness of the remedy after implementation.
4. *Reduction of Toxicity, Mobility or Volume with Treatment*. The remedy's ability to reduce the toxicity, mobility or volume of site contamination is evaluated.
5. *Short-term Effectiveness.* The potential short-term adverse impacts and risks of the remedy upon the community, the workers, and the environment during the construction and/or implementation are evaluated.
6. *Implementability.* The technical and administrative feasibility of implementing the remedy is evaluated. Technical feasibility includes the difficulties associated with the construction and the ability to monitor the effectiveness of the remedy. For administrative

feasibility, the availability of the necessary personnel and material is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, etc.

7. *Cost*. Capital, operation, maintenance and monitoring costs are evaluated for the remedy.
8. *Community Acceptance.* The public's comments, concerns, and overall perception of the remedy, if any, are evaluated in a format that responds to all questions that are raised (i.e., responsiveness summary).
9. *Land Use.* Since the inception of the Pioneer Midler Avenue Project, it has been the stated intention that redevelopment of this former industrial and commercial site would be as a retail commercial facility. Remedial alternatives should be compared as to the ability to attain remedial goals given that intended use.

8.2 Remedial Goal

The overall remedial goal for the pioneer Midler Avenue site is to eliminate or mitigate significant threats to public health and the environment, given the intended use of the site.

8.3 Remedial Action Objectives for Soil

As indicated earlier in this report, the IRM verification data (Table 3 of the IRM Report) indicate that the IRM remedial goal was achieved and that, for the combined treatment areas, 99.92% of CVOCs were destroyed during the IRM. Within the IRM treatment areas, there were 21 final verification sampling locations where one or more individual CVOC parameters were detected at concentrations exceeding the respective IRM SSCO (out of a total of 59 verification sampling locations). Figure 17 shows the distribution of those samples, and includes all RI soil sample locations where one or more individual CVOC parameters were detected at levels exceeding the IRM SSCOs and that were outside the delineated treatment areas.

The HHEA identified the following feasible exposure scenarios with respect to soils at the site:

- A future on-site worker who might contact impacted soils; and

- The future on-site patron or worker who could be exposed to volatile vapors within site structures.

Given the above, the Remedial Action Objective (RAO) with respect to site soils would be to protect future on-site workers or patrons from contact with impacted soils or vapors.

8.4 Remedial Action Objectives for Groundwater

As discussed previously, the analytical results from the final RI groundwater sampling event (Table 20) indicated:

- No appreciable change in groundwater flow direction or in groundwater quality at site upgradient, side-gradient, or downgradient locations;
- Significant reductions in CVOC concentrations within the groundwater (as well as in the soil) in the "B-3" area at the conclusion of the thermal treatment regime;
- An increase in the concentration of one CVOC compound (vinyl chloride) immediately outside the "3-D" thermal treatment area (MW-13D sample);
- An increase in the concentrations of several ketone compounds (acetone, 2-butanone, and 4-methyl-2-pentanone) in and near the thermal treatment areas.

The final two conditions discussed above are apparently related to the dynamic effects of the thermal increase within and near the thermal treatment areas. Within the thermal treatment areas, the temperature conditions that destroyed CVOC compounds also favored increased production of ketones. In areas outside and proximate to the treatment areas, increased temperatures apparently enhanced biological degradation (dechlorination) of CVOCs. These effects, and the associated concentrations of the volatile chemical constituents of interest (both CVOCs and ketones), would be expected to decline as the subsurface temperatures decline to ambient conditions in the months following cessation of heating. The decrease in CVOC and ketone concentrations would occur from the degradation of these materials from naturally occurring bacteria.

The lithology and hydrogeology for the site are discussed in Report Sections 3 and 4. These assessments indicate a low hydraulic gradient and very slow-moving shallow overburden groundwater above a clay confining unit (aquitard) of varying thickness. This characterization was consistent with the sizes and configurations of the CVOC source areas identified and treated via the IRM, as well as the time–frame over which those impacted areas evolved. The presence of conditions amenable to reductive dechlorination of PCE (the compound that is assumed to be the original source of CVOC contamination at the site) is empirically evidenced by the predominance of degradation compounds (vinyl chloride, dichloroethenes) outside the identified source areas and the trend of declining concentrations of those degradation compounds with distance from the source areas.

The potential affects to the groundwater regime in and near the treatment areas caused by the dynamic temperature conditions associated with the IRM could temporarily alter groundwater physical/chemical characteristics, including water surface elevations, viscosity, kinematic viscosity, dissolved oxygen, pH, and microbiological activity. Those effects to the subsurface physical/chemical environment would be expected to create subsurface transport and biological activity characteristics different from static conditions that would slowly return to the steady state characteristics identified during the RI.

Due to the long-established utilization of public drinking water supplies in areas surrounding the site, the HHEA concludes that, although groundwater at the site contains volatile organic compounds at concentrations exceeding Class GA Groundwater Standards, the only feasible exposure scenarios were associated with:

- The future on-site worker who might contact impacted groundwater.
- The future on-site patron or worker who could be exposed to volatile vapors within site structures.

Therefore, one RAO with respect to site groundwater would be to protect future on-site workers or patrons from contact with groundwater or vapors.

Although, in our opinion, the HHEA concluded that there was no likely exposure scenario associated with withdrawal and use of groundwater at the site, that assessment did conclude that it would be appropriate for a site remedy to include measures to assure that site groundwater will not be withdrawn and used for any purpose, as well as measures to monitor groundwater conditions at the downgradient site boundary to confirm conditions over time. Therefore, additional RAOs for groundwater would be:

- To assure that site groundwater will not be withdrawn and used for any reason.
- To mitigate potential off-site CVOC migration via site groundwater.

8.5 Remedial Alternatives for Soil

Given the summary site characteristics and conditions, the following remedial technologies have been identified as potentially applicable to soils impacted by volatile organic contaminants:

- Excavation and Off-Site Disposal
- In-Situ Thermal Treatment
- Institutional and/or Engineering Controls

The following subsections describe the above remedial technologies and assess the feasibility of each in addressing the remaining CVOC-impacted materials at the Pioneer Midler Avenue site.

8.5.1 Excavation and Off-Site Disposal

<u>Technology Description</u>

This technology consists of excavating impacted materials, transporting them off-site for disposal or treatment, and replacing the excavated materials with clean imported fill. Excavation was successfully implemented within the shallow, overburden soils within the "B-5" treatment area during the IRM, as documented in preceding sections of this report. Due to the shallow site groundwater table and the depths of the CVOC impacts, each area to be excavated would need to be sheet-piled and braced to limit groundwater intrusion. Non-impacted upper soils would be characterized, removed and stockpiled. Impacted soils would be characterized using a photoionization detector and segregated for disposal. A confirmation sampling program would be incorporated to confirm that remedial goals were achieved; excavations would need to be kept open and dewatered pending receipt of sample results in case additional excavation would be needed to achieve clean-up goals. Affected areas would need to be restored.

Feasibility Assessment

Excavation was utilized in the "B-5" area during the IRM based on relatively shallow depths of impacts in that area and because the impacted soils could be moved to a thermal treatment area for treatment (avoiding the costs for transport and disposal). The IRM soil verification data confirmed that the IRM goal (average concentration of each CVOC less than SSCO) was achieved at the limits of the "B-5" excavation. The further application of this technology to soils where one or more CVOC parameters exceed cleanup goals, would extend this technology to deeper overburden soils within an area approximately double the size of the combined IRM treatment areas, resulting in unit costs far exceeding those of the IRM (and far beyond feasibility for a private investor), and associated CVOC removals two to three orders of magnitude less than were achieved during the IRM.

This technology could be successfully implemented: all known soils with impacts exceeding cleanup goals could be excavated and transported from the site for disposal, until verification samples from the limits of excavations met the cleanup goals. However, even after that inordinate effort and expense, institutional and/or engineering controls would remain appropriate to meet the site RAOs. Therefore, given the prohibitive efforts and costs of implementing this technology, and the fact that successful implementation would not obviate the need for institutional and/or engineering controls, this technology is deemed not feasible for addressing remaining impacts to soils at the site.

8.5.2 In-Situ Thermal Treatment

Technology Description

This technology consists of heating the subsurface to thermally destroy volatile organic contaminants. Two specific variants of in-situ thermal treatment differ in the manner in which the soils are heated; one technology induces an electrical current between pairs of electrodes placed in the subsurface and another technology installs electrical resistance heating elements within vertical wells. Application of either of these technologies at the site would include a vapor extraction and treatment system and associated collection and treatment/destruction of withdrawn vapors and condensed liquids.

In-situ thermal treatment was selected as the preferred technology for the IRM source areas based on the shallow depth to groundwater, the generally deeper occurrences of CVOC impacts, and the higher CVOC concentrations (particularly the highly chlorinated isomers, PCE and TCE) in the treatment areas. For the purpose of the IRM, in-situ thermal treatment was judged to be more cost-effective than excavation and disposal because of the depth of the CVOC-impacted soils, the extremely elevated CVOC concentrations exhibited (pre-IRM concentration of 18,927,326 ug/kg average "Total CVOCs" in the "B-3" area), and because a large fraction of excavated soils would likely have needed to be disposed as hazardous waste.

<u>Feasibility Assessment</u>

Figure 17 shows the known sample points where RI and IRM data identify one or more individual CVOC concentrations that may exceed the respective SSCO. The distribution of these sample points indicates that an area roughly twice the size of the IRM treatment areas, with average CVOC concentrations three orders of magnitude less than those addressed during the IRM, would need to be treated to remediate soils exhibiting individual CVOCs that presently may exceed IRM SSCOs. The resulting cost per mass unit of CVOCs removed would be thousands of times greater than that achieved during the IRM. However, even after that substantial effort and expense, institutional and/or engineering controls would remain appropriate to meet the site RAOs. Therefore, based on the prohibitive costs of implementing this technology (far beyond feasible costs for a private investor), and on the fact that successful implementation would not obviate the need for institutional and/or engineering controls, in our opinion, this technology is not feasible for addressing remaining impacts to soils at the site.

8.5.3 Institutional and Engineering Controls

Technology Description

An *institutional control* is a non-physical means of enforcing a restriction on the use of real property that is used in situations where conditions make the property suitable for some, but not all, potential uses of the property. The purpose of an institutional control, such as an environmental easement, may be to limit human or environmental exposure, restrict use, or provide notice of such restriction.

Engineering controls consist of physical barriers or methods employed to actively or passively contain, stabilize, or monitor contamination; restrict the movement of contamination to ensure the long-term effectiveness of a remedial program; or eliminate potential exposure pathways to contamination. Examples potentially applicable to the Pioneer Midler Avenue site would be low-permeability membranes or sub-slab depressurization systems applied below the concrete building slabs or a positively pressured interior atmospheric system within a structure.

Feasibility Assessment

The analyses provided in the RI, the Qualitative HHEA and in this RAA indicate that the present condition of the Pioneer Midler Avenue site, with safeguards to mitigate identified exposure scenarios, is compatible with the intended use of the site as a retail commercial establishment. After completion of the IRM and redevelopment of the site, there is a possibility of a future change in the use of the site that might require significant additional construction. Therefore, it would be feasible and appropriate to:

- Incorporate institutional controls to limit the types of activities that might take place at the site in the future, and to notify future site workers as to the site's limitations and to the nature of potential exposures; and

- Incorporate engineering controls, such as sub-slab depressurization systems for site structures to mitigate potential for site workers and patrons to be exposed to CVOC vapors from the subsurface.

8.6 Potential Remedial Actions for Groundwater

The remedial goal with respect to groundwater would be to mitigate human or environmental exposure to contaminants in the groundwater. The Qualitative HHEA evaluated use of the groundwater from the site as a potential human exposure pathway, and concluded that, given the availability of public drinking water, such use is unlikely. Technologies available for mitigating exposure to contaminated groundwater are:

- In-Situ or Ex-Situ Groundwater Treatment;
- Monitored Natural Attenuation; and
- Institutional and/or Engineering Controls.

The following subsections describe the above technologies and assess the feasibility of each in addressing groundwater at the Pioneer Midler Avenue site.

8.6.1 In-Situ or Ex-Situ Groundwater Treatment

<u>Technology Description</u>

This technology could consist of one of a large variety of treatment systems that are capable of treating groundwater either in place (e.g., reaction walls, injection of microbes or nutrients, air sparge) or after extraction of the groundwater (e.g., air stripping, granular activated carbon adsorption). In general, these technologies are applicable to sites where a distinct area of impacted groundwater (contaminant plume) is present. For in-situ technologies to be effective the hydrogeological characteristics and contaminant distribution data for the site should indicate that the contaminant plume coincides with the treatment area to an extent necessary for adequate treatment to occur; otherwise, a hydraulic control technology would need to be included to achieve that condition. For ex-situ technologies to be effective, the groundwater extraction field would need to assert an area of influence sufficient to remove and treat impacted groundwater from the entire plume. In-situ technologies tend to be capital intensive, but may be less expensive to operate and maintain compared to ex-situ technologies. Achieving remediation to stringent standards (such as Class GA groundwater Standards) is often problematic for all of these technologies due to ongoing soil/groundwater contaminant partitioning and to practical difficulties and costs involved with addressing large areas of low-level groundwater contamination.

Feasibility Assessment

The summary site groundwater data do not identify a CVOC contaminant plume that would appear to be compatible with ex-situ or in-situ treatment technologies. Of the fourteen monitoring wells installed in the peat/marl unit, only those within IRM treatment areas (MW-3D, MW-11D, MW-12D) exhibited significant concentrations of the highly chlorinated CVOCs (PCE or TCE) in groundwater prior to implementation of the IRM. Based on the post-IRM (August 2007) sample from the "B-3" treatment area monitoring well (MW-12D), the thermal treatment effectively removed those highly chlorinated compounds from groundwater in the source areas. Outside the thermal treatment areas, the distribution of CVOCs in groundwater appears to be dispersed, low-level concentrations, and composed primarily of the lower-chlorinated degradation compounds (VC, cis-DCE). As previously discussed, two situations have been identified that warrant consideration of ex-situ or in-situ remedial technologies:

- In MW-13D, an increase in vinyl chloride was detected in the post-IRM groundwater sample; and
- Within all thermal treatment areas, several ketones (acetone, 2-butanone, and 4-methyl-2-pentanone) were detected in IRM soil verification samples and in post-IRM groundwater samples.

Both of the above conditions appear to be associated with the dynamic thermal conditions within and near the thermal treatment areas. As such, the observed effects upon the subsurface physical/chemical environment are assumed to be temporal, and would not warrant mitigation actions of the scope associated with ex-situ or in-situ treatment technologies. Concentration of ketones and vinyl chloride are expected to continue decreasing through natural attenuation after the subsurface has cooled. Therefore, these in-situ and ex-situ technologies are concluded to be not appropriate for the site given current conditions.

8.6.2 Monitored Natural Attenuation

Technology Description

Natural attenuation processes (biodegradation, dispersion, sorption, and volatilization) are active to some degree within any CVOC-impacted groundwater system. In a situation where natural attenuation processes, compared with other remedial alternatives, can be expected to attain site remedial objectives within a reasonable time period, reliance on and monitoring of these processes can constitute an appropriate site remedy. In most cases, adoption of monitored natural attenuation as the site remedy follows a period of active remediation, such as the source area thermal treatment implemented as an IRM at the Midler site, or one of the ex-situ treatment technologies discussed previously. Determining the appropriateness of monitored natural attenuation of CVOCs for a site requires, at a minimum:

- That the contaminant flow field be known to an acceptable degree of certainty;
- That a source of electron donors is present;
- That inorganic electron acceptors are not present in quantities that would interfere with biodegradation pathways;
- That the affects and interactions of attenuation processes have been considered and can be assessed periodically via monitoring; and
- That the potential for downgradient receptors to be exposed to contaminants can be assessed.

In most cases, site characterization data are used as a basis for determining whether monitored natural attenuation may be appropriate for a site. Performance monitoring will then be used to demonstrate the progress of natural attenuation of CVOCs, as well as to confirm that, among other things:

- No impacts to downgradient receptors are occurring;

- No additional releases of contaminants have occurred;
- No potentially toxic transformation products have resulted from biodegradation; and
- No environmental conditions (hydrogeologic, geochemical, microbiological) have changed to the extent that the efficacy of the attenuation processes may be compromised.

Performance monitoring typically continues for a specified period (e.g., two years) after clean-up objectives have been achieved. Institutional mechanisms for maintaining the monitoring program should be established in the remedy decision or in other binding site documents.

Feasibility Assessment

Although a large body of site data was generated during the RI, the IRM and associated removal of more than 99.9% of CVOCs from within the treatment areas has rendered much of those data obsolete. Existing soil conditions within and surrounding the thermal treatment areas, where one or more CVOCs may remain present at concentrations exceeding the IRM SSCOs are presented on Figure 17. Furthermore, during the last year of the three-year RI period, the IRM was being successfully implemented, resulting in dynamic conditions within and surrounding the thermal treatment areas. During the cool-down period, it is assumed that static conditions will slowly return to the treatment area environs, first to areas more distant from the thermal treatment zones, and finally inward to the centers of the treatment zones. Therefore, the following analysis of the appropriateness of monitored natural attenuation as the site remedy is based on

- The general site hydrogeologic characteristics developed during the RI;
- The results of the IRM, which successfully removed more than 99.9% of CVOCs from the treatment areas;
- One additional round of groundwater sampling conducted at the end of the IRM; and
- Supplemental (non-RI) investigations undertaken independently by Pioneer Midler Avenue, LLC.

The summary hydrogeologic investigations at this site have not identified any characteristics that would contraindicate the feasibility of natural attenuation. The presence of high concentrations of total organic carbon within the saturated overburden indicates that the peat/marl unit constitutes an abundant electron donor source. The existence of degradation compounds at declining concentrations in downgradient locations indicates that, if present, inorganic electron acceptors are not inhibiting some level of reductive dechlorination from occurring.

To gain an understanding of the presence of populations of dechlorinating microbes in the site groundwater regime, Pioneer Midler Avenue, LLC collected one sample from each of three site monitoring wells (MW-3D, MW-11D, and SB-7-1) in October 2005, using sample kits provided by Microbial Insights of Rockford, Tennessee. This limited investigation was not a formal part of the RI. The samples were analyzed by Microbial Insights for the presence of Dehalococcoides (dechlorinating bacteria) and for functional genes and phylogenetic groups associated with dechlorinating conditions. The data generated indicated the presence of Dehalococcoides and functional genes at each of the wells.

To augment the Microbial Insights data, and to define post-IRM geochemical and microbiological conditions downgradient of one of the thermal treatment areas, Pioneer Midler Avenue, LLC collected additional groundwater samples from monitoring well MW-13D in October 2007. Field parameters (ORP, DO, temperature) were measured and groundwater samples were submitted to STL Inc. and SiREM for analysis of a list of MNA indicators, including: dissolved inorganic carbon, dissolved organic carbon, VOCs, Dehalococcoides, Vinyl Chloride Reductase, Iron [total, Fe (II) and Fe (III)], nitrate, nitrite, sulfate, sulfide, methane, ethene, and ethane.

Table 22 presents the data generated from the October 2007 groundwater sampling and provides limited interpretation of the data. Table 22 also provides calculation of a site score using the USEPAs methodology from the 1998 *Technical Protocol for Evaluating Attenuation of Chlorinated Solvents in Ground Water.* According to the USEPA's scoring criteria, a site score exceeding 20 indicates that there is strong evidence for reductive dechlorination at the site; the score for the Pioneer Midler Avenue site from the October groundwater sampling at MW-13D is 22. In addition to the physical and geochemical parameters the USEPA uses in their site scoring methodology, the biological data generated from the October 2007 sampling indicate the abundant presence of microbes associated with reductive dechlorination, particularly the specific microbes Vinyl Chloride Reductase (vcrA) capable of reducing vinyl chloride to ethene and carbon dioxide.

Of the four main components of natural attenuation (biodegradation, dispersion, sorption, and volatilization), in our opinion, biodegradation would be the dominant parameter at this site due to the slow-moving groundwater environment. Dispersion, sorption, and volatilization would all have more affect in a groundwater regime with higher rates of flux than are present at this site. This same relatively static environment would offer the ability to periodically assess conditions with ample opportunity to identify and assess a change that might indicate a threat to potential downgradient receptors.

The preceding analyses indicate that, with adequate institutional controls to prohibit use of site groundwater and with adequate engineering controls to protect identified potential on-site receptors, monitored natural attenuation constitutes a feasible remedy for the residual groundwater CVOC contamination that remains at this site following the IRM.

8.6.3 Institutional and Engineering Controls

Technology Description

Engineering controls to mitigate groundwater impacts include physical barriers to contain groundwater, such as slurry walls or sheet piling barriers. Other types of engineering controls include access controls, provision of alternative water supplies via connection to public water supply, adding treatment technologies to existing public water supplies, or installing filtration devices on private water supplies.

An *institutional control* is a non-physical means of enforcing a restriction on the use of real property that is used in situations where conditions make the property suitable for some, but not all, potential uses of the property. The purpose of an institutional control, such as an environmental easement, may be to limit human or environmental exposure, restrict use, or provide notice of such restriction.

Feasibility Assessment

Barrier type engineering controls would not appear to be applicable to this site as no distinct plume or area of particularly elevated contaminant levels ("hot spot") appear to be present. With respect to the other types of controls, the encompassing availability and use of public water in the vicinity of the site renders these technologies unnecessary. To assure that withdrawal and use of groundwater from beneath the site does not occur, institution of site controls restricting such use is appropriate.

8.7 The "No Action" Alternative

Technology Description

Guidance for assessing remedial alternatives requires that the "No Action" alternative be included in the assessment. Under this alternative, the consequences of doing nothing to address identified or potential risks posed by the presence of contamination at a site are assessed. This alternative may be the appropriate one if the risks present are not of sufficient significance, or if the effectiveness of other potential remedies can not be established. For the Pioneer Midler Avenue site, this alternative assumes that following completion of the IRM and establishment of the site's redevelopment, no further actions would be undertaken by Pioneer Midler Avenue, LLC with respect to mitigating potential risks posed by CVOC contaminants that remain at the site.

Feasibility Assessment

Summary site data indicate that, following the IRM, CVOC impacts at the site are dramatically reduced compared to pre-IRM conditions. However, those residual CVOC impacts, and the identified potential exposure pathways, are significant enough that the "No-Action" alternative would not be appropriate.

8.8 Comparative Analyses

Tables 23 and 24 provide summaries of the comparative analyses of remedial alternatives for soil and groundwater, respectively. These tables assess each of the remedial technologies developed in the previous sections (including the "No Action" alternative) with respect to the nine criteria set forth in Section 8.1. The analyses in Tables 23 and 24 extend the comparison of alternatives to assess each with respect to both the intended use of the site as a commercial retail facility (Track 4 development) and a hypothetical Unrestricted Use (Track 1) development.

The technology assessments summarized in Tables 23 and 24 indicate that, for the intended use of the site (Track 4 development), and with the exception of the "No Action" alternative, each of the remedial technologies is potentially capable of achieving the remedial action objectives for the Pioneer Midler site. The technologies differ in the difficulty and high cost associated with the more aggressive potential remedies~~ys~~ in addressing widespread but comparatively low levels of contaminated soils and groundwater present at the site following the source removal actions of the IRM. For the hypothetical Unrestricted Use (Track 1) development scenario, extensive application of those more aggressive and intrusive technologies would be required to attempt to attain site conditions appropriate for unrestricted use. However, it would remain likely that inclusion of the less physically aggressive technologies (Institutional and Engineering Controls, Monitored Natural Attenuation) would be appropriate following implementation of aggressive remedial actions, irrespective of the redevelopment track pursued.

8.9 Conclusions

The preceding discussions regarding potential exposure scenarios associated with CVOCs in the site soils and groundwater regimes indicate, in our opinion, that the identified risks posed by those constituents do not pose an immediate threat to a receptor population, such that the adoption of additional aggressive remedial actions is appropriate. We conclude that, based on the effectiveness of the IRM and the site's hydrogeological characteristics, risks associated with the site have been reduced to the extent that Monitored Natural Attenuation of groundwater conditions, accompanied by Institutional and Engineering Controls to protect the identified on-site receptor populations, constitute a remedy that provides:

- Overall protection of public health and the environment;
- A path to long-term attainment of cleanup goals for soil and Class GA Groundwater Standards for groundwater; and
- A commitment to monitoring long-term effectiveness and the flexibility to add elements of additional technologies, if appropriate in the future.

The selected technologies (Monitored Natural Attenuation, Institutional Controls, and Engineering Controls) provide a cost-effective means to return this site to a productive capacity for the surrounding community, with no technical restraints or short-term adverse impacts. Although the time needed to achieve cleanup goals for soil and Class GA Groundwater Standards for water will be on the order of decades, this time constraint could not likely be shortened appreciably by any of the other much more aggressive and expensive remedial technologies available.

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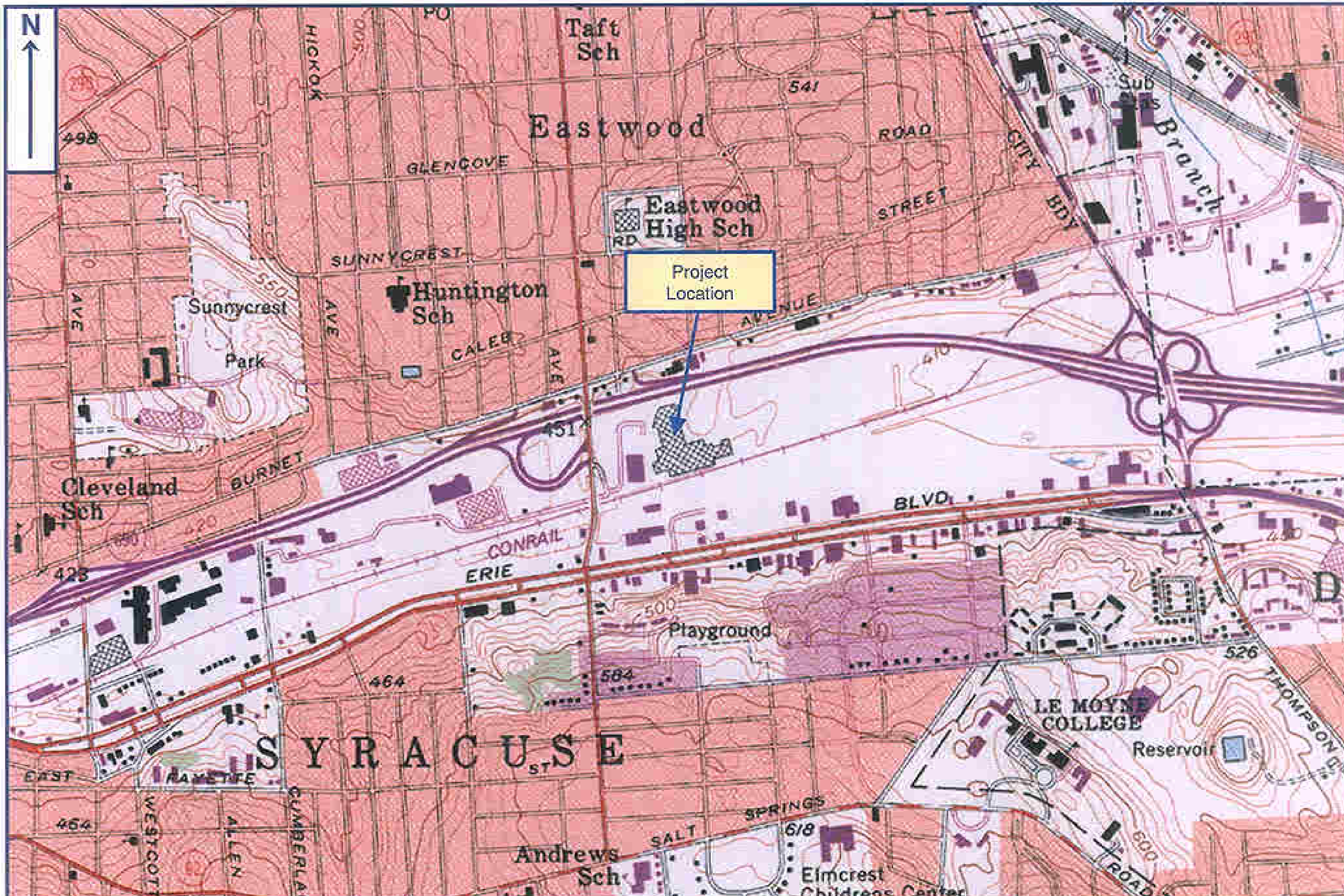
FIGURES



Source: USGS Topographic Maps (Terrain Navigator)
Syracuse East, NY

Pioneer Midler Avenue LLC
Remedial Investigation Report
Figure 1
Site Location Map

C&S COMPANIES
ENGINEERS
DESIGN BUILD
TECHNICAL RESOURCES
OPERATIONS

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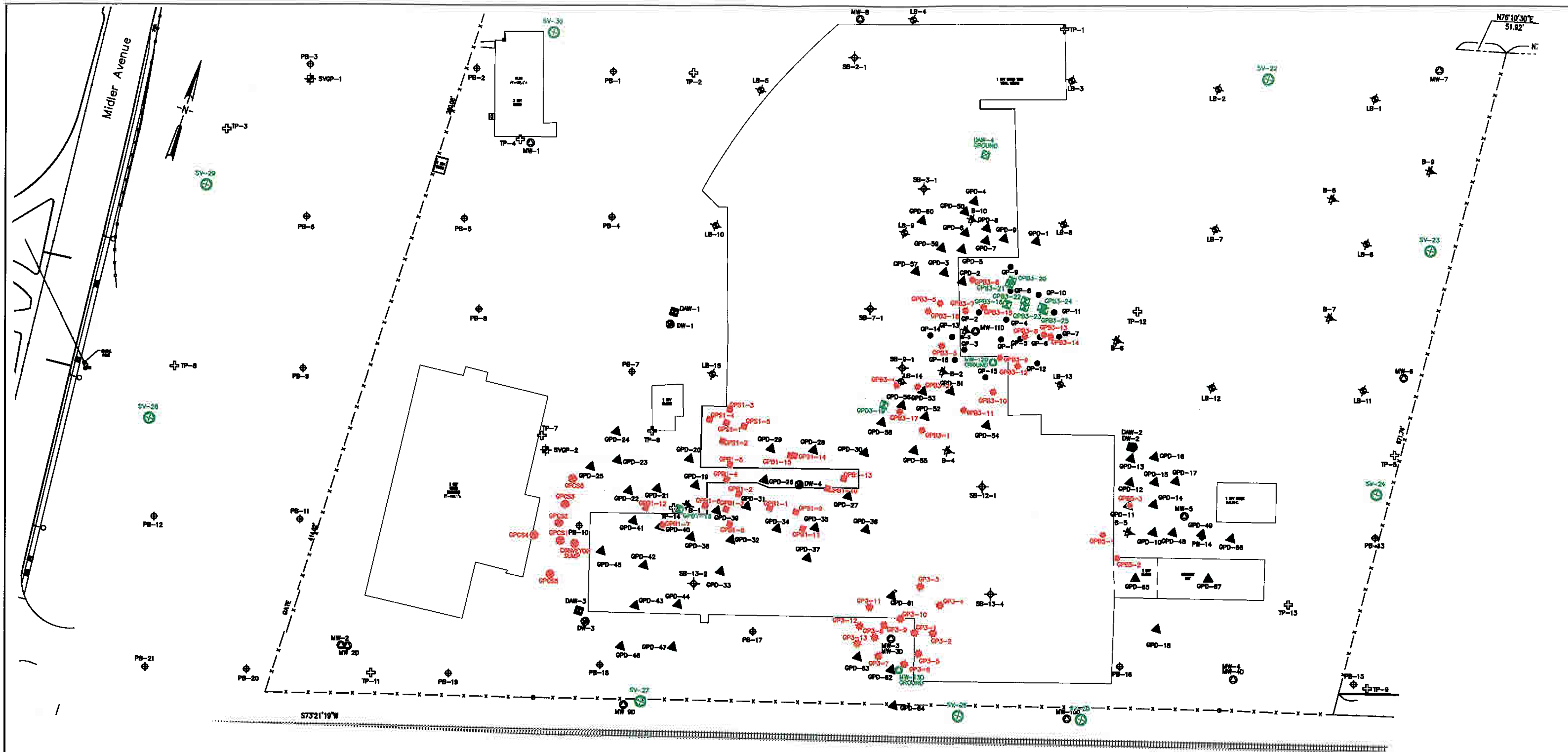

LEGEND:

MW-10 MW-10D		MONITORING WELL
TP-14		TEST PITS
B-5		B SERIES COMPLETED NOV. 2004
GPD-44		GPD SERIES COMPLETED SEPT. 2005
GP-12		GP SERIES COMPLETED MARCH 2005
SB-13-4		INTERIOR SOIL BORING COMPLETED AS TEMPERARY MONITORING WELLS MARCH 2005
DW-1		DW SERIES COMPLETED JULY 2005
DAW-1		DAW SERIES COMPLETED AUG. 2005
PB-18		PB SERIES COMPLETED NOV. 2004
LB-1		LB SERIES COMPLETED NOV. 2004
SVGP-1		SVOC SAMPLES COMPLETED SEPT. 2005
		CONVEYOR SUMP INVESTIGATION COMPLETED MARCH 2006
		MW3/3D INVESTIGATION COMPLETED MARCH 2006
		IRM DESIGN B-5 SOURCE AREA COMPLETED MARCH 2006
		IRM DESIGN B-3 SOURCE AREA COMPLETED MARCH 2006
		IRM DESIGN B-1 SOURCE AREA COMPLETED MARCH 2006
MW-10 MW-10D		MW SERIES COMPLETED APRIL 2006
DAW-1		DAW SERIES COMPLETED APRIL 2006
GPB3-18		GPB SERIES COMPLETED APRIL 2006
GPD-44		GPD SERIES COMPLETED APRIL 2006
SV		SOIL VAPOR SAMPLING LOCATIONS COMPLETED APRIL 2006

50' 25' 0 50'

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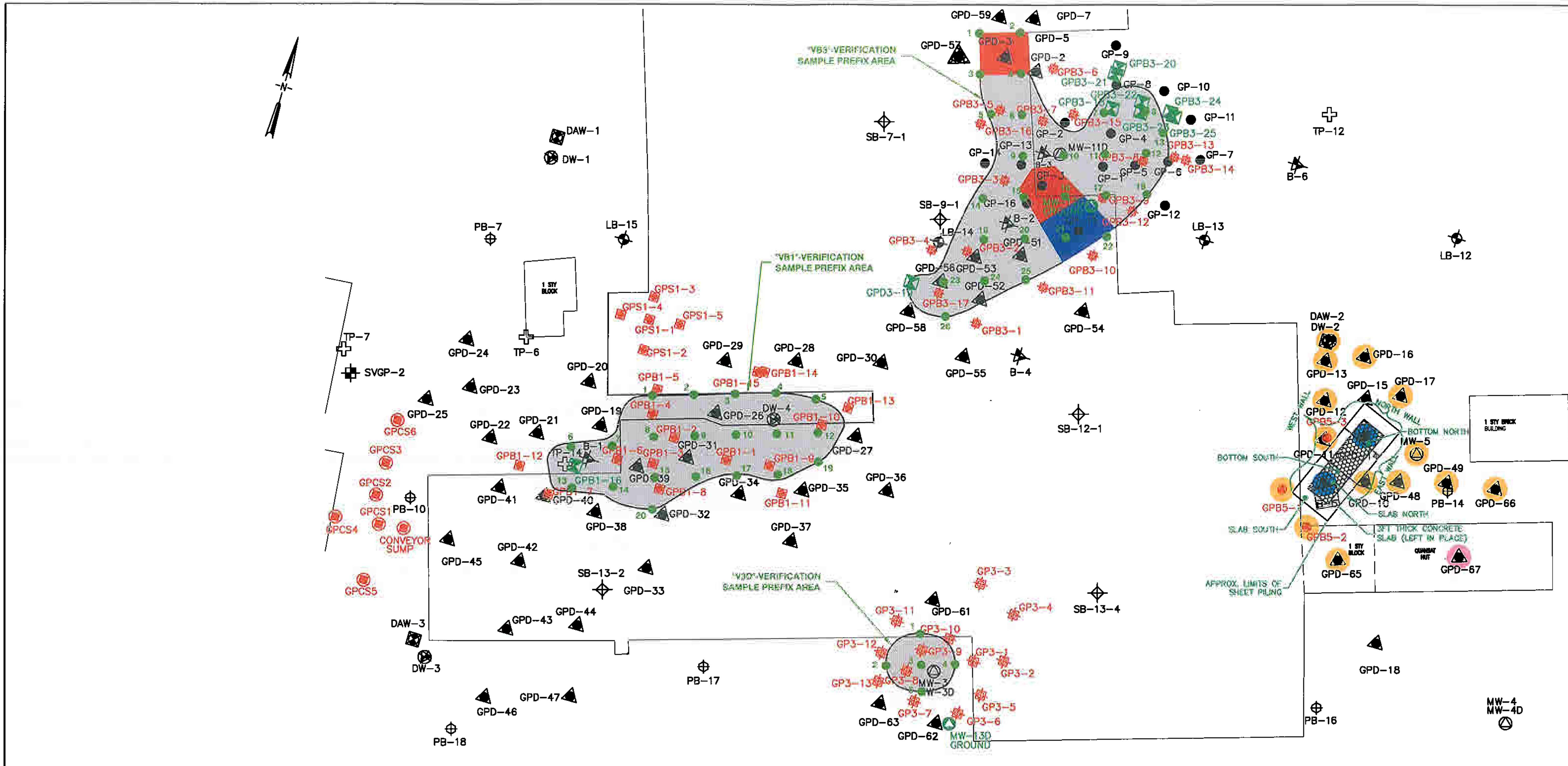
Pioneer Midler Avenue LLC
Remedial Investigation Report
RI Site Sample Location Map

Figure 3



LEGEND:

MW-10 MW-10D		PERMANENT MONITORING WELL
TP-14		TEST PITS
B-5		B SERIES COMPLETED NOV. 2004
GPD-44		GPD SERIES COMPLETED SEPT. 2005
GP-12		GP SERIES COMPLETED MARCH 2005
SB-13-4		INTERIOR SOIL BORING COMPLETED AS TEMPERARY MONITORING WELLS MARCH 2005
DW-1		DW SERIES COMPLETED JULY 2005
DAW-1		DAW SERIES COMPLETED AUG. 2005
PB-18		PB SERIES COMPLETED NOV. 2004
LB-1		LB SERIES COMPLETED NOV. 2004
SVGP-1		SVOC SAMPLES COMPLETED SEPT. 2005
		APPROXIMATE LIMIT OF PROPOSED THERMAL TREATMENT AREA-18 FEET TREATMENT DEPTH
		APPROXIMATE LIMIT OF PROPOSED THERMAL TREATMENT AREA-20 FEET TREATMENT DEPTH
		APPROXIMATE LIMIT OF PROPOSED THERMAL TREATMENT AREA-25 FEET TREATMENT DEPTH
		B-5 EXCAVATION AREA
		IRM DESIGN B-3 SOURCE AREA COMPLETED MARCH 2006
		IRM DESIGN B-1 SOURCE AREA COMPLETED MARCH 2006
		CONVEYOR SUMP INVESTIGATION COMPLETED MARCH 2006
		MW3/3D INVESTIGATION COMPLETED MARCH 2006
		IRM DESIGN B-5 SOURCE AREA COMPLETED MARCH 2006
MW-10 MW-10D		MW SERIES COMPLETED APRIL 2006
DAW-1		DAW SERIES COMPLETED APRIL 2006
GPB3-18		GPB SERIES COMPLETED APRIL 2006
GPD-44		GPD SERIES COMPLETED APRIL 2006
SV		SOIL VAPOR SAMPLING LOCATIONS COMPLETED APRIL 2006
1		IRM VERIFICATION SAMPLE LOCATION
		EAST WALL

30' 15' 0 30'

C&S ENGINEERS, INC. 499 Col. Eileen Collins Blvd. Syracuse, New York 13212 Phone 315-455-2000 Fax 315-455-9667 www.cscos.com	DATE: APRIL 2006	NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW	Pioneer Midler Avenue LLC Remedial Investigation Report IRM Verification Sample Locations & Treatment Depths	Figure 3B
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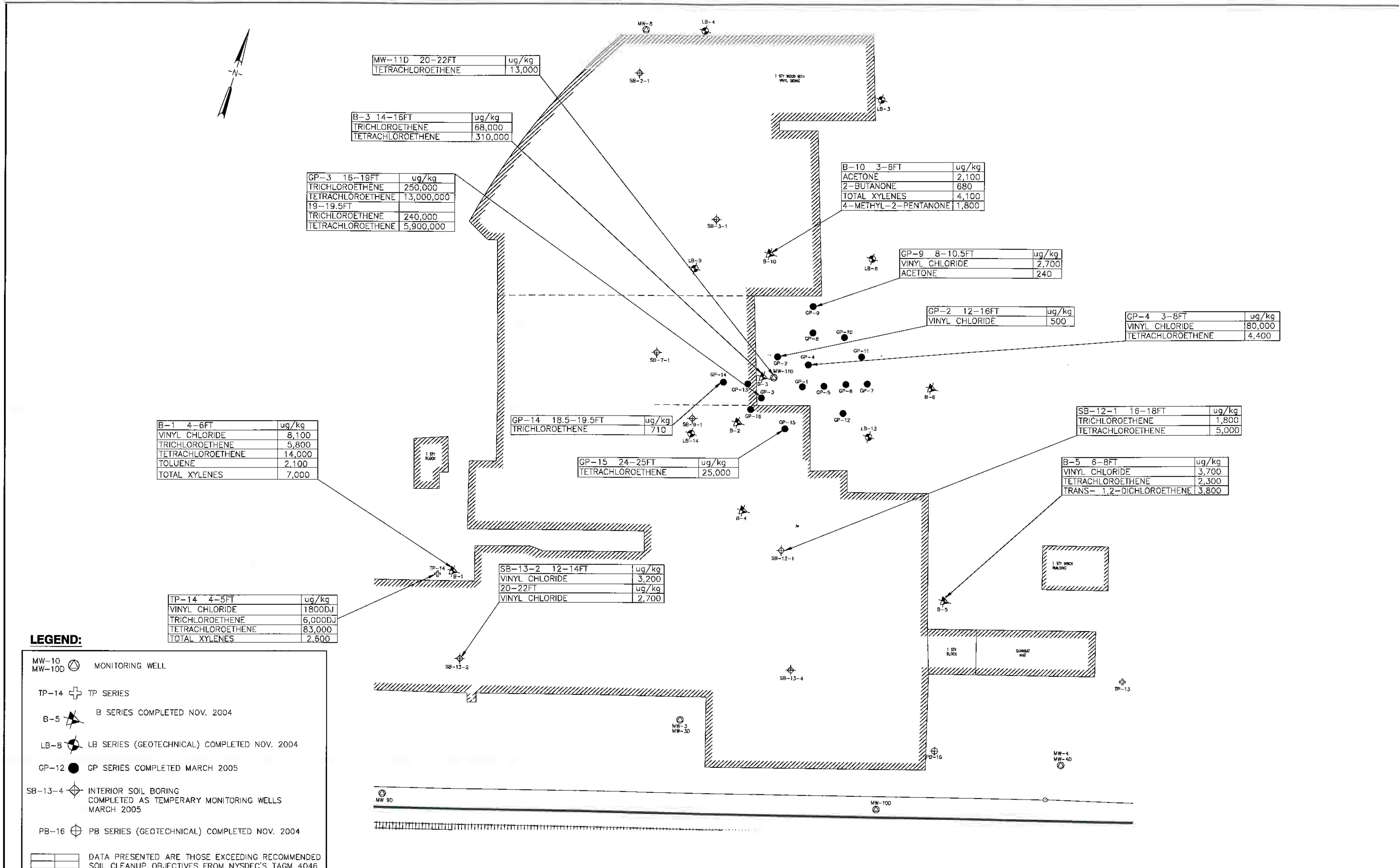

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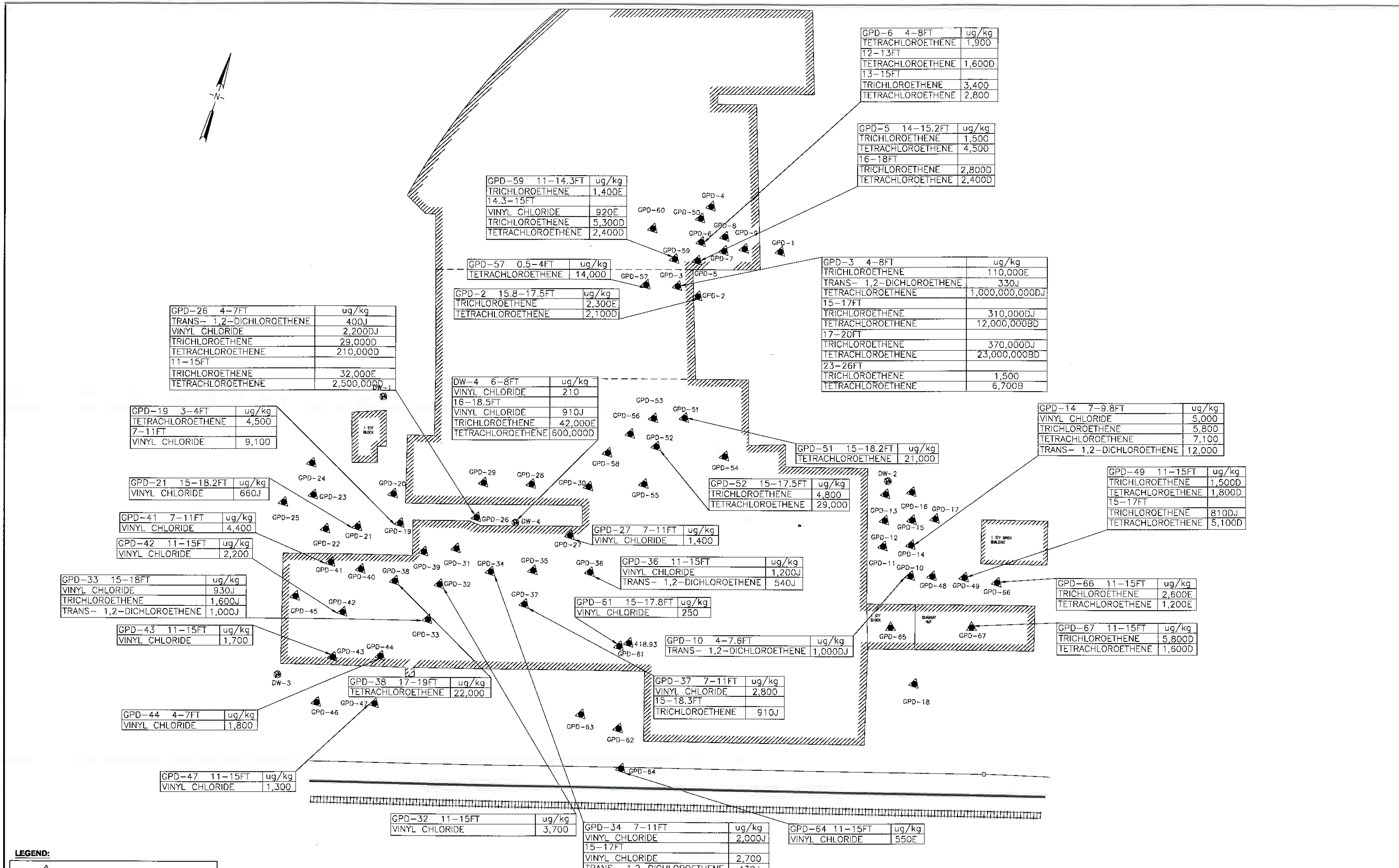
Pioneer Midler Avenue LLC
Remedial Investigation Report
Phase I and Phase II–Soils VOC Data Exceeding RSCO'S

Figure 4



GPD-6 4-8FT	ug/kg
TETRACHLOROETHENE	1,900
12-13FT	
TETRACHLOROETHENE	1,600D
13-15FT	
TRICHLOROETHENE	3,400
TETRACHLOROETHENE	2,800

GPD-5 14-15.2FT	ug/kg
TRICHLOROETHENE	1,500
TETRACHLOROETHENE	4,500
16-18FT	
TRICHLOROETHENE	2,800D
TETRACHLOROETHENE	2,400D

GPD-59 11-14.3FT	ug/kg
TRICHLOROETHENE	1,400E
14.3-15FT	
VINYL CHLORIDE	920E
TRICHLOROETHENE	5,300D
TETRACHLOROETHENE	2,400D

GPD-57 0.5-4FT	ug/kg
TETRACHLOROETHENE	14,000

GPD-2 15.8-17.5FT	ug/kg
TRICHLOROETHENE	2,300E
TETRACHLOROETHENE	2,100D

GPD-3 4-8FT	ug/kg
TRICHLOROETHENE	110,000E
TRANS- 1,2-DICHLOROETHENE	330J
TETRACHLOROETHENE	1,000,000,000DJ
15-17FT	
TRICHLOROETHENE	310,000DJ
TETRACHLOROETHENE	12,000,000BD
17-20FT	
TRICHLOROETHENE	370,000DJ
TETRACHLOROETHENE	23,000,000BD
23-26FT	
TRICHLOROETHENE	1,500
TETRACHLOROETHENE	6,700B

GPD-26 4-7FT	ug/kg
TRANS- 1,2-DICHLOROETHENE	400J
VINYL CHLORIDE	2,200DJ
TRICHLOROETHENE	29,000D
TETRACHLOROETHENE	210,000D
11-15FT	
TRICHLOROETHENE	32,000E
TETRACHLOROETHENE	2,500,000D

DW-4 6-8FT	ug/kg
VINYL CHLORIDE	210
16-18.5FT	
VINYL CHLORIDE	910J
TRICHLOROETHENE	42,000E
TETRACHLOROETHENE	600,000D

GPD-19 3-4FT	ug/kg
TETRACHLOROETHENE	4,500
7-11FT	
VINYL CHLORIDE	9,100

GPD-51 15-18.2FT	ug/kg
TETRACHLOROETHENE	21,000

GPD-14 7-9.8FT	ug/kg
VINYL CHLORIDE	5,000
TRICHLOROETHENE	5,800
TETRACHLOROETHENE	7,100
TRANS- 1,2-DICHLOROETHENE	12,000

GPD-49 11-15FT	ug/kg
TRICHLOROETHENE	1,500D
TETRACHLOROETHENE	1,800D
15-17FT	
TRICHLOROETHENE	810DJ
TETRACHLOROETHENE	5,100D

GPD-21 15-18.2FT	ug/kg
VINYL CHLORIDE	660J

GPD-52 15-17.5FT	ug/kg
TRICHLOROETHENE	4,800
TETRACHLOROETHENE	29,000

GPD-41 7-11FT	ug/kg
VINYL CHLORIDE	4,400

GPD-27 7-11FT	ug/kg
VINYL CHLORIDE	1,400

GPD-42 11-15FT	ug/kg
VINYL CHLORIDE	2,200

GPD-36 11-15FT	ug/kg
VINYL CHLORIDE	1,200J
TRANS- 1,2-DICHLOROETHENE	540J

GPD-33 15-18FT	ug/kg
VINYL CHLORIDE	930J
TRICHLOROETHENE	1,600J
TRANS- 1,2-DICHLOROETHENE	1,000J

GPD-61 15-17.8FT	ug/kg
VINYL CHLORIDE	250

GPD-66 11-15FT	ug/kg
TRICHLOROETHENE	2,600E
TETRACHLOROETHENE	1,200E

GPD-10 4-7.6FT	ug/kg
TRANS- 1,2-DICHLOROETHENE	1,000DJ

GPD-67 11-15FT	ug/kg
TRICHLOROETHENE	5,800D
TETRACHLOROETHENE	1,600D

GPD-43 11-15FT	ug/kg
VINYL CHLORIDE	1,700

GPD-38 17-19FT	ug/kg
TETRACHLOROETHENE	22,000

GPD-37 7-11FT	ug/kg
VINYL CHLORIDE	2,800
15-18.3FT	
TRICHLOROETHENE	910J

GPD-44 4-7FT	ug/kg
VINYL CHLORIDE	1,800

GPD-47 11-15FT	ug/kg
VINYL CHLORIDE	1,300

GPD-32 11-15FT	ug/kg
VINYL CHLORIDE	3,700

GPD-34 7-11FT	ug/kg
VINYL CHLORIDE	2,000J
15-17FT	
VINYL CHLORIDE	2,700
TRANS- 1,2-DICHLOROETHENE	430J

GPD-64 11-15FT	ug/kg
VINYL CHLORIDE	550E

LEGEND:

GPD-44 GEOPROBE SOIL BORING COMPLETED SEPT. 2005

DW-1 DW SERIES COMPLETED JULY 2005

DATA PRESENTED ARE THOSE EXCEEDING RECOMMENDED SOIL CLEANUP OBJECTIVES FROM NYSDEC'S TAGM 4046

40' 20' 0 40'

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Remedial Investigation Report
Phase 3 – Soil Sample Results Exceeding RSCO'S

Figure 5

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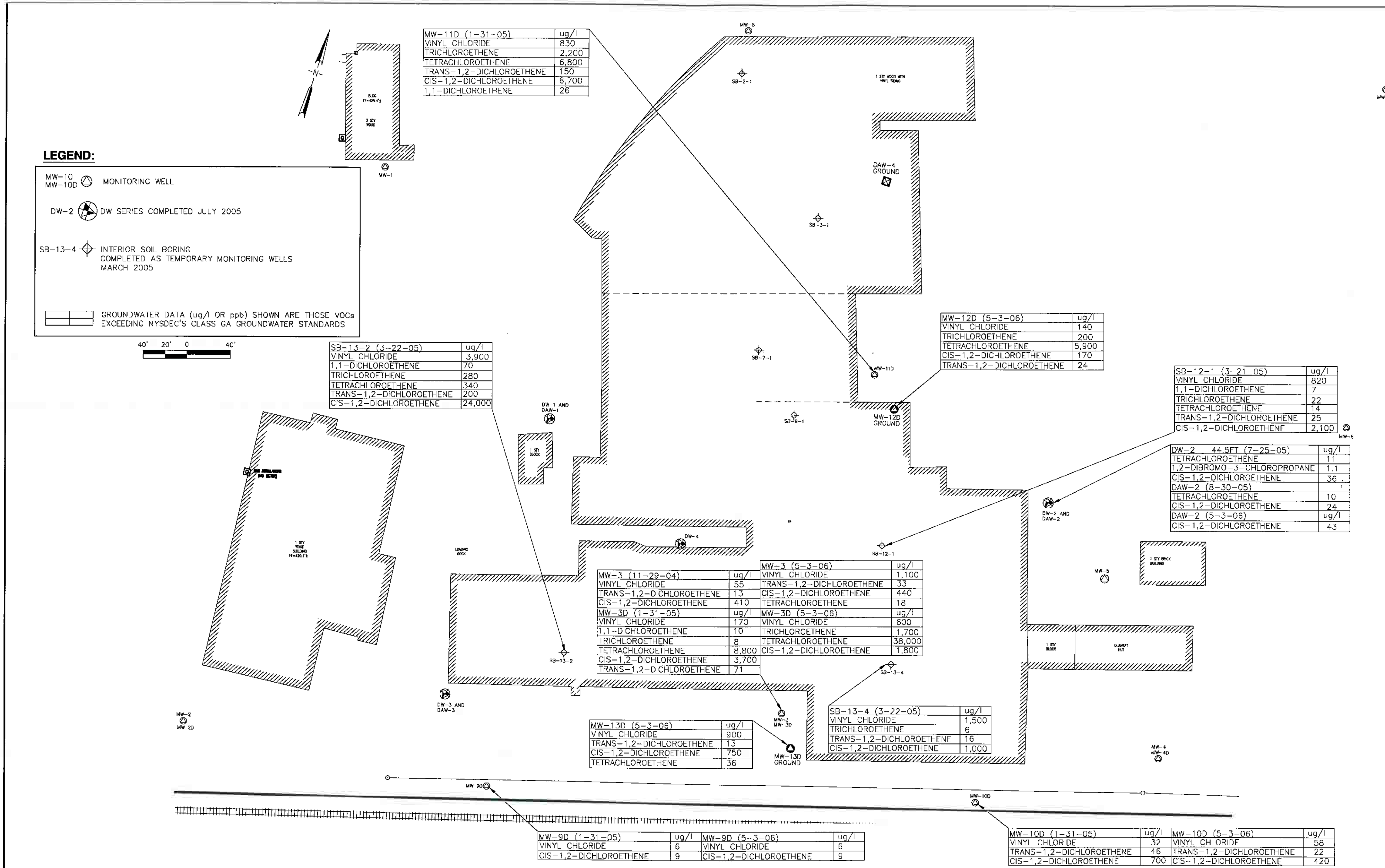

MW-11D (1-31-05)	ug/l
VINYL CHLORIDE	830
TRICHLOROETHENE	2,200
TETRACHLOROETHENE	6,800
TRANS-1,2-DICHLOROETHENE	150
CIS-1,2-DICHLOROETHENE	6,700
1,1-DICHLOROETHENE	26

MW-12D (5-3-06)	ug/l
VINYL CHLORIDE	140
TRICHLOROETHENE	200
TETRACHLOROETHENE	5,900
CIS-1,2-DICHLOROETHENE	170
TRANS-1,2-DICHLOROETHENE	24

SB-12-1 (3-21-05)	ug/l
VINYL CHLORIDE	820
1,1-DICHLOROETHENE	7
TRICHLOROETHENE	22
TETRACHLOROETHENE	14
TRANS-1,2-DICHLOROETHENE	25
CIS-1,2-DICHLOROETHENE	2,100

DW-2 44.5FT (7-25-05)	ug/l
TETRACHLOROETHENE	11
1,2-DIBROMO-3-CHLOROPROPANE	1.1
CIS-1,2-DICHLOROETHENE	36
DAW-2 (8-30-05)	
TETRACHLOROETHENE	10
CIS-1,2-DICHLOROETHENE	24
DAW-2 (5-3-06)	ug/l
CIS-1,2-DICHLOROETHENE	43

SB-13-2 (3-22-05)	ug/l
VINYL CHLORIDE	3,900
1,1-DICHLOROETHENE	70
TRICHLOROETHENE	280
TETRACHLOROETHENE	340
TRANS-1,2-DICHLOROETHENE	200
CIS-1,2-DICHLOROETHENE	24,000

MW-3 (11-29-04)	ug/l
VINYL CHLORIDE	55
TRANS-1,2-DICHLOROETHENE	13
CIS-1,2-DICHLOROETHENE	410
MW-3D (1-31-05)	ug/l
VINYL CHLORIDE	170
1,1-DICHLOROETHENE	10
TRICHLOROETHENE	8
TETRACHLOROETHENE	8,800
CIS-1,2-DICHLOROETHENE	3,700
TRANS-1,2-DICHLOROETHENE	71

MW-3 (5-3-06)	ug/l
VINYL CHLORIDE	1,100
TRANS-1,2-DICHLOROETHENE	33
CIS-1,2-DICHLOROETHENE	440
TETRACHLOROETHENE	18
MW-3D (5-3-06)	ug/l
VINYL CHLORIDE	600
TRICHLOROETHENE	1,700
TETRACHLOROETHENE	38,000
CIS-1,2-DICHLOROETHENE	1,800

SB-13-4 (3-22-05)	ug/l
VINYL CHLORIDE	1,500
TRICHLOROETHENE	6
TRANS-1,2-DICHLOROETHENE	16
CIS-1,2-DICHLOROETHENE	1,000

MW-13D (5-3-06)	ug/l
VINYL CHLORIDE	900
TRANS-1,2-DICHLOROETHENE	13
CIS-1,2-DICHLOROETHENE	750
TETRACHLOROETHENE	36

MW-9D (1-31-05)	ug/l	MW-9D (5-3-06)	ug/l
VINYL CHLORIDE	6	VINYL CHLORIDE	6
CIS-1,2-DICHLOROETHENE	9	CIS-1,2-DICHLOROETHENE	9

MW-10D (1-31-05)	ug/l	MW-10D (5-3-06)	ug/l
VINYL CHLORIDE	32	VINYL CHLORIDE	58
TRANS-1,2-DICHLOROETHENE	46	TRANS-1,2-DICHLOROETHENE	22
CIS-1,2-DICHLOROETHENE	700	CIS-1,2-DICHLOROETHENE	420

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Remedial Investigation Report
Pre-IRM Groundgwater VOC's Data
Exceeding Class GA Standards

Figure 6

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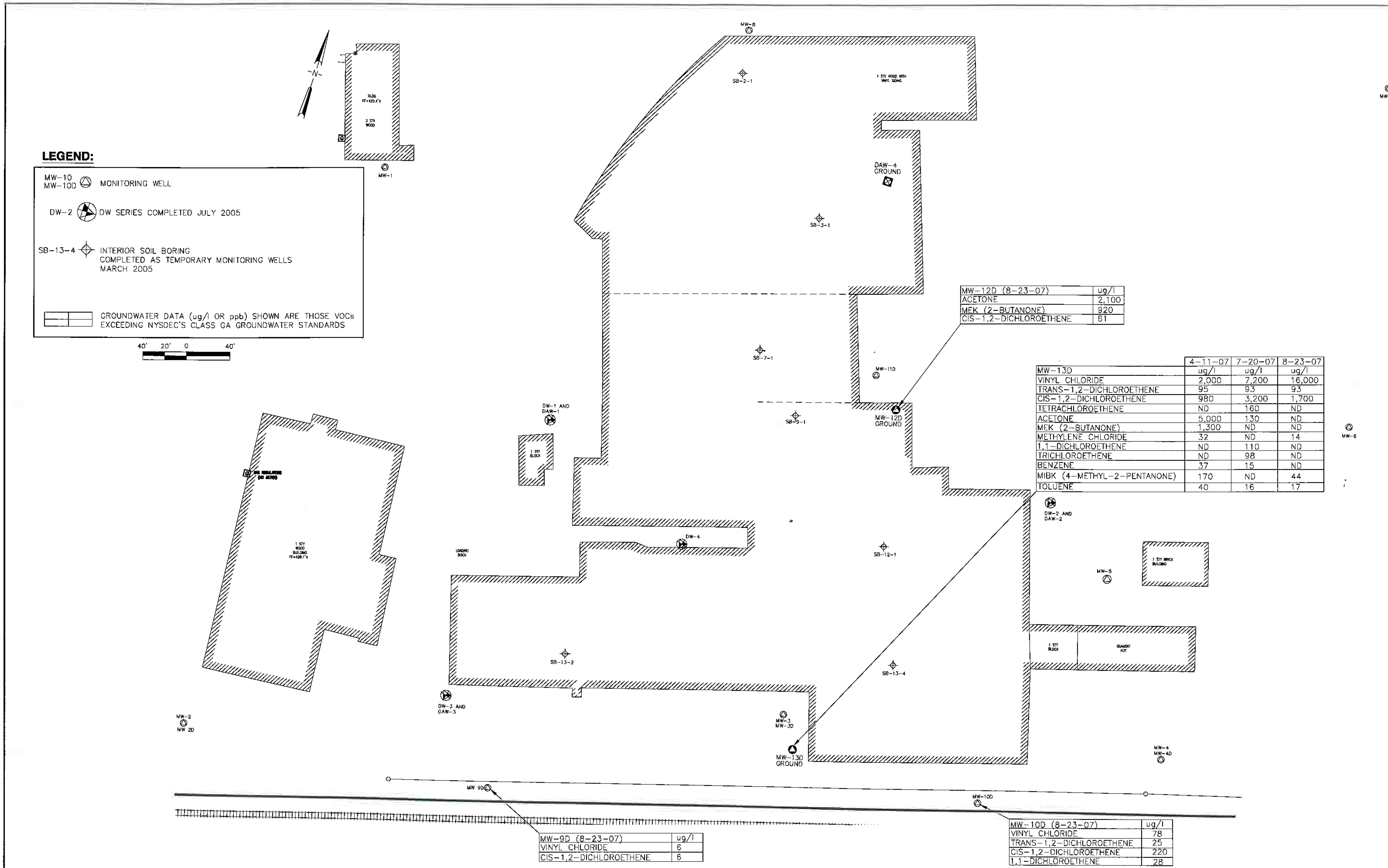

MW-12D (8-23-07)	ug/l
ACETONE	2,100
MEK (2-BUTANONE)	920
CIS-1,2-DICHLOROETHENE	61

	4-11-07	7-20-07	8-23-07
MW-13D	ug/l	ug/l	ug/l
VINYL CHLORIDE	2,000	7,200	16,000
TRANS-1,2-DICHLOROETHENE	95	93	93
CIS-1,2-DICHLOROETHENE	980	3,200	1,700
TETRACHLOROETHENE	ND	160	ND
ACETONE	5,000	130	ND
MEK (2-BUTANONE)	1,300	ND	ND
METHYLENE CHLORIDE	32	ND	14
1,1-DICHLOROETHENE	ND	110	ND
TRICHLOROETHENE	ND	98	ND
BENZENE	37	15	ND
MIBK (4-METHYL-2-PENTANONE)	170	ND	44
TOLUENE	40	16	17

MW-9D (8-23-07)	ug/l
VINYL CHLORIDE	6
CIS-1,2-DICHLOROETHENE	6

MW-10D (8-23-07)	ug/l
VINYL CHLORIDE	78
TRANS-1,2-DICHLOROETHENE	25
CIS-1,2-DICHLOROETHENE	220
1,1-DICHLOROETHENE	28

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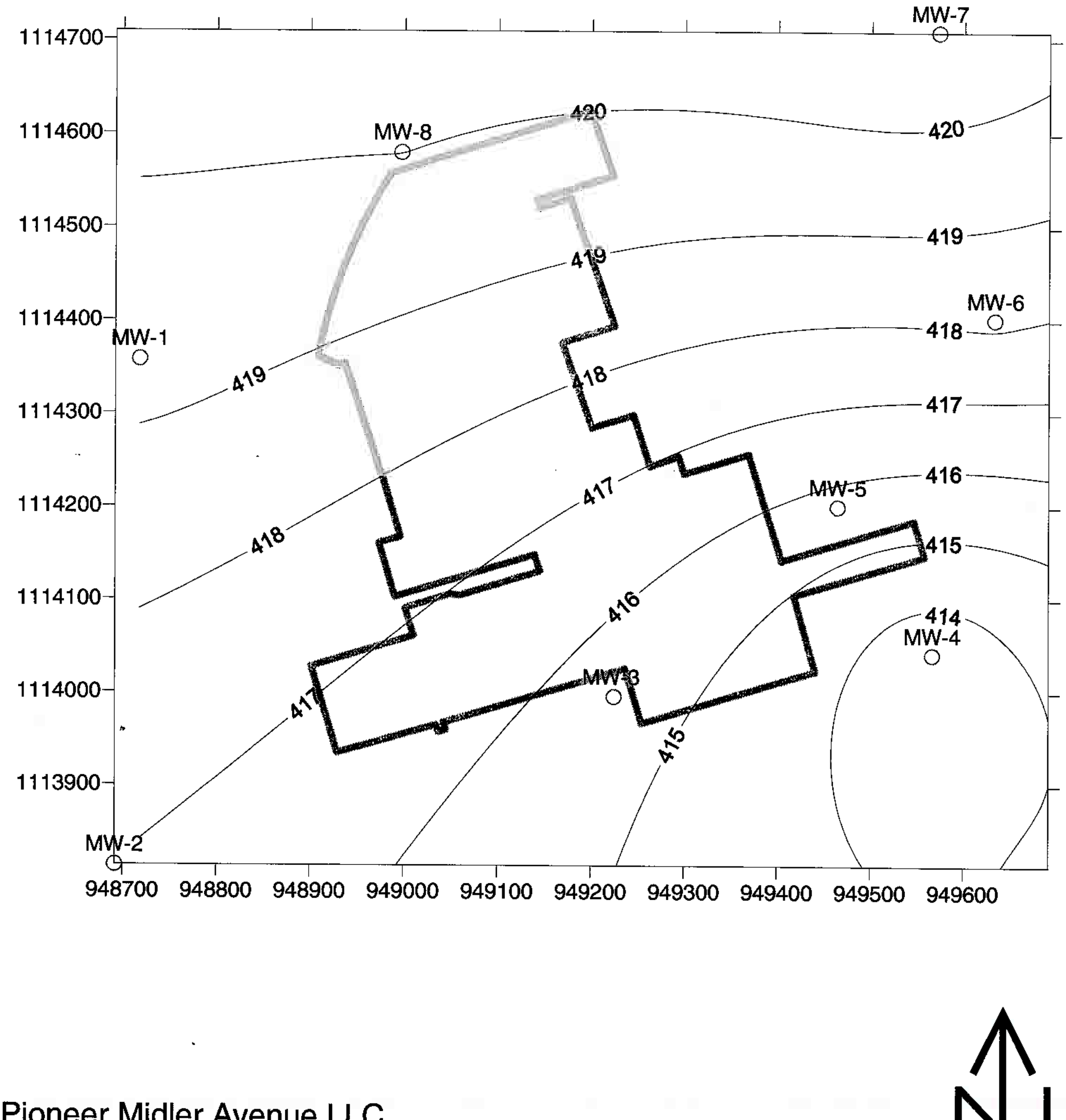
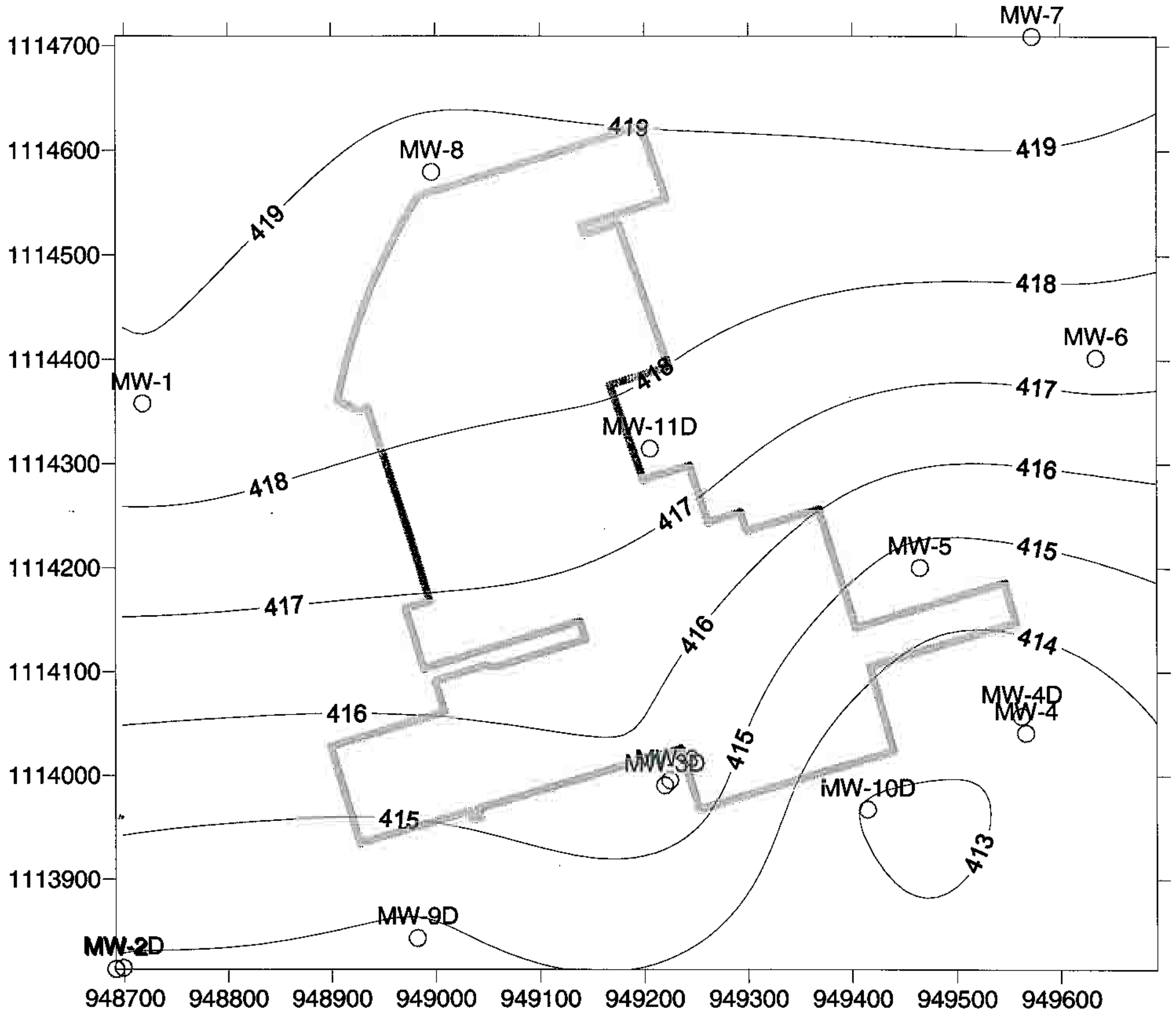
Pioneer Midler Avenue LLC
Remedial Investigation Report
IRM And Post-IRM Groundwater VOC's Data Exceeding Class GA Standards

Figure 6B

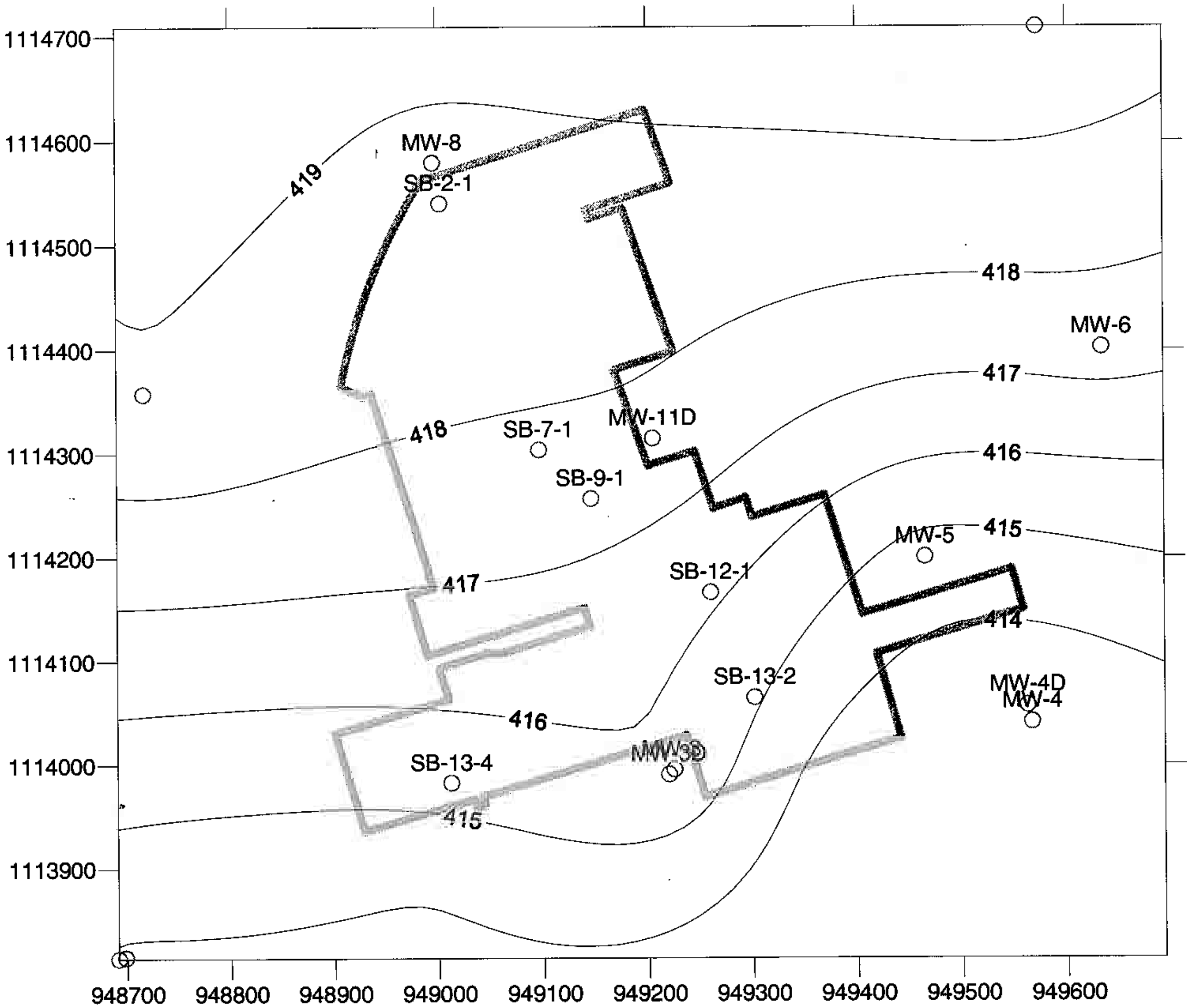
Oct 15, 2007 - 2:08pm F:\Project\C81 - Pioneer Development\Cadd RI Reports\figure 6b.dwg

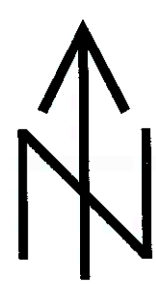


Pioneer Midler Avenue LLC
Remedial Investigation Report
Figure 7
Groundwater Contours for December 2004



Pioneer Midler Avenue LLC
Remedial Investigation Report
Figure 8
Groundwater Contours for February 2005





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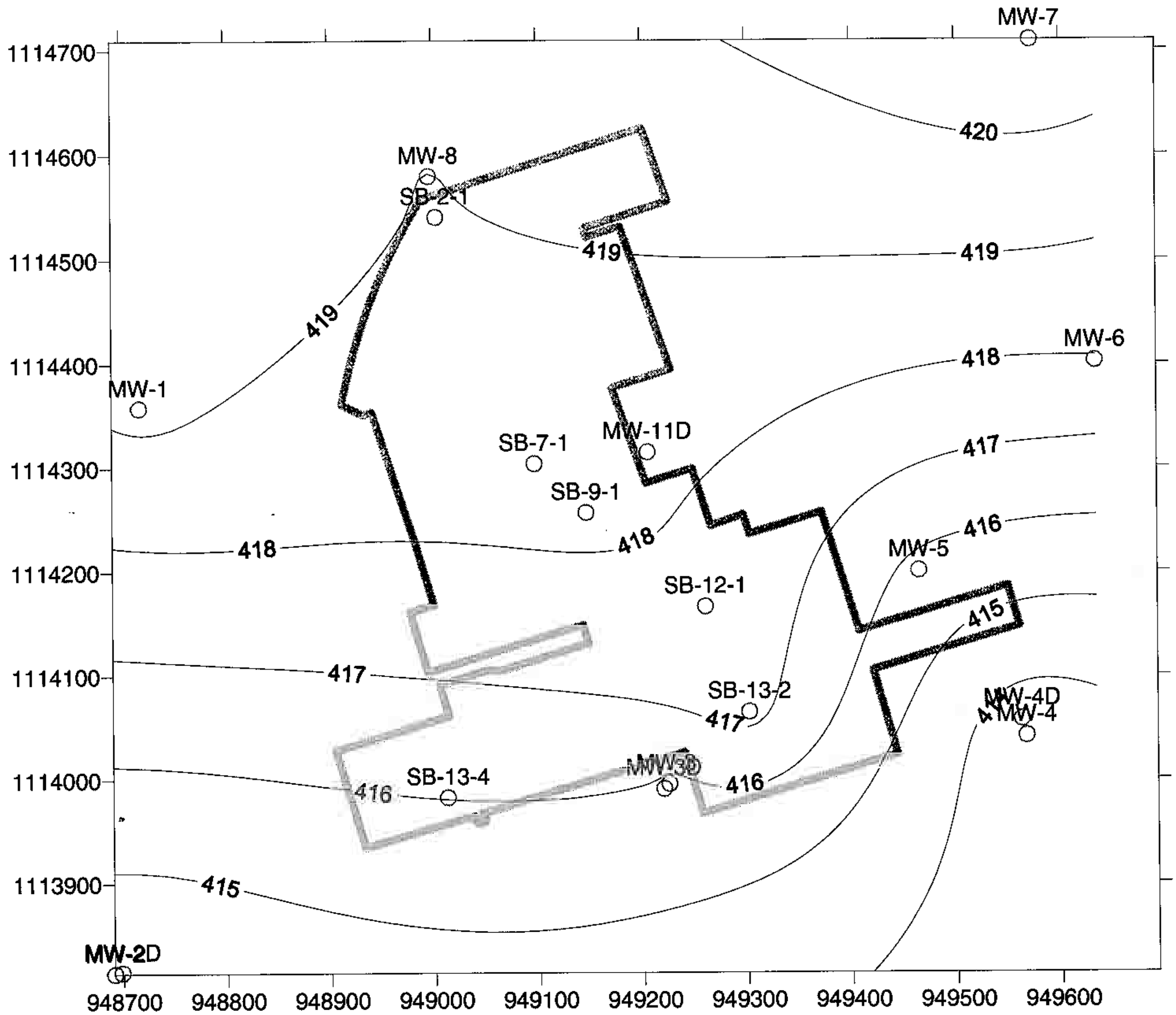
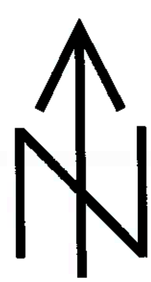
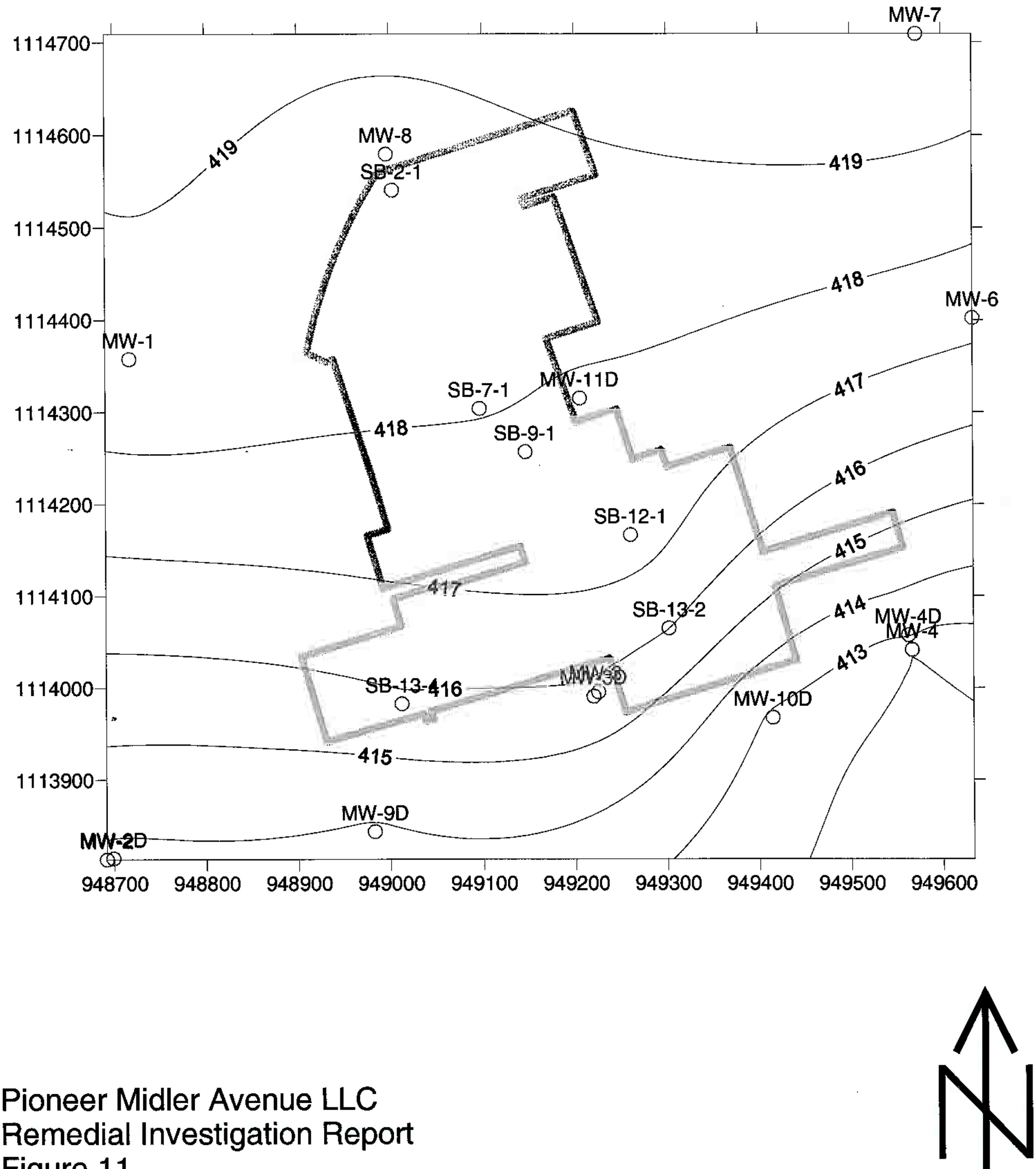
Remedial Investigation Report
Figure 9
Groundwater Contours for April 2005

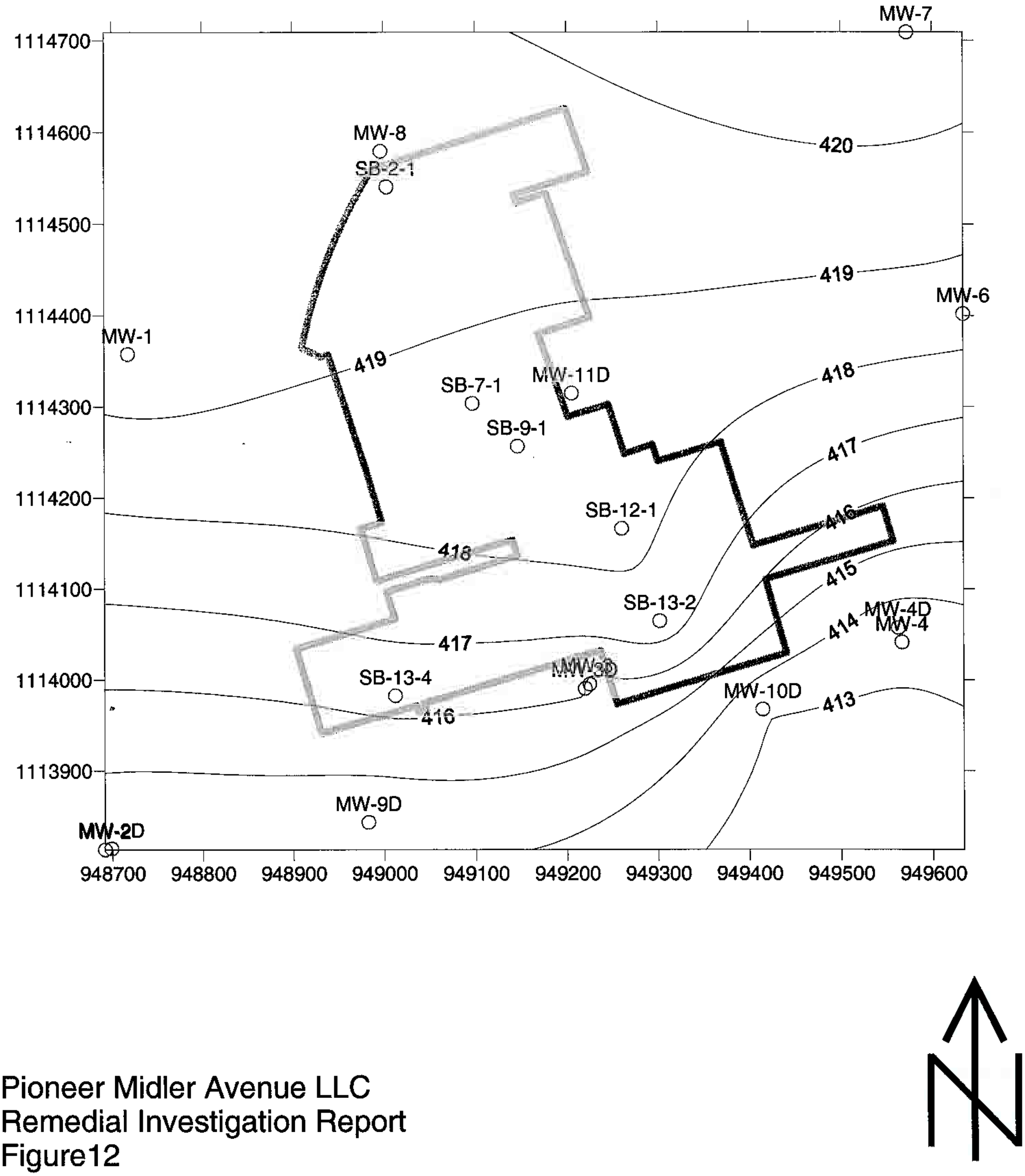




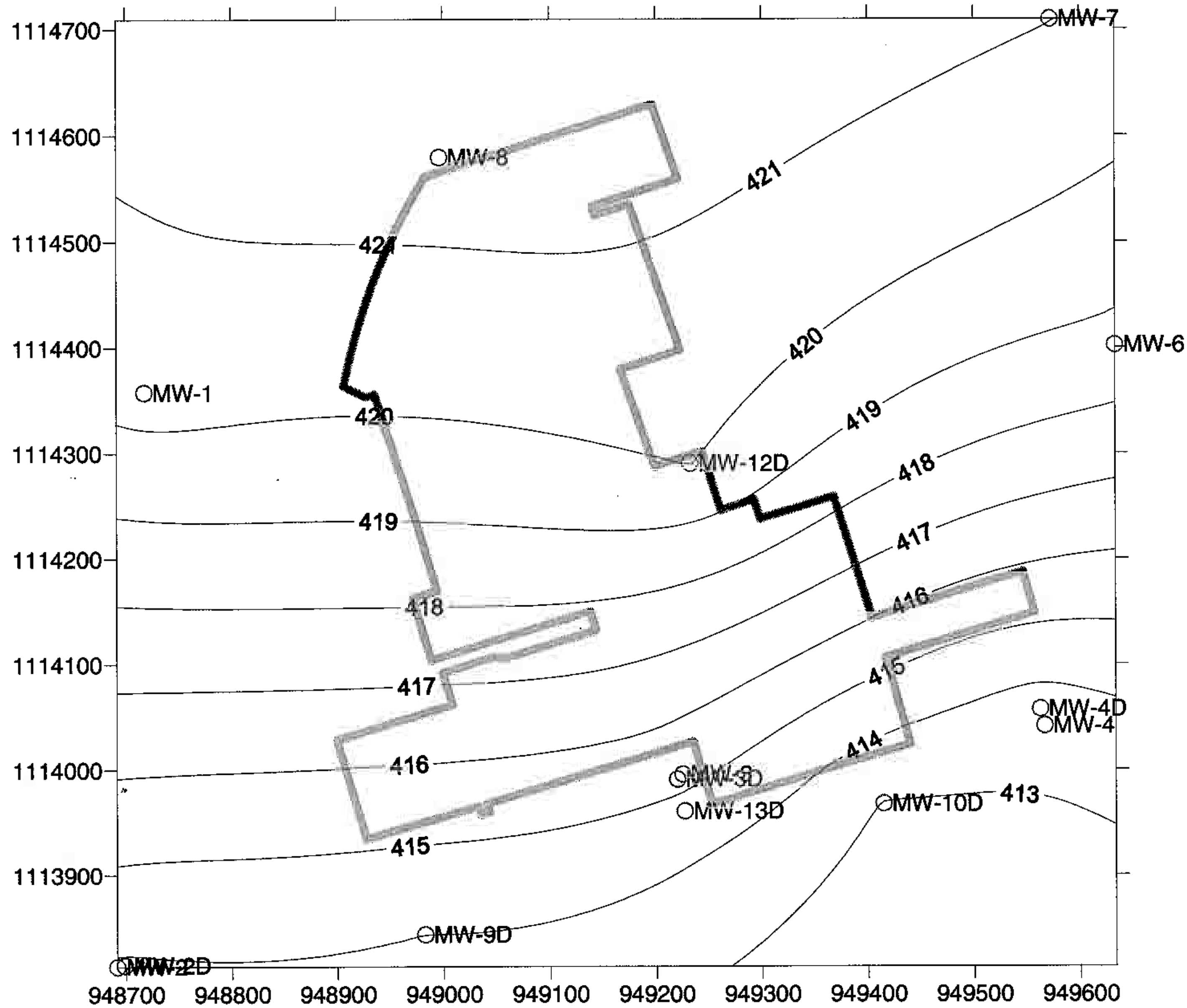
Pioneer Midler Avenue LLC
Remedial Investigation Report
Figure 10
Groundwater Contours for May 2005



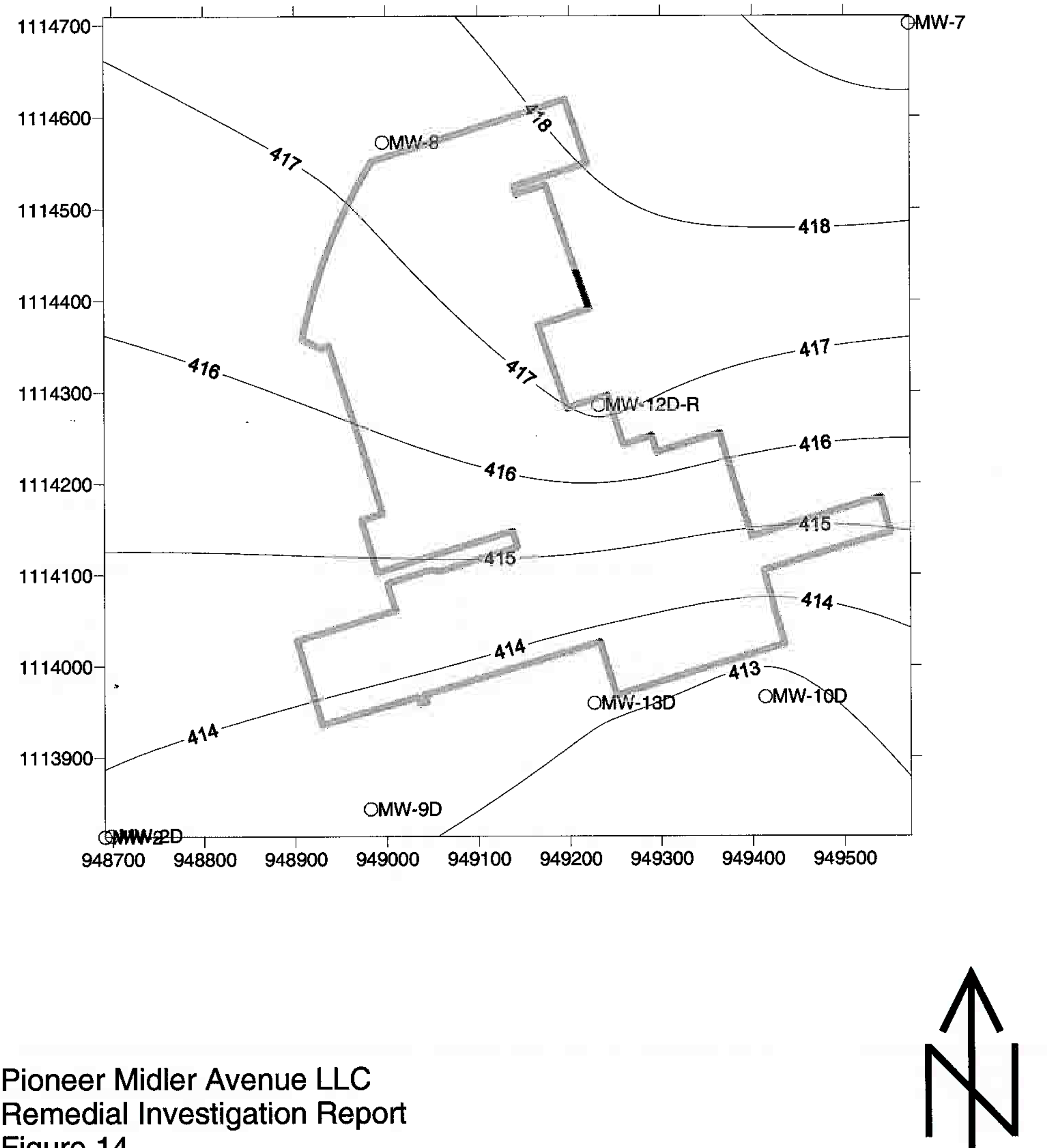
Pioneer Midler Avenue LLC
Remedial Investigation Report
Figure 11
Groundwater Contours for July 2005



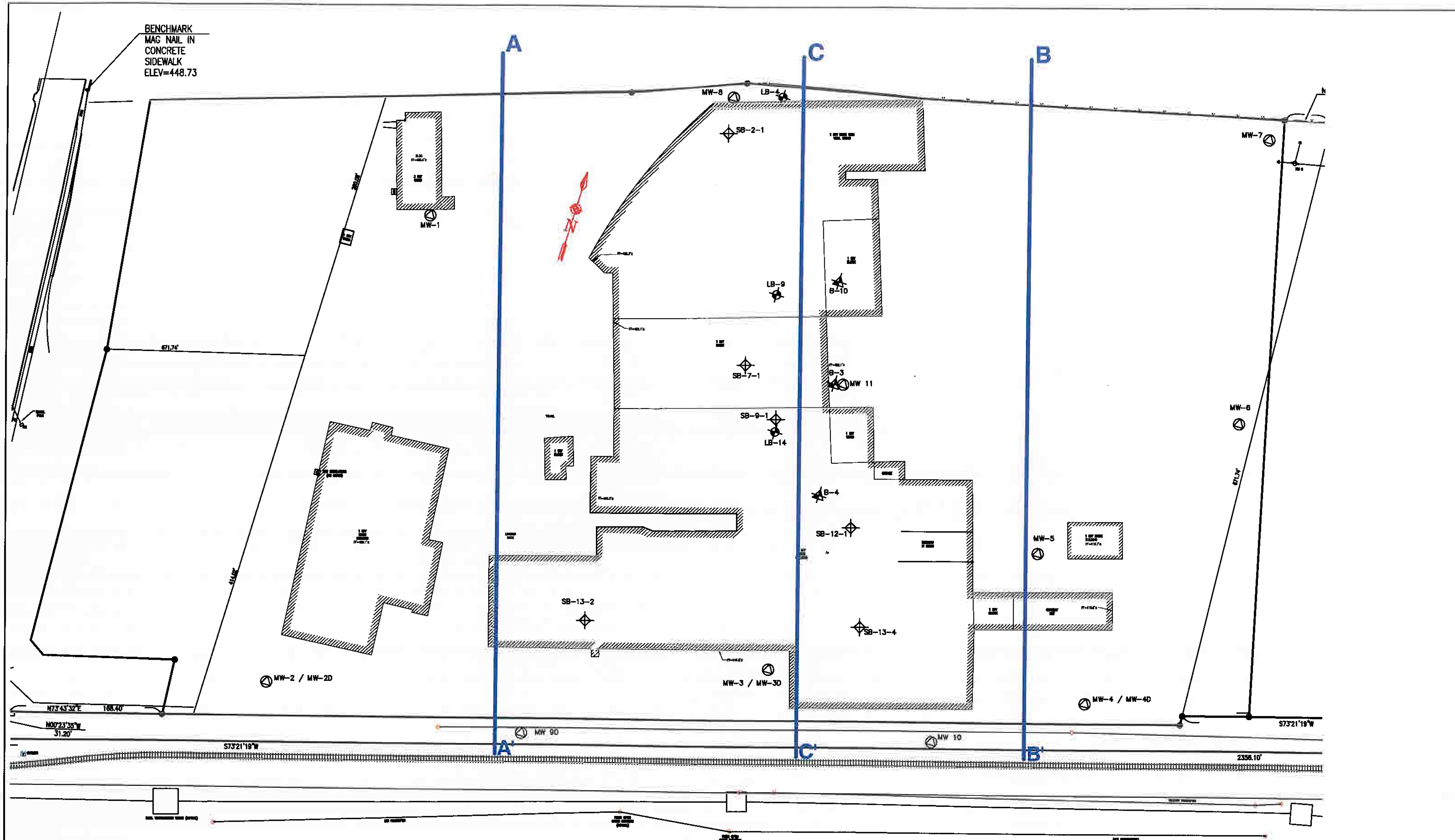
Pioneer Midler Avenue LLC
Remedial Investigation Report
Figure12
Groundwater Contours for October 2005



Pioneer Midler Avenue LLC
Remedial Investigation Report
Figure 13
Groundwater Contours for May 2006



Pioneer Midler Avenue LLC
Remedial Investigation Report
Figure 14
Groundwater Contours for August 2007



- Interior Soil Boring
- Monitoring Wells
- B Series
- LB Series (Geotechnical)

100' 50' 0 100'

C&S ENGINEERS, INC.

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Pioneer Midler Avenue LLC
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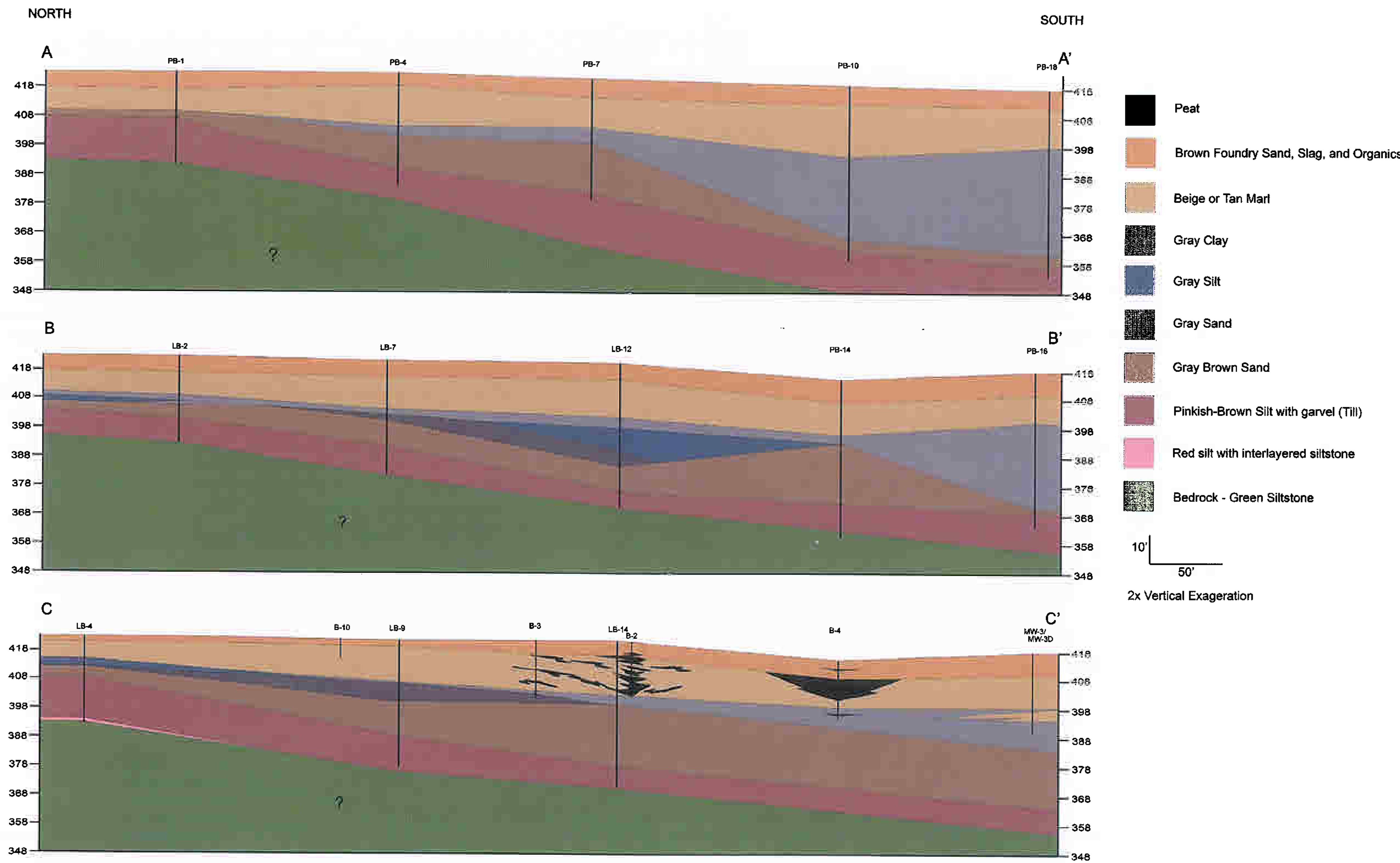
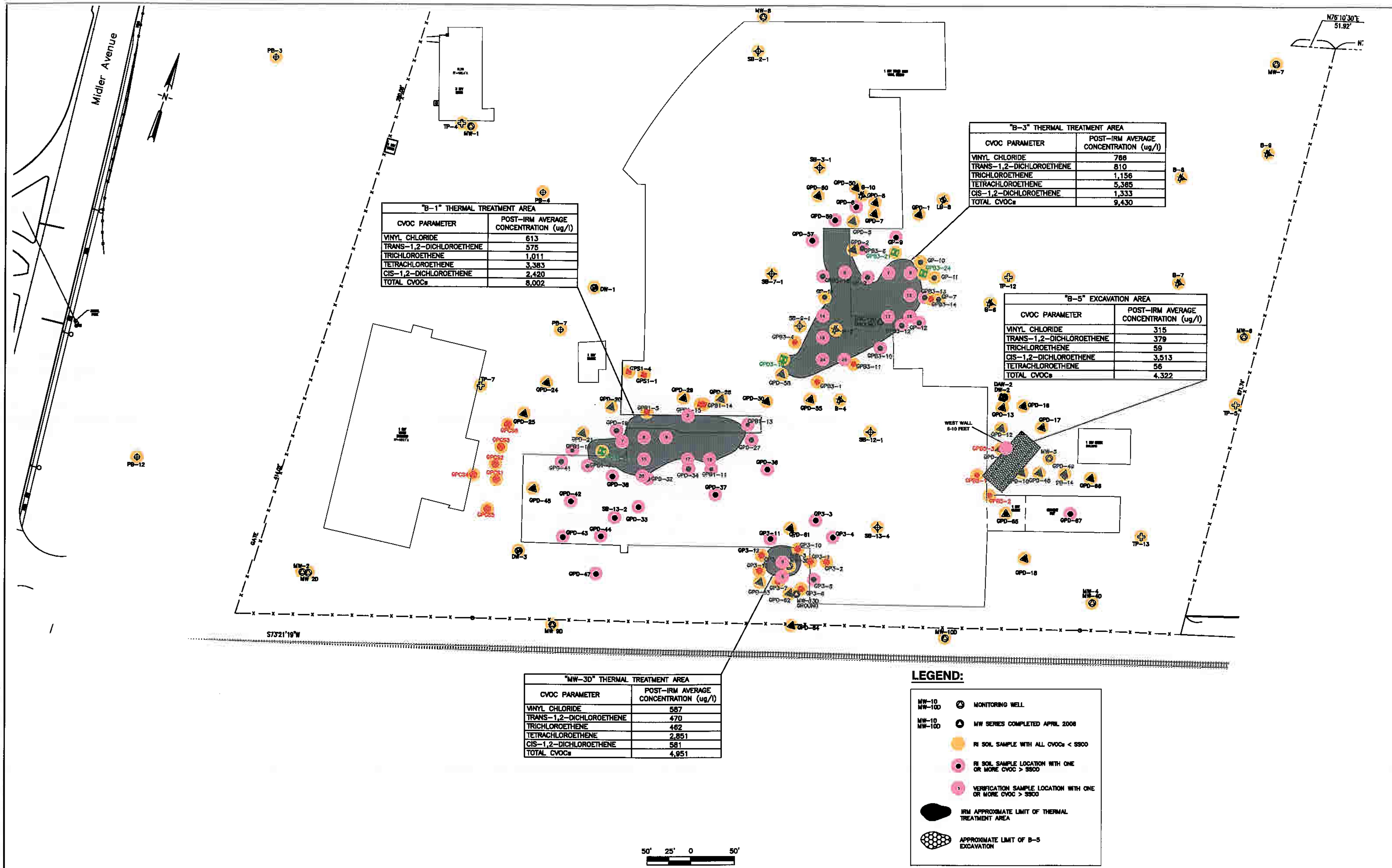
Cross Section Location Map

Figure 15

Midler Avenue Cross Sections



C&S ENGINEERS, INC. 499 Col. Eileen Collins Blvd. Syracuse, New York 13212 Phone 315-455-2000 Fax 315-455-9667 www.cscos.com	DATE: OCTOBER 2007 SCALE: AS SHOWN FILE NO. C81.002.001	NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW	Pioneer Midler Avenue LLC Remedial Investigation Report Generalized Geologic Cross Sections	Figure 16



"B-1" THERMAL TREATMENT AREA	
CVOC PARAMETER	POST-IRM AVERAGE CONCENTRATION (ug/l)
VINYL CHLORIDE	613
TRANS-1,2-DICHLOROETHENE	575
TRICHLOROETHENE	1,011
TETRACHLOROETHENE	3,383
CIS-1,2-DICHLOROETHENE	2,420
TOTAL CVOCs	8,002

"B-3" THERMAL TREATMENT AREA	
CVOC PARAMETER	POST-IRM AVERAGE CONCENTRATION (ug/l)
VINYL CHLORIDE	766
TRANS-1,2-DICHLOROETHENE	810
TRICHLOROETHENE	1,156
TETRACHLOROETHENE	5,365
CIS-1,2-DICHLOROETHENE	1,333
TOTAL CVOCs	9,430

"B-5" EXCAVATION AREA	
CVOC PARAMETER	POST-IRM AVERAGE CONCENTRATION (ug/l)
VINYL CHLORIDE	315
TRANS-1,2-DICHLOROETHENE	379
TRICHLOROETHENE	59
CIS-1,2-DICHLOROETHENE	3,513
TETRACHLOROETHENE	56
TOTAL CVOCs	4.322

"MW-3D" THERMAL TREATMENT AREA	
CVOC PARAMETER	POST-IRM AVERAGE CONCENTRATION (ug/l)
VINYL CHLORIDE	587
TRANS-1,2-DICHLOROETHENE	470
TRICHLOROETHENE	462
TETRACHLOROETHENE	2,851
CIS-1,2-DICHLOROETHENE	581
TOTAL CVOCs	4,951

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Pioneer Midler Avenue LLC
Remedial Investigation Report
Post–IRM Soil CVOCs Data

Figure 17

TABLES

STL

DATA QUALIFIER PAGE

These definitions are provided in the event the data in this report requires the use of one or more of the qualifiers. Not all qualifiers defined below are necessarily used in the accompanying data package.

ORGANIC DATA QUALIFIERS

ND or U	Indicates compound was analyzed for, but not detected.
J	Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS.
B	This flag is used when the analyte is found in the associated blank, as well as in the sample.
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at the secondary dilution factor.
N	Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds, where the identification is based on the Mass Spectral library search. It is applied to all TIC results.
P	This flag is used for CLP methodology only. For Pesticide/Aroclor target analytes, when a difference for detected concentrations between the two GC columns is greater than 25%, the lower of the two values is reported on the data page and flagged with a "P".
A	This flag indicates that a TIC is a suspected aldol-condensation product.
1	Indicates coelution.
*	Indicates analysis is not within the quality control limits.

INORGANIC DATA QUALIFIERS

ND or U	Indicates element was analyzed for, but not detected. Report with the detection limit value.
J or B	Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.
N	Indicates spike sample recovery is not within the quality control limits.
S	Indicates value determined by the Method of Standard Addition.
E	Indicates a value estimated or not reported due to the presence of interferences.
H	Indicates analytical holding time exceedance. The value obtained should be considered an estimate.
*	Indicates the spike or duplicate analysis is not within the quality control limits.
+	Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 1 - Phase 1 Soil Boring Data

Sample ID ->	Units	TAGM 4046		B-1	B-2	B-3	B-3	B-4	B-5	B-5 DL
Depth - >		RSCO	Eastern USA Background	4 - 6	5 - 7	14 - 16	2 - 4	2 - 4	6 - 8	6 - 8
Date Sampled ->				11/12/2004	11/12/2004	11/11/2004	11/11/2004	11/11/2004	11/12/2004	11/12/2004
VOLATILES	ug/kg									
Chloromethane	ug/kg			1,800 UJ	16 U	16,000 UJ	11 U	12 U	**660 J**	5,800 U
Bromomethane	ug/kg			1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
Vinyl chloride	ug/kg	200		**8,100**	**11 J**	16,000 U	11 U	12 U	**3,800**	**3,700 DJ**
Chloroethane	ug/kg	1,900		1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
Methylene chloride	ug/kg	100		1,800 U	16 U	16,000 U	16 U	**14 U**	1,500 U	5,800 U
Acetone	ug/kg	200		1,800 U	**62**	16,000 U	**7 J**	12 U	1,500 U	5,800 U
Carbon disulfide	ug/kg	2,700		1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
1,1-Dichloroethene	ug/kg	400		1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
1,1-Dichloroethane	ug/kg	200		1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
Chloroform	ug/kg	300		1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
1,2-Dichloroethane	ug/kg	100		1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
2-Butanone	ug/kg	300		1,800 U	**9 J**	16,000 U	11 U	12 U	1,500 U	5,800 U
1,1,1-Trichloroethane	ug/kg	800		1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
Carbon tetrachloride	ug/kg	600		1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
Bromodichloromethane	ug/kg			1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
1,2-Dichloropropane	ug/kg			1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
cis-1,3-Dichloropropene	ug/kg			1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
Trichloroethene	ug/kg	700		**5,800**	**5 J**	**68,000**	**2 J**	**3 J**	**490 J**	5,800 U
Dibromochloromethane	ug/kg			1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
1,1,2-Trichloroethane	ug/kg			1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
Benzene	ug/kg	60 or MDL		1,800 U	**2 J**	16,000 U	11 U	12 U	1,500 U	5,800 U
trans-1,3-Dichloropropene	ug/kg			1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
Bromoform	ug/kg			1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
4-Methyl-2-pentanone	ug/kg	1,000		1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
2-Hexanone	ug/kg			1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
Tetrachloroethene	ug/kg	1,400		**14,000**	**21**	**310,000**	**20**	**8 J**	**1,200 J**	**2,300 DJ**
Toluene	ug/kg	1,500		**2,100**	16 U	16,000 U	**2 J**	12 U	1,500 U	5,800 U
1,1,2,2-Tetrachloroethane	ug/kg	600		1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
Chlorobenzene	ug/kg	1,700		1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
Ethylbenzene	ug/kg	5,500		**2,400**	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
Styrene	ug/kg			1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
Total xylenes	ug/kg	1,200		**7,000**	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000		1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
cis-1,2-Dichloroethene	ug/kg			**11,000**	**18**	**30,000**	11 U	12 U	**54,000**	**54,000 D**
trans-1,2-Dichloroethene	ug/kg	300		1,800 U	16 U	16,000 U	11 U	12 U	**3,100**	**3,800 DJ**
Dichlorodifluoromethane	ug/kg			1,800 U	16 UJ	16,000 U	11 UJ	12 UJ	1,500 U	5,800 U
Trichlorofluoromethane	ug/kg			1,800 U	16 UJ	16,000 U	11 UJ	12 UJ	1,500 U	5,800 U
Methyl acetate	ug/kg			1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
Methyl tert butyl ether	ug/kg	120		1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
Cyclohexane	ug/kg			**620 J**	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
Methylcyclohexane	ug/kg			**17,000**	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
1,2-Dibromoethane	ug/kg			1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
Isopropylbenzene	ug/kg			**750 J**	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
1,3-Dichlorobenzene	ug/kg	1,600		1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
1,4-Dichlorobenzene	ug/kg	8,500		1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
1,2-Dichlorobenzene	ug/kg	7,900		1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
1,2-Dibromo-3-chloropropane	ug/kg			1,800 U	16 U	16,000 U	11 U	12 U	1,500 U	5,800 U
1,2,4-Trichlorobenzene	ug/kg	3,400		1,800 UJ	16 UJ	16,000 UJ	11 UJ	12 UJ	1,500 UJ	5,800 U
SEMIVOLATILES										
Benzaldehyde	ug/kg			4,900 U	1,100 U	1,900 U	3,600 U	790 U	4,100 U	- -

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 1 - Phase 1 Soil Boring Data

Sample ID ->	Units	TAGM 4046		B-1	B-2	B-3	B-3	B-4	B-5	B-5 DL
Depth - >		RSCO	Eastern USA Background	4 - 6	5 - 7	14 - 16	2 - 4	2 - 4	6 - 8	6 - 8
Date Sampled ->				11/12/2004	11/12/2004	11/11/2004	11/11/2004	11/11/2004	11/12/2004	11/12/2004
Phenol	ug/kg	30 or MDL		2,400 U	**24** J	**150** J	1,800 U	400 U	2,000 U	- -
Bis(2-chloroethyl) ether	ug/kg			2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
2-Chlorophenol	ug/kg	800		2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
2-Methylphenol	ug/kg	100 or MDL		2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
2,2'-Oxybis(1-Chloropropane)	ug/kg			2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
Acetophenone	ug/kg			4,900 U	1,100 U	1,900 U	3,600 U	790 U	4,100 U	- -
4-Methylphenol	ug/kg	900		2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
N-Nitroso-Di-n-propylamine	ug/kg			2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
Hexachloroethane	ug/kg			2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
Nitrobenzene	ug/kg	200 or MDL		2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
Isophorone	ug/kg	4400		2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
2-Nitrophenol	ug/kg	330 or MDL		2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
2,4-Dimethylphenol	ug/kg			2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
Bis(2-chloroethoxy) methane	ug/kg			2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
2,4-Dichlorophenol	ug/kg	400		2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
Naphthalene	ug/kg	1,300		**540** J	530 U	930 U	**1,800 U**	400 U	2,000 U	- -
4-Chloroaniline	ug/kg	220 or MDL		2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
Hexachlorobutadiene	ug/kg			2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
Caprolactam	ug/kg			4,900 U	1,100 U	1,900 U	3,600 U	790 U	4,100 U	- -
4-Chloro-3-methylphenol	ug/kg	240 or MDL		2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
2-Methylnaphthalene	ug/kg	36,400		**1,500** J	530 U	930 U	1,800 U	400 U	2,000 U	- -
Hexachlorocyclopentadiene	ug/kg			2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
2,4,6-Trichlorophenol	ug/kg			2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
2,4,5-Trichlorophenol	ug/kg	100		5,900 U	1,300 U	2,300 U	4,400 U	960 U	5,000 U	- -
Biphenyl	ug/kg			4,900 U	1,100 U	1,900 U	3,600 U	790 U	4,100 U	- -
2-Chloronaphthalene	ug/kg			2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
2-Nitroaniline	ug/kg	430 or MDL		5,900 U	1,300 U	2,300 U	4,400 U	960 U	5,000 U	- -
Dimethyl phthalate	ug/kg	2,000		2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
2,6-Dinitrotoluene	ug/kg	1,000		2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
Acenaphthylene	ug/kg	41,000		2,400 U	**14** J	930 U	1,800 U	400 U	2,000 U	- -
3-Nitroaniline	ug/kg	500 or MDL		5,900 U	1,300 U	2,300 U	4,400 U	960 U	5,000 U	- -
Acenaphthene	ug/kg	50,000		**290** J	530 U	930 U	1,800 U	400 U	2,000 U	- -
2,4-Dinitrophenol	ug/kg	200 or MDL		5,900 U	1,300 U	2,300 U	4,400 U	960 U	5,000 U	- -
4-Nitrophenol	ug/kg	100 or MDL		5,900 U	1,300 U	2,300 U	4,400 U	960 U	5,000 U	- -
Dibenzofuran	ug/kg	6,200		370 J	530 U	930 U	1,800 U	400 U	2,000 U	- -
2,4-Dinitrotoluene	ug/kg	1,000		2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
Diethyl phthalate	ug/kg	7,100		2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
Fluorene	ug/kg	50,000		**800** J	**51** J	930 U	**160** J	**18** J	2,000 U	- -
4-Chlorophenyl phenyl ether	ug/kg			2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
4-Nitroaniline	ug/kg			5,900 U	1,300 U	2,300 U	4,400 U	960 U	5,000 U	- -
4,6-Dinitro-2-methylphenol	ug/kg			5,900 U	1,300 U	2,300 U	4,400 U	960 U	5,000 U	- -
N-nitrosodiphenylamine	ug/kg			2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
4-Bromophenyl phenyl ether	ug/kg			2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
Hexachlorobenzene	ug/kg	410		2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
Atrazine	ug/kg			4,900 U	1,100 U	1,900 U	3,600 U	790 U	4,100 U	- -
Pentachlorophenol	ug/kg	1000 or MDL		5,900 U	1,300 U	2,300 U	4,400 U	960 U	5,000 U	- -
Phenanthrene	ug/kg	50,000		**1,400** J	**690**	**180** J	**2,300**	**300** J	**58** J	- -
Anthracene	ug/kg	50,000		**270** J	**120** J	**40** J	**450** J	**53** J	2,000 U	- -
Carbazole	ug/kg			**92** J	**67** J	**27** J	**220** J	**30** J	2,000 U	- -
Di-n-butyl phthalate	ug/kg	8,100		2,400 U	530 U	930 U	1,800 U	400 U	2,000 U	- -
Fluoranthene	ug/kg	50,000		**1,300** J	**860**	**400** J	**4,600**	**500**	**160** J	- -

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 1 - Phase 1 Soil Boring Data

Sample ID ->	Units	TAGM 4046		B-1		B-2		B-3		B-3		B-4		B-5		B-5 DL	
Depth - >		RSCO	Eastern USA Background	4 - 6		5 - 7		14 - 16		2 - 4		2 - 4		6 - 8		6 - 8	
Date Sampled ->				11/12/2004		11/12/2004		11/11/2004		11/11/2004		11/11/2004		11/12/2004		11/12/2004	
Pyrene	ug/kg	50,000		1,200	J	410	J	240	J	2,600		300	J	92	J	-	-
Butyl benzyl phthalate	ug/kg	50,000		2,400	U	21	J	930	U	1,800	U	400	U	2,000	U	-	-
3,3'-Dichlorobenzidine	ug/kg			2,400	U	530	U	930	U	1,800	U	400	U	2,000	U	-	-
Benzo(a)anthracene	ug/kg	224 or MDL		610	J	340	J	250	J	2,500		220	J	97	J	-	-
Chrysene	ug/kg	400		710	J	400	J	290	J	2,700		250	J	110	J	-	-
Bis(2-ethylhexyl) phthalate	ug/kg			2,400	U	530	U	930	U	1,800	U	400	U	2,000	U	-	-
Di-n-octyl phthalate	ug/kg	50,000		2,400	U	530	U	930	U	1,800	U	400	U	2,000	U	-	-
Benzo(b)fluoranthene	ug/kg	1,100		790	J	350	J	290	J	2,200		250	J	85	J	-	-
Benzo(k)fluoranthene	ug/kg	1,100		680	J	210	J	140	J	1,800		100	J	2,000	U	-	-
Benzo(a)pyrene	ug/kg	61 or MDL		800	J	130	J	92	J	940	J	93	J	2,000	U	-	-
Indeno(1,2,3-cd)pyrene	ug/kg	3,200		510	J	87	J	63	J	790	J	80	J	2,000	U	-	-
Dibenzo(a,h)anthracene	ug/kg	14 or MDL		210	J	66	J	52	J	670	J	57	J	2,000	U	-	-
Benzo(ghi)perylene	ug/kg	50,000		680	J	530	U	930	U	1,800	U	400	U	2,000	U	-	-
PESTICIDES/AROCLORS																	
alpha-BHC	ug/kg	110		13	U	2.7	U	4.9	U	9.2	U	2	U	2.1	U	-	-
beta-BHC	ug/kg	200		13	U	2.7	U	4.9	U	9.2	U	2	U	2.1	U	-	-
delta-BHC	ug/kg	300		13	U	2.7	U	4.9	U	9.2	U	2	U	2.1	U	-	-
gamma-BHC (Lindane)	ug/kg	60		13	U	2.7	U	4.9	U	9.2	U	2	U	2.1	U	-	-
Heptachlor	ug/kg	100		13	U	2.7	U	4.9	U	9.2	U	2	U	2.1	U	-	-
Aldrin	ug/kg	41		13	U	2.7	U	4.9	U	9.2	U	0.65	JP	2.1	U	-	-
Heptachlor epoxide	ug/kg	20		13	U	1.1	JPN	4.9	U	9.2	U	2	U	2.1	U	-	-
Endosulfan I	ug/kg	900		13	U	2.7	U	4.9	U	9.2	U	2	U	2.1	U	-	-
Dieldrin	ug/kg	44		24	U	5.3	U	9.6	U	18	U	3.9	U	4.1	U	-	-
4,4'-DDE	ug/kg	2,100		24	U	5.3	U	9.6	U	18	U	3.9	U	4.1	U	-	-
Endrin	ug/kg	100		24	U	5.3	U	9.6	U	18	U	3.9	U	3.5	J	-	-
Endosulfan II	ug/kg	900		24	U	5.3	U	9.6	U	18	U	3.9	U	4.1	U	-	-
4,4'-DDD	ug/kg	2,900		24	U	5.3	U	9.6	U	18	U	3.9	U	4.1	U	-	-
Endosulfan Sulfate	ug/kg	100		24	U	5.3	U	9.6	U	18	U	3.9	U	4.1	U	-	-
4,4'-DDT	ug/kg	2,100		24	U	5.3	U	7.1	JP	18	U	3.9	U	4.1	U	-	-
Methoxychlor	ug/kg			110	U	27	U	49	U	18	U	7.6	JP	21	U	-	-
Endrin ketone	ug/kg			24	U	5.3	U	9.6	U	18	U	3.9	U	4.1	U	-	-
Endrin aldehyde	ug/kg			24	U	5.3	U	9.6	U	18	U	3.9	U	4.1	U	-	-
alpha-Chlordane	ug/kg	540		13	U	2.7	U	4.9	U	2.4	J	2	U	2.1	U	-	-
gamma-Chlordane	ug/kg	540		13	U	2.7	U	4.9	U	9.2	U	2	U	2.1	U	-	-
Toxaphene	ug/kg			1,300	U	270	U	490	U	920	U	200	U	210	U	-	-
Aroclor 1016	ug/kg	1,000 - surface soils, 10,000 - subsurface soils		240	U	53	U	96	U	180	U	39	U	41	U	-	-
Aroclor 1221	ug/kg			490	U	110	U	190	U	360	U	79	U	84	U	-	-
Aroclor 1232	ug/kg			240	U	53	U	96	U	180	U	39	U	41	U	-	-
Aroclor 1242	ug/kg			240	U	53	U	96	U	180	U	39	U	41	U	-	-
Aroclor 1248	ug/kg			240	U	53	U	96	U	180	U	39	U	41	U	-	-
Aroclor 1254	ug/kg			240	U	53	U	96	U	180	U	39	U	41	U	-	-
Aroclor 1260	ug/kg			240	U	53	U	96	U	180	U	39	U	41	U	-	-
INORGANICS																	
Aluminum	mg/kg	SB	33000	3,230	J	1,480	J	1,020	J	3,760	J	5,540	J	4,910	J	-	-
Antimony	mg/kg	SB		0.69	NU*J	0.65	NU*J	1.3	NU*J	0.5	NU*J	0.52	NU*J	0.56	NU*J	-	-
Arsenic	mg/kg	7.5 or SB	3 - 12	9.2	N*J	1.2	BN*J	0.96	BN*J	17.9	N*J	3	N*J	7.4	N*J	-	-
Barium	mg/kg	300 or SB	15 - 600	38.3	N*J	59.3	N*J	26.3	BN*J	86.7	N*J	56.8	N*J	42.4	N*J	-	-
Beryllium	mg/kg	0.16 or SB	0 - 1.75	0.24	BN*J	0.18	BN*J	0.14	BN*J	0.25	BN*J	0.26	BN*J	0.24	BN*J	-	-
Cadmium	mg/kg	1 or SB	0.1 - 1	0.04	NU*J	0.04	NU*J	0.07	NU*J	0.03	NU*J	0.03	NU*J	0.03	NU*J	-	-
Calcium	mg/kg	SB	130 - 35,000	65,300	EJ	484,000	EJ	157,000	EJ	12,300	EJ	19000	EJ	67800	EJ	-	-
Chromium	mg/kg	10 or SB	1.5 - 40	15.3	N*J	14.2	N*J	2.2	BN*J	22.1	N*J	9.8	N*J	8.4	N*J	-	-

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 1 - Phase 1 Soil Boring Data

Sample ID ->	Units	TAGM 4046		B-1		B-2		B-3		B-3		B-4		B-5		B-5 DL	
Depth - >		RSCO	Eastern USA Background	4 - 6		5 - 7		14 - 16		2 - 4		2 - 4		6 - 8		6 - 8	
Date Sampled ->				11/12/2004		11/12/2004		11/11/2004		11/11/2004		11/11/2004		11/12/2004		11/12/2004	
Cobalt	mg/kg	30 or SB	2.5 - 60	4	BN*J	1.2	BN*J	0.82	BN*J	11.2	N*J	3.3	BN*J	3.1	BN*J	-	-
Copper	mg/kg	25 or SB	1 - 50	38.1	N*J	10.7	N*J	14.2	N*J	57.3	N*J	15	N*J	10.7	N*J	-	-
Iron	mg/kg	2,000 or SB	2,000 - 550,000	50,000	J	4,000	J	4,140	J	126,000	J	19,400	J	22,600	J	-	-
Lead	mg/kg	SB	200 - 500	28	NJ	4.9	NJ	1.9	NJ	35.5	NJ	14.2	NJ	17.3	NJ	-	-
Magnesium	mg/kg	SB	100 - 5,000	1,420	J	12,400	J	1490	J	1,360	J	2,760	J	2,530	J	-	-
Manganese	mg/kg	SB	50 - 5,000	266	N*J	109	N*J	76.9	N*J	882	N*J	418	N*J	221	N*J	-	-
Mercury	mg/kg	0.1	0.001 - 0.2	0.042	BN*J	0.035	NU*	0.059	U	0.115		0.026	U	0.028	NU*	-	-
Nickel	mg/kg	13 or SB	0.5 - 25	73.3	N*J	4.4	BN*J	16.8	N*J	16.2	N*J	6.2	N*J	6.4	N*J	-	-
Potassium	mg/kg	SB	8,500 - 43,000	445	BEJ	568	BEJ	291	BEJ	485	BEJ	1,040	EJ	718	EJ	-	-
Selenium	mg/kg	2 or SR	0.1 - 3.9	3	BN*J	0.73	BN*J	4	BN*J	3.3	BN*J	1	BN*J	0.76	BN*J	-	-
Silver	mg/kg	SB		0.15	NU*J	0.14	NU*J	0.27	NU*J	0.39	BN*J	0.11	NU*J	0.12	NU*J	-	-
Sodium	mg/kg	SB	6,000 - 8,000	115	BJ	151	BJ	339	BJ	91.4	BJ	147	BJ	271	BJ	-	-
Thallium	mg/kg	SB		10.1	N*J	0.57	BN*J	1.6	BN*J	23.5	N*J	3.7	N*J	4.6	N*J	-	-
Vanadium	mg/kg	150 or SB	1 - 300	23.1	N*J	4.9	BN*J	2.7	BN*J	30.3	N*J	16.3	N*J	15.6	N*J	-	-
Zinc	mg/kg	20 or SB	9 - 50	67.8	N*J	14.2	N*J	40.9	N*J	80.5	N*J	36.8	N*J	63.2	N*J	-	-
WET CHEMISTRY ANALYSIS																	
Cyanide - Total	ug/kg			4,000	U	4,000	U	4,000	U	4,000	U	4,000	U	4,000	U		
Leachable pH	S.U.			7.23		11.1		7.47		7.79		8.21		7.86			

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 1 - Phase 1 Soil Boring Data

Sample ID ->	Units	TAGM 4046		B-6	B-7	B-8	B-9	B-10
Depth - >		RSCO	Eastern USA Background	2 - 4	2 - 4	2 - 4	2 - 4	3 - 6
Date Sampled ->				11/11/2004	11/12/2004	11/11/2004	11/11/2004	11/12/2004
VOLATILES	ug/kg							
Chloromethane	ug/kg			10 U	11 U	11 U	11 U	910 J
Bromomethane	ug/kg			10 U	11 U	11 U	11 U	1,700 U
Vinyl chloride	ug/kg	200		10 U	11 U	11 U	11 U	1,700 U
Chloroethane	ug/kg	1,900		10 U	11 U	11 U	11 U	1,700 U
Methylene chloride	ug/kg	100		21 U	25 U	21 U	16 U	1,700 U
Acetone	ug/kg	200		10 U	11 U	11 U	16	2,100
Carbon disulfide	ug/kg	2,700		10 U	11 U	11 U	11 U	1,700 U
1,1-Dichloroethene	ug/kg	400		10 U	11 U	11 U	11 U	1,700 U
1,1-Dichloroethane	ug/kg	200		10 U	11 U	11 U	11 U	1,700 U
Chloroform	ug/kg	300		10 U	11 U	11 U	11 U	1,700 U
1,2-Dichloroethane	ug/kg	100		10 U	11 U	11 U	11 U	1,700 U
2-Butanone	ug/kg	300		10 U	11 U	11 U	4 J	680 J
1,1,1-Trichloroethane	ug/kg	800		10 U	11 U	11 U	11 U	1,700 U
Carbon tetrachloride	ug/kg	600		10 U	11 U	11 U	11 U	1,700 U
Bromodichloromethane	ug/kg			10 U	11 U	11 U	11 U	1,700 U
1,2-Dichloropropane	ug/kg			10 U	11 U	11 U	11 U	1,700 U
cis-1,3-Dichloropropene	ug/kg			10 U	11 U	11 U	11 U	1,700 U
Trichloroethene	ug/kg	700		10 U	11 U	11 U	11 U	1,700 U
Dibromochloromethane	ug/kg			10 U	11 U	11 U	11 U	1,700 U
1,1,2-Trichloroethane	ug/kg			10 U	11 U	11 U	11 U	1,700 U
Benzene	ug/kg	60 or MDL		10 U	11 U	11 U	11 U	1,700 U
trans-1,3-Dichloropropene	ug/kg			10 U	11 U	11 U	11 U	1,700 U
Bromoform	ug/kg			10 U	11 U	11 U	11 U	1,700 U
4-Methyl-2-pentanone	ug/kg	1,000		10 U	11 U	11 U	11 U	1,800
2-Hexanone	ug/kg			10 U	11 U	11 U	11 U	1,700 U
Tetrachloroethene	ug/kg	1,400		10 U	11 U	11 U	17	1,700 U
Toluene	ug/kg	1,500		10 U	2 J	11 U	11 U	810 J
1,1,2,2-Tetrachloroethane	ug/kg	600		10 U	11 U	11 U	11 U	1,700 U
Chlorobenzene	ug/kg	1,700		10 U	11 U	11 U	11 U	1,700 U
Ethylbenzene	ug/kg	5,500		10 U	11 U	11 U	11 U	500 J
Styrene	ug/kg			10 U	11 U	11 U	11 U	1,700 U
Total xylenes	ug/kg	1,200		10 U	11 U	11 U	11 U	4,100
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000		10 U	11 U	11 U	11 U	1,700 U
cis-1,2-Dichloroethene	ug/kg			10 U	11 U	11 U	11 U	1,700 U
trans-1,2-Dichloroethene	ug/kg	300		10 U	11 U	11 U	11 U	1,700 U
Dichlorodifluoromethane	ug/kg			10 UJ	11 UJ	3 J	11 U	1,700 U
Trichlorofluoromethane	ug/kg			10 UJ	11 UJ	11 UJ	11 U	1,700 U
Methyl acetate	ug/kg			10 U	11 U	11 U	11 U	850 J
Methyl tert butyl ether	ug/kg	120		10 U	11 U	11 U	11 U	1,700 U
Cyclohexane	ug/kg			10 U	11 U	11 U	11 U	1,700 U
Methylcyclohexane	ug/kg			10 U	11 U	11 U	11 U	1,700 U
1,2-Dibromoethane	ug/kg			10 U	11 U	11 U	11 U	1,700 U
Isopropylbenzene	ug/kg			10 U	11 U	11 U	11 U	330 J
1,3-Dichlorobenzene	ug/kg	1,600		10 U	11 U	11 U	11 U	1,700 U
1,4-Dichlorobenzene	ug/kg	8,500		10 U	11 U	11 U	11 U	1,700 U
1,2-Dichlorobenzene	ug/kg	7,900		10 U	11 U	11 U	11 U	1,700 U
1,2-Dibromo-3-chloropropane	ug/kg			10 U	11 U	11 U	11 U	1,700 U
1,2,4-Trichlorobenzene	ug/kg	3,400		10 UJ	11 UJ	11 UJ	11 UJ	1,700 UJ
SEMIVOLATILES								
Benzaldehyde	ug/kg			720 U	3,800 U	3,600 U	740 U	4,600 U

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 1 - Phase 1 Soil Boring Data

Sample ID ->	Units	TAGM 4046		B-6	B-7	B-8	B-9	B-10
Depth - >		RSCO	Eastern USA Background	2 - 4	2 - 4	2 - 4	2 - 4	3 - 6
Date Sampled ->				11/11/2004	11/12/2004	11/11/2004	11/11/2004	11/12/2004
Phenol	ug/kg	30 or MDL		360 U	1,900 U	1,800 U	**15 J**	**67 J**
Bis(2-chloroethyl) ether	ug/kg			360 U	1,900 U	1,800 U	370 U	2,300 U
2-Chlorophenol	ug/kg	800		360 U	1,900 U	1,800 U	370 U	2,300 U
2-Methylphenol	ug/kg	100 or MDL		360 U	1,900 U	1,800 U	370 U	2,300 U
2,2'-Oxybis(1-Chloropropane)	ug/kg			360 U	1,900 U	1,800 U	370 U	2,300 U
Acetophenone	ug/kg			720 U	3,800 U	3,600 U	740 U	4,600 U
4-Methylphenol	ug/kg	900		360 U	1,900 U	1,800 U	370 U	**440 J**
N-Nitroso-Di-n-propylamine	ug/kg			360 U	1,900 U	1,800 U	370 U	2,300 U
Hexachloroethane	ug/kg			360 U	1,900 U	1,800 U	370 U	2,300 U
Nitrobenzene	ug/kg	200 or MDL		360 U	1,900 U	1,800 U	370 U	2,300 U
Isophorone	ug/kg	4400		360 U	1,900 U	1,800 U	370 U	2,300 U
2-Nitrophenol	ug/kg	330 or MDL		360 U	1,900 U	1,800 U	370 U	2,300 U
2,4-Dimethylphenol	ug/kg			360 U	1,900 U	1,800 U	370 U	2,300 U
Bis(2-chloroethoxy) methane	ug/kg			360 U	1,900 U	1,800 U	370 U	2,300 U
2,4-Dichlorophenol	ug/kg	400		360 U	1,900 U	1,800 U	370 U	2,300 U
Naphthalene	ug/kg	1,300		360 U	1,900 U	1,800 U	370 U	**1,000 J**
4-Chloroaniline	ug/kg	220 or MDL		360 U	1,900 U	1,800 U	370 U	2,300 U
Hexachlorobutadiene	ug/kg			360 U	1,900 U	1,800 U	370 U	2,300 U
Caprolactam	ug/kg			720 U	3,800 U	3,600 U	740 U	4,600 U
4-Chloro-3-methylphenol	ug/kg	240 or MDL		360 U	1,900 U	1,800 U	370 U	2,300 U
2-Methylnaphthalene	ug/kg	36,400		360 U	1,900 U	1,800 U	370 U	**300 J**
Hexachlorocyclopentadiene	ug/kg			360 U	1,900 U	1,800 U	370 U	2,300 U
2,4,6-Trichlorophenol	ug/kg			360 U	1,900 U	1,800 U	370 U	2,300 U
2,4,5-Trichlorophenol	ug/kg	100		870 U	4,600 U	4,400 U	900 U	5,500 U
Biphenyl	ug/kg			720 U	3,800 U	3,600 U	740 U	4,600 U
2-Chloronaphthalene	ug/kg			360 U	1,900 U	1,800 U	370 U	2,300 U
2-Nitroaniline	ug/kg	430 or MDL		870 U	4,600 U	4,400 U	900 U	5,500 U
Dimethyl phthalate	ug/kg	2,000		360 U	1,900 U	1,800 U	370 U	2,300 U
2,6-Dinitrotoluene	ug/kg	1,000		360 U	1,900 U	1,800 U	370 U	2,300 U
Acenaphthylene	ug/kg	41,000		360 U	1,900 U	**46 J**	370 U	**150 J**
3-Nitroaniline	ug/kg	500 or MDL		870 U	4,600 U	4,400 U	900 U	5,500 U
Acenaphthene	ug/kg	50,000		360 U	1,900 U	1,800 U	370 U	**200 J**
2,4-Dinitrophenol	ug/kg	200 or MDL		870 U	4,600 U	4,400 U	900 U	5,500 U
4-Nitrophenol	ug/kg	100 or MDL		870 U	4,600 U	4,400 U	900 U	5,500 U
Dibenzofuran	ug/kg	6,200		360 U	1,900 U	1,800 U	370 U	**220 J**
2,4-Dinitrotoluene	ug/kg	1,000		360 U	1,900 U	1,800 U	370 U	2,300 U
Diethyl phthalate	ug/kg	7,100		360 U	1,900 U	1,800 U	370 U	2,300 U
Fluorene	ug/kg	50,000		**26 J**	1,900 U	1,800 U	370 U	**460 J**
4-Chlorophenyl phenyl ether	ug/kg			360 U	1,900 U	1,800 U	370 U	2,300 U
4-Nitroaniline	ug/kg			870 U	4,600 U	4,400 U	900 U	5,500 U
4,6-Dinitro-2-methylphenol	ug/kg			870 U	4,600 U	4,400 U	900 U	5,500 U
N-nitrosodiphenylamine	ug/kg			360 U	1,900 U	1,800 U	370 U	**76 J**
4-Bromophenyl phenyl ether	ug/kg			360 U	1,900 U	1,800 U	370 U	2,300 U
Hexachlorobenzene	ug/kg	410		360 U	1,900 U	1,800 U	370 U	2,300 U
Atrazine	ug/kg			720 U	3,800 U	3,600 U	740 U	4,600 U
Pentachlorophenol	ug/kg	1000 or MDL		870 U	4,600 U	4,400 U	900 U	5,500 U
Phenanthrene	ug/kg	50,000		**280 J**	**680 J**	**300 J**	**68 J**	**3,200**
Anthracene	ug/kg	50,000		**64 J**	**88 J**	**100 J**	**10 J**	**430 J**
Carbazole	ug/kg			**29 J**	1,900 U	1,800 U	370 U	**340 J**
Di-n-butyl phthalate	ug/kg	8,100		360 U	1,900 U	1,800 U	370 U	2,300 U
Fluoranthene	ug/kg	50,000		**330 J**	**1,200 J**	**1,000 J**	**97 J**	**5,200**

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 1 - Phase 1 Soil Boring Data

Sample ID ->	Units	TAGM 4046		B-6		B-7		B-8		B-9		B-10	
Depth - >		RSCO	Eastern USA Background	2 - 4		2 - 4		2 - 4		2 - 4		3 - 6	
Date Sampled ->				11/11/2004		11/12/2004		11/11/2004		11/11/2004		11/12/2004	
Pyrene	ug/kg	50,000		**180**	**J**	**690**	**J**	**710**	**J**	**51**	**J**	**2,300**	
Butyl benzyl phthalate	ug/kg	50,000		360	U	1,900	U	1,800	U	370	U	2,300	U
3,3'-Dichlorobenzidine	ug/kg			360	U	1,900	U	1,800	U	370	U	2,300	U
Benzo(a)anthracene	ug/kg	224 or MDL		**160**	**J**	**590**	**J**	**590**	**J**	**39**	**J**	**1,100**	**J**
Chrysene	ug/kg	400		**180**	**J**	**680**	**J**	**650**	**J**	**54**	**J**	**1,400**	**J**
Bis(2-ethylhexyl) phthalate	ug/kg			360	U	1,900	U	1,800	U	370	U	**2,300**	**U**
Di-n-octyl phthalate	ug/kg	50,000		360	U	1,900	U	1,800	U	370	U	2,300	U
Benzo(b)fluoranthene	ug/kg	1,100		**160**	**J**	**420**	**J**	**730**	**J**	**49**	**J**	**2,400**	
Benzo(k)fluoranthene	ug/kg	1,100		**81**	**J**	**450**	**J**	**330**	**J**	**35**	**J**	**2,200**	**J**
Benzo(a)pyrene	ug/kg	61 or MDL		**52**	**J**	**220**	**J**	**250**	**J**	**18**	**J**	**1,100**	**J**
Indeno(1,2,3-cd)pyrene	ug/kg	3,200		**44**	**J**	**120**	**J**	**150**	**J**	**13**	**J**	**250**	**J**
Dibenzo(a,h)anthracene	ug/kg	14 or MDL		**39**	**J**	**110**	**J**	**120**	**J**	**10**	**J**	**100**	**J**
Benzo(ghi)perylene	ug/kg	50,000		360	U	1,900	U	1,800	U	370	U	**300**	**J**
PESTICIDES/AROCLORS													
alpha-BHC	ug/kg	110		1.9	U	9.6	U	9.3	U	1.9	U	23	U
beta-BHC	ug/kg	200		1.9	U	9.6	U	9.3	U	1.9	U	23	U
delta-BHC	ug/kg	300		1.9	U	9.6	U	9.3	U	1.9	U	23	U
gamma-BHC (Lindane)	ug/kg	60		1.9	U	9.6	U	9.3	U	1.9	U	23	U
Heptachlor	ug/kg	100		1.9	U	9.6	U	9.3	U	1.9	U	23	U
Aldrin	ug/kg	41		1.9	U	9.6	U	9.3	U	1.9	U	23	U
Heptachlor epoxide	ug/kg	20		1.9	U	9.6	U	9.3	U	1.9	U	23	U
Endosulfan I	ug/kg	900		1.9	U	9.6	U	9.3	U	1.9	U	23	U
Dieldrin	ug/kg	44		3.6	U	19	U	18	U	3.7	U	45	U
4,4'-DDE	ug/kg	2,100		3.6	U	19	U	18	U	3.7	U	45	U
Endrin	ug/kg	100		3.6	U	19	U	18	U	3.7	U	45	U
Endosulfan II	ug/kg	900		3.6	U	19	U	18	U	3.7	U	45	U
4,4'-DDD	ug/kg	2,900		3.6	U	19	U	18	U	3.7	U	45	U
Endosulfan Sulfate	ug/kg	100		3.6	U	19	U	18	U	3.7	U	45	U
4,4'-DDT	ug/kg	2,100		3.6	U	19	U	18	U	3.7	U	45	U
Methoxychlor	ug/kg			19	U	96	U	93	U	19	U	230	U
Endrin ketone	ug/kg			3.6	U	19	U	18	U	3.7	U	45	U
Endrin aldehyde	ug/kg			3.6	U	19	U	18	U	3.7	U	45	U
alpha-Chlordane	ug/kg	540		1.9	U	9.6	U	9.3	U	1.9	U	23	U
gamma-Chlordane	ug/kg	540		1.9	U	9.6	U	9.3	U	1.9	U	23	U
Toxaphene	ug/kg			190	U	960	U	930	U	190	U	2,300	U
Aroclor 1016	ug/kg	1,000 - surface soils, 10,000 - subsurface soils		36	U	190	U	180	U	37	U	450	U
Aroclor 1221	ug/kg			73	U	380	U	370	U	76	U	920	U
Aroclor 1232	ug/kg			36	U	190	U	180	U	37	U	450	U
Aroclor 1242	ug/kg			36	U	190	U	180	U	37	U	450	U
Aroclor 1248	ug/kg			36	U	190	U	180	U	37	U	450	U
Aroclor 1254	ug/kg			36	U	190	U	180	U	37	U	**3,000**	
Aroclor 1260	ug/kg			36	U	190	U	180	U	37	U	450	U
INORGANICS													
Aluminum	mg/kg	SB	33000	4,770	J	4,560	J	5,130	J	2,790	J	5,850	J
Antimony	mg/kg	SB		0.48	NU*J	1.1	BN*J	0.49	NU*J	0.49	NU*	3.9	BN*.
Arsenic	mg/kg	7.5 or SB	3 - 12	3.3	N*J	2.2	N*J	2.4	N*J	18.5	N*J	7.9	N*J
Barium	mg/kg	300 or SB	15 - 600	35.5	N*J	35.1	N*J	57.4	N*J	406	N*J	102	N*J
Beryllium	mg/kg	0.16 or SB	0 - 1.75	0.28	BN*J	0.31	BN*J	0.3	BN*J	0.22	BN*	0.29	BN*.
Cadmium	mg/kg	1 or SB	0.1 - 1	0.03	NU*J	0.03	NU*J	0.03	NU*J	0.03	NU*	1.8	N*J
Calcium	mg/kg	SB	130 - 35,000	13,000	EJ	24,900	EJ	53,700	EJ	8,370	EJ	15,600	EJ
Chromium	mg/kg	10 or SB	1.5 - 40	8.5	N*J	7.5	N*J	7.3	N*J	21.8	N*J	40.9	N*J

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 1 - Phase 1 Soil Boring Data

Sample ID ->	Units	TAGM 4046		B-6		B-7		B-8		B-9		B-10	
Depth - >		RSCO	Eastern USA	2 - 4		2 - 4		2 - 4		2 - 4		3 - 6	
Date Sampled ->			Background	11/11/2004		11/12/2004		11/11/2004		11/11/2004		11/12/2004	
Cobalt	mg/kg	30 or SB	2.5 - 60	2.9	BN*J	2.7	BN*J	3	BN*J	9.3	N*J	7.2	N*J
Copper	mg/kg	25 or SB	1 - 50	17.6	N*J	16.5	N*J	12.8	N*J	27.6	N*J	964	N*J
Iron	mg/kg	2,000 or SB	2,000 - 550,000	18,100	J	17,900	J	11,600	J	153,000	J	60,500	J
Lead	mg/kg	SB	200 - 500	7.3	NJ	33.8	NJ	16.9	NJ	32.3	NJ	494	NJ
Magnesium	mg/kg	SB	100 - 5,000	1,470	J	3,360	J	9,680	J	1,310	J	2,450	J
Manganese	mg/kg	SB	50 - 5,000	383	N*J	628	N*J	221	N*J	893	N*J	804	N*J
Mercury	mg/kg	0.1	0.001 - 0.2	0.029	U	0.028	U	0.023	U	0.025	U	0.31	N*J
Nickel	mg/kg	13 or SB	0.5 - 25	5.4	N*J	4.5	N*J	7.6	N*J	19.6	N*J	79.2	N*J
Potassium	mg/kg	SB	8,500 - 43,000	825	EJ	721	EJ	1,050	EJ	439	BEJ	1,100	EJ
Selenium	mg/kg	2 or SR	0.1 - 3.9	1.2	BN*J	0.98	BN*J	0.55	BN*J	3.4	BN*	2.1	BN*
Silver	mg/kg	SB		0.1	NU*J	0.11	NU*J	0.11	NU*J	0.14	BN*	0.71	BN*
Sodium	mg/kg	SB	6,000 - 8,000	103	BJ	130	BJ	131	BJ	134	BJ	1,850	J
Thallium	mg/kg	SB		3.7	N*J	3.5	N*J	2.3	N*J	27.7	N*J	11.1	N*J
Vanadium	mg/kg	150 or SB	1 - 300	15.2	N*J	16.9	N*J	22	N*J	44.6	N*J	23.2	N*J
Zinc	mg/kg	20 or SB	9 - 50	24.5	N*J	53.3	N*J	38.4	N*J	396	N*J	348	N*J
WET CHEMISTRY ANALYSIS													
Cyanide - Total	ug/kg			4,000	U	4,000	U	4,000	U	4,000	U	4,000	U
Leachable pH	S.U.			8.28		8.15		9.68		7.73		9.12	

RSCO = Recommended Soil Cleanup Objectives
1,000 - indicates detected value for organics.
- indicates value exceeds TAGM 4046 RSCO

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 2 - Phase 1 Soil Data for Monitoring Wells and Geotechnical Borings

Sample ID ->	Units	TAGM 4046		LB-8	PB-3	PB-3 DL	PB-4	PB-7	PB-7 DL
Depth - >		RSCO	Eastern USA	4 - 6	2 - 4	2 - 4	2 - 4	2 - 4	2 - 4
Date Sampled ->			Background	11/9/2004	11/22/2004	11/22/2004	11/18/2004	11/19/2004	38310
VOLATILES	ug/kg								
Chloromethane	ug/kg			15 U	12 UJ		12 UJ	12 UJ	
Bromomethane	ug/kg			15 U	12 U		12 U	12 U	
Vinyl chloride	ug/kg	200		15 U	12 UJ		12 U	12 UJ	
Chloroethane	ug/kg	1,900		15 U	12 U		12 U	12 U	
Methylene chloride	ug/kg	100		**15 U**	12 U		12 U	20 U	
Acetone	ug/kg	200		**48**	**14**		**10 J**	12 U	
Carbon disulfide	ug/kg	2,700		15 U	12 U		12 U	12 U	
1,1-Dichloroethene	ug/kg	400		15 U	12 U		12 U	12 U	
1,1-Dichloroethane	ug/kg	200		15 U	12 U		12 U	12 U	
Chloroform	ug/kg	300		15 U	12 U		12 U	12 U	
1,2-Dichloroethane	ug/kg	100		15 U	12 UJ		12 U	12 UJ	
2-Butanone	ug/kg	300		13 J	12 U		12 U	12 U	
1,1,1-Trichloroethane	ug/kg	800		15 U	12 U		12 U	12 U	
Carbon tetrachloride	ug/kg	600		15 U	12 U		12 U	12 U	
Bromodichloromethane	ug/kg			15 U	12 U		12 U	12 U	
1,2-Dichloropropane	ug/kg			15 U	12 U		12 U	12 U	
cis-1,3-Dichloropropene	ug/kg			15 U	12 U		12 U	12 U	
Trichloroethene	ug/kg	700		15 U	12 U		12 U	12 U	
Dibromochloromethane	ug/kg			15 U	12 U		12 U	12 U	
1,1,2-Trichloroethane	ug/kg			15 U	12 U		12 U	12 U	
Benzene	ug/kg	60 or MDL		**2 J**	12 U		12 U	12 U	
trans-1,3-Dichloropropene	ug/kg			15 U	12 U		12 U	12 U	
Bromoform	ug/kg			15 U	12 U		12 U	12 U	
4-Methyl-2-pentanone	ug/kg	1,000		15 U	12 U		12 U	12 U	
2-Hexanone	ug/kg			15 U	12 U		12 U	12 U	
Tetrachloroethene	ug/kg	1,400		15 U	12 U		12 U	12 U	
Toluene	ug/kg	1,500		15 U	12 U		12 U	12 U	
1,1,2,2-Tetrachloroethane	ug/kg	600		15 U	12 U		12 U	12 U	
Chlorobenzene	ug/kg	1,700		15 U	12 U		12 U	12 U	
Ethylbenzene	ug/kg	5,500		**16**	12 U		12 U	12 U	
Styrene	ug/kg			15 U	12 U		12 U	12 U	
Total xylenes	ug/kg	1,200		15 U	12 U		12 U	12 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000		15 U	12 U		12 U	12 U	
cis-1,2-Dichloroethene	ug/kg			15 U	12 U		12 U	12 U	
trans-1,2-Dichloroethene	ug/kg	300		15 U	12 U		12 U	12 U	
Dichlorodifluoromethane	ug/kg			15 U	12 UJ		12 U	12 UJ	
Trichlorofluoromethane	ug/kg			15 U	12 UJ		12 U	12 UJ	
Methyl acetate	ug/kg			15 U	12 U		12 U	12 U	
Methyl tert butyl ether	ug/kg	120		15 U	12 U		12 U	12 U	
Cyclohexane	ug/kg			**10 J**	12 U		12 U	12 U	
Methylcyclohexane	ug/kg			**31**	12 U		12 U	12 U	
1,2-Dibromoethane	ug/kg			15 U	12 U		12 U	12 U	
Isopropylbenzene	ug/kg			**35**	12 U		12 U	12 U	
1,3-Dichlorobenzene	ug/kg	1,600		15 U	12 U		12 U	12 U	
1,4-Dichlorobenzene	ug/kg	8,500		15 U	12 U		12 U	12 U	
1,2-Dichlorobenzene	ug/kg	7,900		15 U	12 U		12 U	12 U	
1,2-Dibromo-3-chloropropane	ug/kg			15 U	12 U		12 U	12 U	
1,2,4-Trichlorobenzene	ug/kg	3,400		15 UJ	12 UJ		12 UJ	12 UJ	
SEMIVOLATILES									
Benzaldehyde	ug/kg			900 U	7,900 U	79,000 U	760 U	7,900 U	39,000 U

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 2 - Phase 1 Soil Data for Monitoring Wells and Geotechnical Borings

Sample ID ->	Units	TAGM 4046		LB-8		PB-3		PB-3 DL		PB-4		PB-7		PB-7 DL	
Depth - >		RSCO	Eastern USA Background	4 - 6		2 - 4		2 - 4		2 - 4		2 - 4		2 - 4	
Date Sampled ->				11/9/2004		11/22/2004		11/22/2004		11/18/2004		11/19/2004		38310	
Phenol	ug/kg	30 or MDL		22	J	110	J	40,000	U	380	U	140	J	20,000	U
Bis(2-chloroethyl) ether	ug/kg			450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
2-Chlorophenol	ug/kg	800		450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
2-Methylphenol	ug/kg	100 or MDL		450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
2,2'-Oxybis(1-Chloropropane)	ug/kg			450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
Acetophenone	ug/kg			900	U	7,900	U	79,000	U	760	U	7,900	U	39,000	U
4-Methylphenol	ug/kg	900		450	U	4,000	U	40,000	U	380	U	160	J	20,000	U
N-Nitroso-Di-n-propylamine	ug/kg			450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
Hexachloroethane	ug/kg			450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
Nitrobenzene	ug/kg	200 or MDL		450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
Isophorone	ug/kg	4400		450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
2-Nitrophenol	ug/kg	330 or MDL		450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
2,4-Dimethylphenol	ug/kg			450	U	140	J	40,000	U	380	U	120	J	20,000	U
Bis(2-chloroethoxy) methane	ug/kg			450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
2,4-Dichlorophenol	ug/kg	400		450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
Naphthalene	ug/kg	1,300		48	JN	13,000		13,000	DJ	21	J	1,200	J	1,400	DJ
4-Chloroaniline	ug/kg	220 or MDL		450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
Hexachlorobutadiene	ug/kg			450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
Caprolactam	ug/kg			900	U	7,900	U	79,000	U	760	U	7,900	U	39,000	U
4-Chloro-3-methylphenol	ug/kg	240 or MDL		450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
2-Methylnaphthalene	ug/kg	36,400		220	J	12,000		12,000	DJ	16	J	1,500	J	1,600	DJ
Hexachlorocyclopentadiene	ug/kg			450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
2,4,6-Trichlorophenol	ug/kg			450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
2,4,5-Trichlorophenol	ug/kg	100		1,100	U	9,600	U	96,000	U	920	U	9,500	U	48,000	U
Biphenyl	ug/kg			900	U	7,900	U	79,000	U	760	U	7,900	U	39,000	U
2-Chloronaphthalene	ug/kg			450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
2-Nitroaniline	ug/kg	430 or MDL		1,100	U	9,600	U	96,000	U	920	U	9,500	U	48,000	U
Dimethyl phthalate	ug/kg	2,000		450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
2,6-Dinitrotoluene	ug/kg	1,000		450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
Acenaphthylene	ug/kg	41,000		450	U	2,400	J	3,500	J	35	J	4,600		4,500	DJ
3-Nitroaniline	ug/kg	500 or MDL		1,100	U	9,600	U	96,000	U	920	U	9,500	U	48,000	U
Acenaphthene	ug/kg	50,000		110	J	11,000		11,000	DJ	24	J	2,800	J	3,400	DJ
2,4-Dinitrophenol	ug/kg	200 or MDL		1,100	U	9,600	U	96,000	U	920	U	9,500	U	48,000	U
4-Nitrophenol	ug/kg	100 or MDL		1,100	U	9,600	U	96,000	U	920	U	9,500	U	48,000	U
Dibenzofuran	ug/kg	6,200		74	J	17,000		16,000	DJ	22	J	4,600		5,000	DJ
2,4-Dinitrotoluene	ug/kg	1,000		450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
Diethyl phthalate	ug/kg	7,100		450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
Fluorene	ug/kg	50,000		240	J	28,000		26,000	DJ	25	J	5,800		5,600	DJ
4-Chlorophenyl phenyl ether	ug/kg			450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
4-Nitroaniline	ug/kg			1,100	U	9,600	U	96,000	U	920	U	9,500	U	48,000	U
4,6-Dinitro-2-methylphenol	ug/kg			1,100	U	9,600	U	96,000	U	920	U	9,500	U	48,000	U
N-nitrosodiphenylamine	ug/kg			190	J	4,000	U	40,000	U	380	U	3,900	U	20,000	U
4-Bromophenyl phenyl ether	ug/kg			450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
Hexachlorobenzene	ug/kg	410		450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
Atrazine	ug/kg			900	U	7,900	U	79,000	U	760	U	7,900	U	39,000	U
Pentachlorophenol	ug/kg	1000 or MDL		1,100	U	4,000	U	40,000	U	920	U	9,500	U	48,000	U
Phenanthrene	ug/kg	50,000		360	J	130,000		130,000	BD	470		68,000		68,000	D
Anthracene	ug/kg	50,000		35	J	30,000	J	3,000	DJ	70	J	7,100		7,500	DJ
Carbazole	ug/kg			450	U	6,000		6,500	DJ	45	J	3,400	J	3,600	DJ
Di-n-butyl phthalate	ug/kg	8,100		23	J	4,000	U	40,000	U	11	J	3,900	U	700	DJ
Fluoranthene	ug/kg	50,000		91	J	110,000		110,000	DJ	650		71,000		71,000	D

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 2 - Phase 1 Soil Data for Monitoring Wells and Geotechnical Borings

Sample ID ->	Units	TAGM 4046		LB-8		PB-3		PB-3 DL		PB-4		PB-7		PB-7 DL	
Depth - >		RSCO	Eastern USA	4 - 6		2 - 4		2 - 4		2 - 4		2 - 4		2 - 4	
Date Sampled ->			Background	11/9/2004		11/22/2004		11/22/2004		11/18/2004		11/19/2004		38310	
Pyrene	ug/kg	50,000		87	J	41,000		41,000	BD	510		53,000		53,000	D
Butyl benzyl phthalate	ug/kg	50,000		450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
3,3'-Dichlorobenzidine	ug/kg			450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
Benzo(a)anthracene	ug/kg	224 or MDL		34	J	40,000		40,000	DJ	260	J	20,000		19,000	DJ
Chrysene	ug/kg	400		42	J	32,000	J	33,000	DJ	300	J	23,000		23,000	D
Bis(2-ethylhexyl) phthalate	ug/kg			450	U	4,000	U	40,000	U	830	U	3,900	U	740	BDJ
Di-n-octyl phthalate	ug/kg	50,000		450	U	4,000	U	40,000	U	380	U	3,900	U	20,000	U
Benzo(b)fluoranthene	ug/kg	1,100		28	J	19,000	J	19,000	DJ	260	J	14,000	J	14,000	DJ
Benzo(k)fluoranthene	ug/kg	1,100		25	J	20,000	J	28,000	DJ	200	J	14,000	J	14,000	DJ
Benzo(a)pyrene	ug/kg	61 or MDL		30	J	15,000		13,000	DJ	250	J	21,000	J	18,000	DJ
Indeno(1,2,3-cd)pyrene	ug/kg	3,200		17	J	4,800		5,700	DJ	94	J	5,500	J	9,600	DJ
Dibenzo(a,h)anthracene	ug/kg	14 or MDL		450	U	3,600	J	3,600	DJ	33	J	2,400	J	4,400	DJ
Benzo(ghi)perylene	ug/kg	50,000		22	J	210	J	40,000	U	100	J	5,800	J	12,000	DJ
PESTICIDES/AROCLORS															
alpha-BHC	ug/kg	110		2.3	U	20	U			1.9	U	41	U	410	U
beta-BHC	ug/kg	200		2.3	U	20	U			1.9	U	41	U	410	U
delta-BHC	ug/kg	300		2.3	U	20	U			1.9	U	41	U	410	U
gamma-BHC (Lindane)	ug/kg	60		2.3	U	20	U			1.9	U	41	U	410	U
Heptachlor	ug/kg	100		2.3	U	8.0	JPN			1.9	U	10	JP	410	U
Aldrin	ug/kg	41		2.3	U	20	U			1.9	U	41	U	410	U
Heptachlor epoxide	ug/kg	20		2.3	U	20	U			1.9	U	41	U	410	U
Endosulfan I	ug/kg	900		2.3	U	20	U			3.8	U	79	U	410	U
Dieldrin	ug/kg	44		4.4	U	39	U			3.8	U	100	P	790	U
4,4'-DDE	ug/kg	2,100		4.4	U	39	U			3.8	U	79	U	790	U
Endrin	ug/kg	100		4.4	U	39	U			3.8	U	130	P	790	U
Endosulfan II	ug/kg	900		4.4	U	35	JP			3.8	U	84	P	790	U
4,4'-DDD	ug/kg	2,900		4.4	U	39	U			3.8	U	88	P	790	U
Endosulfan Sulfate	ug/kg	100		4.4	U	39	U			3.8	U	160		240	JP
4,4'-DDT	ug/kg	2,100		4.4	U	39	U			3.8	U	47	JP	790	U
Methoxychlor	ug/kg			23	U	200	U			7.4	J	110	JP	4100	U
Endrin ketone	ug/kg			4.4	U	39	U			9.5		380		790	U
Endrin aldehyde	ug/kg			4.4	U	39	U			3.8	U	79	U	790	U
alpha-Chlordane	ug/kg	540		2.3	U	25				1.9	U	41	U	410	U
gamma-Chlordane	ug/kg	540		2.3	U	28	U			1.9	U	41	U	410	U
Toxaphene	ug/kg			230	U	2,000	U			190	U	790	U	41000	U
Aroclor 1016	ug/kg	1,000 - surface soils, 10,000 - subsurface soils		44	U	390	U			38	U	1,600	U	7900	U
Aroclor 1221	ug/kg			89	U	800	U			77	U	790	U	16000	U
Aroclor 1232	ug/kg			44	U	390	U			38	U	790	U	7900	U
Aroclor 1242	ug/kg			44	U	390	U			38	U	790	U	7900	U
Aroclor 1248	ug/kg			44	U	390	U			38	U	790	U	7900	U
Aroclor 1254	ug/kg			44	U	390	U			38	U	790	U	7900	U
Aroclor 1260	ug/kg			44	U	390	U			38	U	790	U	7900	U
INORGANICS															
Aluminum	mg/kg	SB	33000	2,960	J	6,110				2,990	E	3,530			
Antimony	mg/kg	SB		0.63	NU*J	2.1	BN*J			8.1	NJ	2.5	BNJ		
Arsenic	mg/kg	7.5 or SB	3 - 12	2.5	N*J	7.8	N*J			55.5		6.4	N		
Barium	mg/kg	300 or SB	15 - 600	58.6	N*J	77.7				68.2	E	38.6			
Beryllium	mg/kg	0.16 or SB	0 - 1.75	0.18	BN*J	0.62				0.72		0.52	B		
Cadmium	mg/kg	1 or SB	0.1 - 1	0.03	NU*J	0.24	BN*			0.03	U	0.04	U		
Calcium	mg/kg	SB	130 - 35,000	141,000	EJ	112,000				42,900	E	97,500			
Chromium	mg/kg	10 or SB	1.5 - 40	4.6	N*J	13.6	N*			43.7	E	19.0			

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Table 2 - Phase 1 Soil Data for Monitoring Wells and Geotechnical Borings

Sample ID ->	Units	TAGM 4046		LB-8		PB-3		PB-3 DL		PB-4		PB-7		PB-7 DL	
Depth - >		RSCO	Eastern USA	4 - 6		2 - 4		2 - 4		2 - 4		2 - 4		2 - 4	
Date Sampled ->			Background	11/9/2004		11/22/2004		11/22/2004		11/18/2004		11/19/2004		38310	
Cobalt	mg/kg	30 or SB	2.5 - 60	1.8	BN*J	5.0	B*			11.2		4.7	B		
Copper	mg/kg	25 or SB	1 - 50	4.3	N*J	62.8	N*			91.7	EN	21.7	N		
Iron	mg/kg	2,000 or SB	2,000 - 550,000	10,400	J	24,000				188,000	E	82,000			
Lead	mg/kg	SB	200 - 500	6.3	NJ	141				110	E	29.6			
Magnesium	mg/kg	SB	100 - 5,000	2,240	J	16,900				1,460	E	4,060			
Manganese	mg/kg	SB	50 - 5,000	122	N*J	523	N*J			735	EJ	983	NJ		
Mercury	mg/kg	0.1	0.001 - 0.2	0.026	U	0.203	J			0.026	U	0.078	N*		
Nickel	mg/kg	13 or SB	0.5 - 25	4.1	BN*J	22.0				22.3	E	9.6			
Potassium	mg/kg	SB	8,500 - 43,000	642	BEJ	1,360				565		452	B		
Selenium	mg/kg	2 or SR	0.1 - 3.9	0.71	BN*J	0.55	U			0.48	U	0.58	U		
Silver	mg/kg	SB		0.14	NU*J	0.14	BN*J			0.27	B	0.08	U		
Sodium	mg/kg	SB	6,000 - 8,000	96.4	BJ	384	B			114	B	154	B		
Thallium	mg/kg	SB		2.1	N*J	0.56	U			0.49	U	0.59	U		
Vanadium	mg/kg	150 or SB	1 - 300	9.1	N*J	16.5				82.0	E	35.6			
Zinc	mg/kg	20 or SB	9 - 50	21.8	N*J	140				52.4	E	62.7			
WET CHEMISTRY ANALYSIS															
Cyanide - Total	ug/kg			4,000	U	4,000	UJ			4000	U	4000	U		
Leachable pH	S.U.			7.77		8.21				7.15		7.38			

Pioneer Midler Avenue LLC
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Table 2 - Phase 1 Soil Data for Monitoring Wells and Geotechnical Borings

Sample ID ->	Units	TAGM 4046		PB-12		MW-1		MW-2		MW-3		MW-4	
Depth - >		RSCO	Eastern USA	18 - 20		4 - 6		2 - 4		2 - 4		2 - 4	
Date Sampled ->			Background	11/24/2004		11/17/2004		11/18/2004		11/18/2004		11/17/2004	
VOLATILES	ug/kg												
Chloromethane	ug/kg			17	UJ	11	UJ	12	U	14	UJ	14	UJ
Bromomethane	ug/kg			17	UJ	11	U	12	U	14	U	14	U
Vinyl chloride	ug/kg	200		17	UJ	11	U	12	U	14	U	14	U
Chloroethane	ug/kg	1,900		17	UJ	11	U	12	U	14	U	14	U
Methylene chloride	ug/kg	100		**13**	**J**	11	U	12	U	14	U	14	U
Acetone	ug/kg	200		**8**	**J**	**10**	**J**	12	U	14	U	**40**	
Carbon disulfide	ug/kg	2,700		17	UJ	11	U	12	U	14	U	14	U
1,1-Dichloroethene	ug/kg	400		17	UJ	11	U	12	U	14	U	14	U
1,1-Dichloroethane	ug/kg	200		17	UJ	11	U	12	U	14	U	14	U
Chloroform	ug/kg	300		17	UJ	11	U	12	U	14	U	14	U
1,2-Dichloroethane	ug/kg	100		17	UJ	11	U	12	U	14	U	14	U
2-Butanone	ug/kg	300		17	UJ	11	U	12	U	14	U	**8**	**J**
1,1,1-Trichloroethane	ug/kg	800		17	UJ	11	U	12	U	14	U	14	U
Carbon tetrachloride	ug/kg	600		17	UJ	11	U	12	U	14	U	14	U
Bromodichloromethane	ug/kg			17	UJ	11	U	12	U	14	U	14	U
1,2-Dichloropropane	ug/kg			17	UJ	11	U	12	U	14	U	14	U
cis-1,3-Dichloropropene	ug/kg			17	UJ	11	U	12	U	14	U	14	U
Trichloroethene	ug/kg	700		17	UJ	11	U	12	U	14	U	14	U
Dibromochloromethane	ug/kg			17	UJ	11	U	12	U	14	U	14	U
1,1,2-Trichloroethane	ug/kg			17	UJ	11	U	12	U	14	U	14	U
Benzene	ug/kg	60 or MDL		17	UJ	11	U	12	U	14	U	14	U
trans-1,3-Dichloropropene	ug/kg			17	UJ	11	U	12	U	14	U	14	U
Bromoform	ug/kg			17	UJ	11	U	12	U	14	U	14	U
4-Methyl-2-pentanone	ug/kg	1,000		17	UJ	11	U	12	U	14	U	14	U
2-Hexanone	ug/kg			17	UJ	11	U	12	U	14	U	14	U
Tetrachloroethene	ug/kg	1,400		17	UJ	11	U	12	U	**46**		14	U
Toluene	ug/kg	1,500		17	UJ	11	U	12	U	**14**		14	U
1,1,2,2-Tetrachloroethane	ug/kg	600		17	UJ	11	U	12	U	14	U	14	U
Chlorobenzene	ug/kg	1,700		17	UJ	11	U	12	U	14	U	14	U
Ethylbenzene	ug/kg	5,500		17	UJ	11	U	12	U	**9**	**J**	14	U
Styrene	ug/kg			17	UJ	11	U	12	U	14	U	14	U
Total xylenes	ug/kg	1,200		17	UJ	11	U	12	U	**48**		14	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000		17	UJ	11	U	12	U	14	U	14	U
cis-1,2-Dichloroethene	ug/kg			17	UJ	11	U	12	U	14	U	14	U
trans-1,2-Dichloroethene	ug/kg	300		17	UJ	11	U	12	U	14	U	14	U
Dichlorodifluoromethane	ug/kg			17	UJ	11	U	12	U	14	U	14	U
Trichlorofluoromethane	ug/kg			17	UJ	11	U	12	U	14	U	14	U
Methyl acetate	ug/kg			17	UJ	11	U	12	UJ	14	U	14	U
Methyl tert butyl ether	ug/kg	120		17	UJ	11	U	12	U	14	U	14	U
Cyclohexane	ug/kg			17	UJ	11	U	12	U	14	U	14	U
Methylcyclohexane	ug/kg			17	UJ	11	U	12	U	6	J	14	U
1,2-Dibromoethane	ug/kg			17	UJ	11	U	12	U	14	U	14	U
Isopropylbenzene	ug/kg			17	UJ	11	U	12	U	14	U	14	U
1,3-Dichlorobenzene	ug/kg	1,600		17	UJ	11	U	12	U	14	U	14	U
1,4-Dichlorobenzene	ug/kg	8,500		17	UJ	11	U	12	U	14	U	14	U
1,2-Dichlorobenzene	ug/kg	7,900		17	UJ	11	U	12	U	14	U	14	U
1,2-Dibromo-3-chloropropane	ug/kg			17	UJ	11	U	12	U	14	U	14	U
1,2,4-Trichlorobenzene	ug/kg	3,400		17	UJ	11	UJ	12	UJ	14	UJ	14	UJ
SEMIVOLATILES													
Benzaldehyde	ug/kg			1,100	UJ	3,800	U	750	U	4,700	U	8,900	U

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Table 2 - Phase 1 Soil Data for Monitoring Wells and Geotechnical Borings

Sample ID ->	Units	TAGM 4046		PB-12		MW-1		MW-2		MW-3		MW-4	
Depth - >		RSCO	Eastern USA	18 - 20		4 - 6		2 - 4		2 - 4		2 - 4	
Date Sampled ->			Background	11/24/2004		11/17/2004		11/18/2004		11/18/2004		11/17/2004	
Phenol	ug/kg	30 or MDL		550	UJ	1,900	U	380	U	2,300	U	4,500	U
Bis(2-chloroethyl) ether	ug/kg			550	UJ	1,900	U	380	U	2,300	U	4,500	U
2-Chlorophenol	ug/kg	800		550	UJ	1,900	U	380	U	2,300	U	4,500	U
2-Methylphenol	ug/kg	100 or MDL		550	UJ	1,900	U	380	U	2,300	U	4,500	U
2,2'-Oxybis(1-Chloropropane)	ug/kg			550	UJ	1,900	U	380	U	2,300	U	4,500	U
Acetophenone	ug/kg			1,100	UJ	3,800	U	750	U	4,700	U	8,900	U
4-Methylphenol	ug/kg	900		550	UJ	1,900	U	380	U	2,300	U	4,500	U
N-Nitroso-Di-n-propylamine	ug/kg			550	UJ	1,900	U	380	U	2,300	U	4,500	U
Hexachloroethane	ug/kg			550	UJ	1,900	U	380	U	2,300	U	4,500	U
Nitrobenzene	ug/kg	200 or MDL		550	UJ	1,900	U	380	U	2,300	U	4,500	U
Isophorone	ug/kg	4400		550	UJ	1,900	U	380	U	2,300	U	4,500	U
2-Nitrophenol	ug/kg	330 or MDL		550	UJ	1,900	U	380	U	2,300	U	4,500	U
2,4-Dimethylphenol	ug/kg			550	UJ	1,900	U	380	U	2,300	U	4,500	U
Bis(2-chloroethoxy) methane	ug/kg			550	UJ	1,900	U	380	U	2,300	U	4,500	U
2,4-Dichlorophenol	ug/kg	400		550	UJ	1,900	U	380	U	2,300	U	4,500	U
Naphthalene	ug/kg	1,300		550	UJ	1,900	U	380	U	**260**	**J**	**490**	**J**
4-Chloroaniline	ug/kg	220 or MDL		550	UJ	1,900	U	380	U	2,300	U	4,500	U
Hexachlorobutadiene	ug/kg			550	UJ	1,900	U	380	U	2,300	U	4,500	U
Caprolactam	ug/kg			1,100	UJ	3,800	U	750	U	4,700	U	8,900	U
4-Chloro-3-methylphenol	ug/kg	240 or MDL		550	UJ	1,900	U	380	U	2,300	U	4,500	U
2-Methylnaphthalene	ug/kg	36,400		550	UJ	1,900	U	380	U	**83**	**J**	**200**	**J**
Hexachlorocyclopentadiene	ug/kg			550	UJ	1,900	U	380	U	2,300	U	4,500	U
2,4,6-Trichlorophenol	ug/kg			550	UJ	1,900	U	380	U	2,300	U	4,500	U
2,4,5-Trichlorophenol	ug/kg	100		1,300	UJ	4,500	U	910	U	5,700	U	11,000	U
Biphenyl	ug/kg			1,100	UJ	3,800	U	750	U	4,700	U	8,900	U
2-Chloronaphthalene	ug/kg			550	UJ	1,900	U	380	U	2,300	U	4,500	U
2-Nitroaniline	ug/kg	430 or MDL		1,300	UJ	4,500	U	910	U	5,700	U	11,000	U
Dimethyl phthalate	ug/kg	2,000		550	UJ	1,900	U	380	U	2,300	U	4,500	U
2,6-Dinitrotoluene	ug/kg	1,000		550	UJ	1,900	U	380	U	2,300	U	4,500	U
Acenaphthylene	ug/kg	41,000		550	UJ	1,900	U	380	U	**95**	**J**	**1,500**	**J**
3-Nitroaniline	ug/kg	500 or MDL		1,300	UJ	4,500	U	910	U	5,700	U	11,000	U
Acenaphthene	ug/kg	50,000		550	UJ	1,900	U	380	U	**160**	**J**	**510**	**J**
2,4-Dinitrophenol	ug/kg	200 or MDL		1,300	UJ	4,500	U	910	U	5,700	U	4,500	U
4-Nitrophenol	ug/kg	100 or MDL		1,300	UJ	4,500	U	910	U	5,700	U	4,500	U
Dibenzofuran	ug/kg	6,200		550	UJ	1,900	U	380	U	**120**	**J**	**400**	**J**
2,4-Dinitrotoluene	ug/kg	1,000		550	UJ	1,900	U	380	U	2,300	U	4,500	U
Diethyl phthalate	ug/kg	7,100		550	UJ	1,900	U	380	U	2,300	U	4,500	U
Fluorene	ug/kg	50,000		550	UJ	1,900	U	380	U	**190**	**J**	**1,000**	**J**
4-Chlorophenyl phenyl ether	ug/kg			550	UJ	1,900	U	380	U	2,300	U	4,500	U
4-Nitroaniline	ug/kg			1,300	UJ	4,500	U	910	U	5,700	U	11,000	U
4,6-Dinitro-2-methylphenol	ug/kg			1,300	UJ	4,500	U	910	U	5,700	U	11,000	U
N-nitrosodiphenylamine	ug/kg			550	UJ	1,900	U	380	U	2,300	U	4,500	U
4-Bromophenyl phenyl ether	ug/kg			550	UJ	1,900	U	380	U	2,300	U	4,500	U
Hexachlorobenzene	ug/kg	410		550	UJ	1,900	U	380	U	2,300	U	4,500	U
Atrazine	ug/kg			1,100	UJ	3,800	U	750	U	4,700	U	8,900	U
Pentachlorophenol	ug/kg	1000 or MDL		1,300	UJ	4,500	U	910	U	5,700	U	11,000	U
Phenanthrene	ug/kg	50,000		550	UJ	**300**	**J**	**22**	**J**	**2,100**	**J**	**9,700**	
Anthracene	ug/kg	50,000		550	UJ	**60**	**J**	380	U	**320**	**J**	**2,300**	**J**
Carbazole	ug/kg			550	UJ	1,900	U	380	U	**240**	**J**	**980**	**J**
Di-n-butyl phthalate	ug/kg	8,100		65	J	1,900	U	380	U	2,300	U	**20,000**	
Fluoranthene	ug/kg	50,000		550	UJ	**400**	**J**	**44**	**J**	**2,200**	**J**	**13,000**	

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Table 2 - Phase 1 Soil Data for Monitoring Wells and Geotechnical Borings

Sample ID ->	Units	TAGM 4046		PB-12		MW-1		MW-2		MW-3		MW-4	
Depth - >		RSCO	Eastern USA	18 - 20		4 - 6		2 - 4		2 - 4		2 - 4	
Date Sampled ->			Background	11/24/2004		11/17/2004		11/18/2004		11/18/2004		11/17/2004	
Pyrene	ug/kg	50,000		550	UJ	**280**	**J**	**37**	**J**	2,300	U	4,500	U
Butyl benzyl phthalate	ug/kg	50,000		550	UJ	1,900	U	380	U	2,300	U	4,500	U
3,3'-Dichlorobenzidine	ug/kg			550	UJ	1,900	U	380	U	2,300	U	4,500	U
Benzo(a)anthracene	ug/kg	224 or MDL		550	UJ	**160**	**J**	**26**	**J**	**1,300**	**J**	**8,300**	
Chrysene	ug/kg	400		550	UJ	**170**	**J**	**30**	**J**	**1,400**	**J**	**370**	**BJ**
Bis(2-ethylhexyl) phthalate	ug/kg			550	UJ	1,900	U	380	U	2,300	U	4,500	U
Di-n-octyl phthalate	ug/kg	50,000		550	UJ	1,900	U	**12**	**J**	2,300	U	4,500	U
Benzo(b)fluoranthene	ug/kg	1,100		550	UJ	**140**	**J**	**23**	**J**	**1,400**	**J**	**17,000**	**J**
Benzo(k)fluoranthene	ug/kg	1,100		550	UJ	**150**	**J**	**23**	**J**	**940**	**J**	**9,100**	**J**
Benzo(a)pyrene	ug/kg	61 or MDL		550	UJ	**150**	**J**	**24**	**J**	**1,200**	**J**	**7,100**	
Indeno(1,2,3-cd)pyrene	ug/kg	3,200		550	UJ	**52**	**J**	**10**	**J**	**400**	**J**	**2,800**	**J**
Dibenzo(a,h)anthracene	ug/kg	14 or MDL		550	UJ	1,900	U	380	U	**220**	**J**	**1,500**	**J**
Benzo(ghi)perylene	ug/kg	50,000		550	UJ	**66**	**J**	**12**	**J**	**420**	**J**	**2,900**	**J**
PESTICIDES/AROCLORS													
alpha-BHC	ug/kg	110		2.9	UJ	19	U	1.9	U	24	U	23	U
beta-BHC	ug/kg	200		2.9	UJ	19	U	1.9	U	24	U	23	U
delta-BHC	ug/kg	300		2.9	UJ	19	U	1.9	U	24	U	23	U
gamma-BHC (Lindane)	ug/kg	60		2.9	UJ	19	U	1.9	U	24	U	23	U
Heptachlor	ug/kg	100		2.9	UJ	19	U	1.9	U	24	U	23	U
Aldrin	ug/kg	41		2.9	UJ	19	U	1.9	U	24	U	23	U
Heptachlor epoxide	ug/kg	20		2.9	UJ	19	U	1.9	U	24	U	23	U
Endosulfan I	ug/kg	900		5.6	UJ	19	U	1.9	U	24	U	23	U
Dieldrin	ug/kg	44		5.6	UJ	38	U	3.8	U	47	U	73	U
4,4'-DDE	ug/kg	2,100		5.6	UJ	38	U	3.8	U	47	U	46	U
Endrin	ug/kg	100		5.6	UJ	38	U	3.8	U	47	U	46	U
Endosulfan II	ug/kg	900		5.6	UJ	38	U	3.8	U	47	U	46	U
4,4'-DDD	ug/kg	2,900		5.6	UJ	38	U	3.8	U	47	U	46	U
Endosulfan Sulfate	ug/kg	100		5.6	UJ	38	U	3.8	U	47	U	**38**	**J**
4,4'-DDT	ug/kg	2,100		5.6	UJ	38	U	3.8	U	47	U	46	U
Methoxychlor	ug/kg			29	UJ	190	U	3.8	U	240	U	230	U
Endrin ketone	ug/kg			5.6	UJ	38	U	3.8	U	47	U	**86**	
Endrin aldehyde	ug/kg			5.6	UJ	38	U	3.8	U	47	U	46	U
alpha-Chlordane	ug/kg	540		2.9	UJ	19	U	1.9	U	24	U	23	U
gamma-Chlordane	ug/kg	540		2.9	UJ	19	U	1.9	U	24	U	23	U
Toxaphene	ug/kg			290	UJ	1,900	U	190	U	2,400	U	2,300	U
Aroclor 1016	ug/kg	1,000 - surface soils, 10,000 - subsurface soils		56	UJ	380	U	38	U	470	U	460	U
Aroclor 1221	ug/kg			110	UJ	380	U	38	U	470	U	460	U
Aroclor 1232	ug/kg			56	UJ	380	U	38	U	470	U	460	U
Aroclor 1242	ug/kg			56	UJ	380	U	38	U	470	U	460	U
Aroclor 1248	ug/kg			56	UJ	380	U	38	U	470	U	460	U
Aroclor 1254	ug/kg			56	UJ	380	U	38	U	470	U	460	U
Aroclor 1260	ug/kg			56	UJ	380	U	38	U	470	U	460	U
INORGANICS													
Aluminum	mg/kg	SB	33000	50.1		6580	EJ	4670		5310	EJ	4840	EJ
Antimony	mg/kg	SB		0.62	N*J	1.7	BNJ	0.51	NJ	2.4	BNJ	1.0	BNJ
Arsenic	mg/kg	7.5 or SB	3 - 12	0.45	N*J	3.3		1.4	N	5.1		3.3	
Barium	mg/kg	300 or SB	15 - 600	27.1		64.0	EJ	21.1		32.0	EJ	37.8	BEJ
Beryllium	mg/kg	0.16 or SB	0 - 1.75	0.14		0.70		0.21	BJ	0.50	B	0.36	B
Cadmium	mg/kg	1 or SB	0.1 - 1	0.03	ND	0.04	U	0.03	U	0.04	U	0.06	U
Calcium	mg/kg	SB	130 - 35,000	339,000		106000	EJ	14600		72700	EJ	15200	EJ
Chromium	mg/kg	10 or SB	1.5 - 40	0.11	BN*J	14.2	EJ	5.5		12.3	EJ	14.8	EJ

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Table 2 - Phase 1 Soil Data for Monitoring Wells and Geotechnical Borings

Sample ID ->	Units	TAGM 4046		PB-12		MW-1		MW-2		MW-3		MW-4	
Depth - >		RSCO	Eastern USA	18 - 20		4 - 6		2 - 4		2 - 4		2 - 4	
Date Sampled ->			Background	11/24/2004		11/17/2004		11/18/2004		11/18/2004		11/17/2004	
Cobalt	mg/kg	30 or SB	2.5 - 60	0.07	N	3.1	B	2.1	BJ	5.0	B	1.9	B
Copper	mg/kg	25 or SB	1 - 50	0.38	B*	17.1	ENJ	3.8	N	373	ENJ	38.3	ENJ
Iron	mg/kg	2,000 or SB	2,000 - 550,000	194		27300	EJ	7350		31600	EJ	14900	EJ
Lead	mg/kg	SB	200 - 500	0.16	NJ	90.4	EJ	0.08		109	EJ	39.8	EJ
Magnesium	mg/kg	SB	100 - 5,000	1,800		5600	EJ	2550		11400	EJ	1540	EJ
Manganese	mg/kg	SB	50 - 5,000	38.5		1040	E*J	157	NJ	364	E*J	456	E*J
Mercury	mg/kg	0.1	0.001 - 0.2	0.036	N	0.092	N*	0.026	N*	0.055	BN*	0.104	N*
Nickel	mg/kg	13 or SB	0.5 - 25	2.2		7.8	EJ	4.2		13.8	EJ	9.7	EJ
Potassium	mg/kg	SB	8,500 - 43,000	54.6		1060		979		943		693	B
Selenium	mg/kg	2 or SR	0.1 - 3.9	0.4	N	0.66	U	0.61	BJ	0.54	U	0.96	U
Silver	mg/kg	SB		0.13	N	0.09	U	0.07	U	0.14	B	0.13	U
Sodium	mg/kg	SB	6,000 - 8,000	153		215	B	153	BJ	289	B	102	B
Thallium	mg/kg	SB		0.37	N	0.67	UJ	0.52	U	0.56	UJ	0.98	UJ
Vanadium	mg/kg	150 or SB	1 - 300	0.10	BN*J	21.4	EJ	10.3		17.3	EJ	18.7	EJ
Zinc	mg/kg	20 or SB	9 - 50	2.8		27.2	E*J	19.1		180	E*J	70.3	E*J
WET CHEMISTRY ANALYSIS													
Cyanide - Total	ug/kg			4000	UJ	4000	U	4000	U	4000	U	4000	U
Leachable pH	S.U.			7.08	J	7.50		8.30		7.66		7.45	

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Sample ID ->	Units	TAGM 4046		MW-5		MW-6		MW-7		MW-7 RI		MW-8	
Depth - >		RSCO	Eastern USA	2 - 4		4 - 7		4 - 6		4 - 6		2 - 5	
Date Sampled ->			Background	11/17/2004		11/16/2004		11/16/2004		11/16/2004		11/18/2004	
VOLATILES	ug/kg												
Chloromethane	ug/kg			12	UJ	13	UJ	11	UJ			18	UJ
Bromomethane	ug/kg			12	U	13	U	11	U			18	U
Vinyl chloride	ug/kg	200		12	U	13	U	11	U			18	U
Chloroethane	ug/kg	1,900		12	U	13	U	11	U			18	U
Methylene chloride	ug/kg	100		12	U	13	U	11	U			18	U
Acetone	ug/kg	200		**8**	**J**	**13**		**23**				18	U
Carbon disulfide	ug/kg	2,700		12	U	13	U	11	U			18	U
1,1-Dichloroethene	ug/kg	400		12	U	13	U	11	U			18	U
1,1-Dichloroethane	ug/kg	200		12	U	13	U	11	U			18	U
Chloroform	ug/kg	300		12	U	13	U	11	U			18	U
1,2-Dichloroethane	ug/kg	100		12	U	13	U	11	U			18	U
2-Butanone	ug/kg	300		12	U	13	U	11	U			18	U
1,1,1-Trichloroethane	ug/kg	800		12	U	13	U	11	U			18	U
Carbon tetrachloride	ug/kg	600		12	U	13	U	11	U			18	U
Bromodichloromethane	ug/kg			12	U	13	U	11	U			18	U
1,2-Dichloropropane	ug/kg			12	U	13	U	11	U			18	U
cis-1,3-Dichloropropene	ug/kg			12	U	13	U	11	U			18	U
Trichloroethene	ug/kg	700		12	U	13	U	11	UJ			18	U
Dibromochloromethane	ug/kg			12	U	13	U	11	U			18	U
1,1,2-Trichloroethane	ug/kg			12	U	13	U	11	U			18	U
Benzene	ug/kg	60 or MDL		12	U	13	U	11	U			18	U
trans-1,3-Dichloropropene	ug/kg			12	U	13	U	11	U			18	U
Bromoform	ug/kg			12	U	13	U	11	U			18	U
4-Methyl-2-pentanone	ug/kg	1,000		12	U	13	U	11	U			18	U
2-Hexanone	ug/kg			12	U	13	U	11	U			18	U
Tetrachloroethene	ug/kg	1,400		10	J	13	U	11	U			18	U
Toluene	ug/kg	1,500		12	U	13	U	11	U			18	U
1,1,2,2-Tetrachloroethane	ug/kg	600		12	U	13	U	11	U			18	U
Chlorobenzene	ug/kg	1,700		12	U	13	U	11	UJ			18	U
Ethylbenzene	ug/kg	5,500		12	U	13	U	11	U			18	U
Styrene	ug/kg			12	U	13	U	11	U			18	U
Total xylenes	ug/kg	1,200		12	U	13	U	11	U			18	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000		12	U	13	U	11	U			18	U
cis-1,2-Dichloroethene	ug/kg			12	U	13	U	11	U			18	U
trans-1,2-Dichloroethene	ug/kg	300		12	U	13	U	11	U			18	U
Dichlorodifluoromethane	ug/kg			12	U	13	U	11	U			18	U
Trichlorofluoromethane	ug/kg			12	U	13	U	11	U			18	U
Methyl acetate	ug/kg			12	U	13	U	11	U			18	U
Methyl tert butyl ether	ug/kg	120		12	U	13	U	11	U			18	U
Cyclohexane	ug/kg			12	U	13	U	11	U			18	U
Methylcyclohexane	ug/kg			12	U	13	U	11	U			18	U
1,2-Dibromoethane	ug/kg			12	U	13	U	11	U			18	U
Isopropylbenzene	ug/kg			12	U	13	U	11	U			18	U
1,3-Dichlorobenzene	ug/kg	1,600		12	U	13	U	11	U			18	U
1,4-Dichlorobenzene	ug/kg	8,500		12	U	13	U	11	U			18	U
1,2-Dichlorobenzene	ug/kg	7,900		12	U	13	U	11	U			18	U
1,2-Dibromo-3-chloropropane	ug/kg			12	U	13	U	11	U			18	U
1,2,4-Trichlorobenzene	ug/kg	3,400		12	UJ	13	UJ	11	UJ			18	UJ
SEMIVOLATILES													
Benzaldehyde	ug/kg			750	U	970	U	3,700	U	3,700	U	1,100	U

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Table 2 - Phase 1 Soil Data for Monitoring Wells and Geotechnical Borings

Sample ID ->	Units	TAGM 4046		MW-5		MW-6		MW-7		MW-7 RI		MW-8	
Depth - >		RSCO	Eastern USA	2 - 4		4 - 7		4 - 6		4 - 6		2 - 5	
Date Sampled ->			Background	11/17/2004		11/16/2004		11/16/2004		11/16/2004		11/18/2004	
Phenol	ug/kg	30 or MDL		370	U	480	U	1,800	U	1,800	U	560	U
Bis(2-chloroethyl) ether	ug/kg			370	U	480	U	1,800	U	1,800	U	560	U
2-Chlorophenol	ug/kg	800		370	U	480	U	1,800	U	1,800	U	560	U
2-Methylphenol	ug/kg	100 or MDL		370	U	480	U	1,800	U	1,800	U	560	U
2,2'-Oxybis(1-Chloropropane)	ug/kg			370	U	480	U	1,800	U	1,800	U	560	U
Acetophenone	ug/kg			750	U	970	U	3,700	U	3,700	U	1,100	U
4-Methylphenol	ug/kg	900		370	U	480	U	1,800	U	1,800	U	560	U
N-Nitroso-Di-n-propylamine	ug/kg			370	U	480	U	1,800	U	1,800	U	560	U
Hexachloroethane	ug/kg			370	U	480	U	1,800	U	1,800	U	560	U
Nitrobenzene	ug/kg	200 or MDL		370	U	480	U	1,800	U	1,800	U	560	U
Isophorone	ug/kg	4400		370	U	480	U	1,800	U	1,800	U	560	U
2-Nitrophenol	ug/kg	330 or MDL		370	U	480	U	1,800	U	1,800	U	560	U
2,4-Dimethylphenol	ug/kg			370	U	480	U	1,800	U	1,800	U	560	U
Bis(2-chloroethoxy) methane	ug/kg			370	U	480	U	1,800	U	1,800	U	560	U
2,4-Dichlorophenol	ug/kg	400		370	U	480	U	1,800	U	1,800	U	560	U
Naphthalene	ug/kg	1,300		**28**	**J**	480	U	1,800	U	1,800	U	560	U
4-Chloroaniline	ug/kg	220 or MDL		370	U	480	U	1,800	U	1,800	U	560	U
Hexachlorobutadiene	ug/kg			370	U	480	U	1,800	U	1,800	U	560	U
Caprolactam	ug/kg			750	U	970	U	3,700	U	3,700	U	1,100	U
4-Chloro-3-methylphenol	ug/kg	240 or MDL		370	U	480	U	1,800	U	1,800	U	560	U
2-Methylnaphthalene	ug/kg	36,400		**12**	**J**	480	U	1,800	U	1,800	U	560	U
Hexachlorocyclopentadiene	ug/kg			370	U	480	U	1,800	U	1,800	U	560	U
2,4,6-Trichlorophenol	ug/kg			370	U	480	U	1,800	U	1,800	U	560	U
2,4,5-Trichlorophenol	ug/kg	100		910	U	1,200	U	4,500	U	4,500	U	1,400	U
Biphenyl	ug/kg			750	U	970	U	3,700	U	3,700	U	1,100	U
2-Chloronaphthalene	ug/kg			370	U	480	U	1,800	U	1,800	U	560	U
2-Nitroaniline	ug/kg	430 or MDL		910	U	1,200	U	4,500	U	4,500	U	1,400	U
Dimethyl phthalate	ug/kg	2,000		370	U	480	U	1,800	U	1,800	U	560	U
2,6-Dinitrotoluene	ug/kg	1,000		370	U	480	U	1,800	U	1,800	U	560	U
Acenaphthylene	ug/kg	41,000		**12**	**J**	480	U	1,800	U	1,800	U	560	U
3-Nitroaniline	ug/kg	500 or MDL		910	U	1,200	U	4,500	U	4,500	U	1,400	U
Acenaphthene	ug/kg	50,000		**37**	**J**	480	U	1,800	U	1,800	U	560	U
2,4-Dinitrophenol	ug/kg	200 or MDL		910	U	1,200	U	4,500	U	4,500	U	1,400	U
4-Nitrophenol	ug/kg	100 or MDL		910	U	1,200	U	4,500	U	4,500	U	1,400	U
Dibenzofuran	ug/kg	6,200		370	U	480	U	1,800	U	1,800	U	560	U
2,4-Dinitrotoluene	ug/kg	1,000		**22**	**J**	480	U	1,800	U	1,800	U	560	U
Diethyl phthalate	ug/kg	7,100		370	U	480	U	1,800	U	1,800	U	560	U
Fluorene	ug/kg	50,000		**35**	**J**	480	U	1,800	U	1,800	U	560	U
4-Chlorophenyl phenyl ether	ug/kg			370	U	480	U	1,800	U	1,800	U	560	U
4-Nitroaniline	ug/kg			910	U	1,200	U	4,500	U	4,500	U	1,400	U
4,6-Dinitro-2-methylphenol	ug/kg			910	U	1,200	U	4,500	U	4,500	U	1,400	U
N-nitrosodiphenylamine	ug/kg			370	U	480	U	1,800	U	1,800	U	560	U
4-Bromophenyl phenyl ether	ug/kg			370	U	480	U	1,800	U	1,800	U	560	U
Hexachlorobenzene	ug/kg	410		370	U	480	U	1,800	U	1,800	U	560	U
Atrazine	ug/kg			750	U	970	U	3,700	U	3,700	U	1,100	U
Pentachlorophenol	ug/kg	1000 or MDL		910	U	1,200	U	4,500	U	4,500	U	1,400	U
Phenanthrene	ug/kg	50,000		**64**	**J**	**38**	**J**	**150**	**J**	**150**	**J**	**130**	**J**
Anthracene	ug/kg	50,000		**53**	**J**	480	U	1,800	U	1,800	U	**23**	**J**
Carbazole	ug/kg			**13**	**J**	480	U	1,800	U	1,800	U	**16**	**J**
Di-n-butyl phthalate	ug/kg	8,100		**560**		480	U	1,800	U	1,800	U	**44**	**J**
Fluoranthene	ug/kg	50,000		**470**		**61**	**J**	**240**	**J**	**280**	**J**	**160**	**J**

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Table 2 - Phase 1 Soil Data for Monitoring Wells and Geotechnical Borings

Sample ID ->	Units	TAGM 4046		MW-5		MW-6		MW-7		MW-7 RI		MW-8	
Depth - >		RSCO	Eastern USA Background	2 - 4		4 - 7		4 - 6		4 - 6		2 - 5	
Date Sampled ->				11/17/2004		11/16/2004		11/16/2004		11/16/2004		11/18/2004	
Pyrene	ug/kg	50,000		370	U	**58**	**J**	**180**	**J**	**150**	**J**	**140**	**J**
Butyl benzyl phthalate	ug/kg	50,000		370	U	480	U	1,800	U	1,800	U	560	U
3,3'-Dichlorobenzidine	ug/kg			370	U	480	U	1,800	U	1,800	U	560	U
Benzo(a)anthracene	ug/kg	224 or MDL		**220**	**J**	**36**	**J**	**120**	**J**	**120**	**J**	**71**	**J**
Chrysene	ug/kg	400		**240**	**J**	**41**	**J**	**140**	**J**	**140**	**J**	**79**	**J**
Bis(2-ethylhexyl) phthalate	ug/kg			370	U	480	U	1,800	U	**49**	**BJ**	560	U
Di-n-octyl phthalate	ug/kg	50,000		**10**	**J**	**15**	**J**	1,800	U	1,800	U	560	U
Benzo(b)fluoranthene	ug/kg	1,100		**240**	**J**	**32**	**J**	**130**	**J**	**110**	**J**	**58**	**J**
Benzo(k)fluoranthene	ug/kg	1,100		**140**	**J**	**31**	**J**	**91**	**J**	**110**	**J**	**53**	**J**
Benzo(a)pyrene	ug/kg	61 or MDL		**210**	**J**	**34**	**J**	**120**	**J**	**110**	**J**	**57**	**J**
Indeno(1,2,3-cd)pyrene	ug/kg	3,200		**120**	**J**	**21**	**J**	**51**	**J**	1,800	U	**35**	**J**
Dibenzo(a,h)anthracene	ug/kg	14 or MDL		**58**	**J**	480	U	1,800	U	1,800	U	**19**	**J**
Benzo(ghi)perylene	ug/kg	50,000		**140**	**J**	**26**	**J**	**72**	**J**	**48**	**J**	**43**	**J**
PESTICIDES/AROCLORS													
alpha-BHC	ug/kg	110		1.9	U	2.5	U	19	U			2.9	U
beta-BHC	ug/kg	200		1.9	U	2.5	U	19	U			2.9	U
delta-BHC	ug/kg	300		1.9	U	2.5	U	19	U			2.9	U
gamma-BHC (Lindane)	ug/kg	60		1.9	U	**0.76**	**JP**	19	U			2.9	U
Heptachlor	ug/kg	100		1.9	U	2.5	U	19	U			2.9	U
Aldrin	ug/kg	41		1.9	U	2.5	U	19	U			2.9	U
Heptachlor epoxide	ug/kg	20		1.9	U	2.5	U	19	U			2.9	U
Endosulfan I	ug/kg	900		1.90	U	2.5	U	19	U			2.9	U
Dieldrin	ug/kg	44		3.7	U	4.8	U	37	U			5.6	U
4,4'-DDE	ug/kg	2,100		3.7	U	4.8	U	37	U			5.6	U
Endrin	ug/kg	100		3.7	U	4.8	U	37	U			5.6	U
Endosulfan II	ug/kg	900		3.7	U	4.8	U	37	U			5.6	U
4,4'-DDD	ug/kg	2,900		3.7	U	4.8	U	37	U			5.6	U
Endosulfan Sulfate	ug/kg	100		3.7	U	4.8	U	37	U			5.6	U
4,4'-DDT	ug/kg	2,100		3.7	U	4.8	U	37	U			5.6	U
Methoxychlor	ug/kg			3.7	U	25	U	190	U			**8.4**	**JP**
Endrin ketone	ug/kg			3.7	U	4.8	U	37	U			6.5	PJ
Endrin aldehyde	ug/kg			3.7	U	4.8	U	37	U			5.6	U
alpha-Chlordane	ug/kg	540		1.9	U	2.5	U	19	U			2.9	U
gamma-Chlordane	ug/kg	540		1.9	U	2.5	U	19	U			2.9	U
Toxaphene	ug/kg			190	U	250	U	1,900	U			290	U
Aroclor 1016	ug/kg	1,000 - surface soils, 10,000 - subsurface soils		37	U	48	U	370	U			56	U
Aroclor 1221	ug/kg			37	U	48	U	370	U			56	U
Aroclor 1232	ug/kg			37	U	48	U	370	U			56	U
Aroclor 1242	ug/kg			37	U	48	U	370	U			56	U
Aroclor 1248	ug/kg			37	U	48	U	370	U			56	U
Aroclor 1254	ug/kg			37	U	48	U	370	U			56	U
Aroclor 1260	ug/kg			37	U	48	U	370	U			56	U
INORGANICS													
Aluminum	mg/kg	SB	33000	5550	EJ	6140	EJ	4540	E			33400	E
Antimony	mg/kg	SB		0.6	BNJ	1.5	BNJ	1.7	BNJ			1.5	BNJ
Arsenic	mg/kg	7.5 or SB	3 - 12	2.2		4.5		5.4				7.0	
Barium	mg/kg	300 or SB	15 - 600	21.1	EJ	45.8	BEJ	49.3	E			273	E
Beryllium	mg/kg	0.16 or SB	0 - 1.75	0.29	B	0.47	B	0.49	B			0.71	B
Cadmium	mg/kg	1 or SB	0.1 - 1	0.03	U	0.08	U	0.04	U			0.07	U
Calcium	mg/kg	SB	130 - 35,000	8170	EJ	43200.0	EJ	36000	E			185000	E
Chromium	mg/kg	10 or SB	1.5 - 40	6.4	EJ	12	EJ	11.1	E			14.8	E

Pioneer Midler Avenue LLC
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Table 2 - Phase 1 Soil Data for Monitoring Wells and Geotechnical Borings

Sample ID ->	Units	TAGM 4046		MW-5		MW-6		MW-7		MW-7 RI		MW-8	
Depth - >		RSCO	Eastern USA Background	2 - 4		4 - 7		4 - 6		4 - 6		2 - 5	
Date Sampled ->				11/17/2004		11/16/2004		11/16/2004		11/16/2004		11/18/2004	
Cobalt	mg/kg	30 or SB	2.5 - 60	2.8	B	4.2	B	3.5	B			15.9	
Copper	mg/kg	25 or SB	1 - 50	8.0	EN.	10.7	ENJ	26.7	EN			59.0	EN
Iron	mg/kg	2,000 or SB	2,000 - 550,000	13900	EJ	34200.0	EJ	31400	E			29300	E
Lead	mg/kg	SB	200 - 500	11.3	EJ	55	EJ	36.6	E			19.5	E
Magnesium	mg/kg	SB	100 - 5,000	1450	EJ	2150	EJ	4030	E			4500	E
Manganese	mg/kg	SB	50 - 5,000	178	E*J	420	E*J	486	E*J			722	E*J
Mercury	mg/kg	0.1	0.001 - 0.2	0.029	U	0.038	U	0.024	U			0.073	BN*
Nickel	mg/kg	13 or SB	0.5 - 25	6.1	EJ	8.7	BEJ	7.9	E			29.9	E
Potassium	mg/kg	SB	8,500 - 43,000	659		954	B	653				626	B
Selenium	mg/kg	2 or SR	0.1 - 3.9	0.43	U	1.2	U	0.55	U			1.3	BN*
Silver	mg/kg	SB		0.06	U	0.17	B	0.09	B			0.18	B
Sodium	mg/kg	SB	6,000 - 8,000	62.9	B	353	B	143	B			180	B
Thallium	mg/kg	SB		0.44	UJ	1.2	UJ	0.57	U			1.1	U
Vanadium	mg/kg	150 or SB	1 - 300	12.1	EJ	20.2	EJ	21.5	E			16.1	E
Zinc	mg/kg	20 or SB	9 - 50	24.8	E*J	37.8	E*J	308	E*			140	E*
WET CHEMISTRY ANALYSIS													
Cyanide - Total	ug/kg			4000	U	4000	U	4000	U			4000	U
Leachable pH	S.U.			8.08		7.91		7.49				7.78	

RSCO = Recommended Soil Cleanup Objectives
1,000 - indicates detected value for organics.
- indicates value exceeds TAGM 4046 RSCO

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Table 3 - Phase 1 Test Pit Data

Sample ID ->	Units	TAGM 4046		TP-4	TP-5	TP-7	TP-12	TP-13	TP-14	TP-14 DL
Depth - >		RSCO	Eastern USA Background	3.5-4.2	4.6-5.2	4-7	3.1-5.1	3.5-5.3	4-5	4-5
Date Sampled ->				12/03/04	12/07/05	12/03/04	12/07/05	12/07/05	12/03/04	12/03/04
VOLATILES	ug/kg									
Chloromethane	ug/kg			14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
Bromomethane	ug/kg			14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
Vinyl chloride	ug/kg	200		14 U	15 U	**13 J**	12 U	**37**	**300**	**1,800 DJ**
Chloroethane	ug/kg	1,900		14 U	**3 J**	15 U	12 U	12 U	16 U	7,200 U
Methylene chloride	ug/kg	100		14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
Acetone	ug/kg	200		**76 J**	**18**	**22**	**6 J**	**9 J**	**35**	7,200 U
Carbon disulfide	ug/kg	2,700		14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
1,1-Dichloroethene	ug/kg	400		14 U	15 U	15 U	12 U	12 U	**2 J**	7,200 U
1,1-Dichloroethane	ug/kg	200		14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
Chloroform	ug/kg	300		14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
1,2-Dichloroethane	ug/kg	100		14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
2-Butanone	ug/kg	300		**29 J**	**6 J**	**5 J**	12 U	12 U	16 U	7,200 U
1,1,1-Trichloroethane	ug/kg	800		14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
Carbon tetrachloride	ug/kg	600		14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
Bromodichloromethane	ug/kg			14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
1,2-Dichloropropane	ug/kg			14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
cis-1,3-Dichloropropene	ug/kg			14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
Trichloroethene	ug/kg	700		14 U	15 U	15 U	12 U	**36**	**310**	**5,000 DJ**
Dibromochloromethane	ug/kg			14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
1,1,2-Trichloroethane	ug/kg			14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
Benzene	ug/kg	60 or MDL		14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
trans-1,3-Dichloropropene	ug/kg			14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
Bromoform	ug/kg			14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
4-Methyl-2-pentanone	ug/kg	1,000		14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
2-Hexanone	ug/kg			14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
Tetrachloroethene	ug/kg	1,400		14 U	15 U	15 U	12 U	**67**	**83,000**	**83,000 D**
Toluene	ug/kg	1,500		**2 J**	15 U	15 U	12 U	12 U	**9 J**	7,200 U
1,1,2,2-Tetrachloroethane	ug/kg	600		14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
Chlorobenzene	ug/kg	1,700		14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
Ethylbenzene	ug/kg	5,500		14 U	15 U	15 U	12 U	12 U	**41**	7,200 U
Styrene	ug/kg			14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
Total xylenes	ug/kg	1,200		14 U	15 U	15 U	12 U	12 U	**180**	**2,600 DJ**
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000		14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
cis-1,2-Dichloroethene	ug/kg			14 U	15 U	**2 J**	12 U	**23**	**7,400**	**7,400 D**
trans-1,2-Dichloroethene	ug/kg	300		14 U	15 U	15 U	12 U	**26**	16 U	7,200 U
Dichlorodifluoromethane	ug/kg			14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
Trichlorofluoromethane	ug/kg			14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
Methyl acetate	ug/kg			14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
Methyl tert butyl ether	ug/kg	120		14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
Cyclohexane	ug/kg			**52 J**	15 U	15 U	12 U	12 U	**150**	7,200 U
Methylcyclohexane	ug/kg			**160 J**	15 U	15 U	12 U	12 U	**31,000**	**31,000 D**
1,2-Dibromoethane	ug/kg			14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
Isopropylbenzene	ug/kg			**200 J**	15 U	15 U	12 U	12 U	**55**	7,200 U
1,3-Dichlorobenzene	ug/kg	1,600		14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
1,4-Dichlorobenzene	ug/kg	8,500		14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
1,2-Dichlorobenzene	ug/kg	7,900		14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
1,2-Dibromo-3-chloropropane	ug/kg			14 U	15 U	15 U	12 U	12 U	16 U	7,200 U
1,2,4-Trichlorobenzene	ug/kg	3,400		14 UJ	15 UJ	15 UJ	12 UJ	12 UJ	16 UJ	7,200 U
SEMIVOLATILES										
Benzaldehyde	ug/kg			900 UJ	5,600 U	5,100 U	760 U	830 U	10,000 U	
Phenol	ug/kg	30 or MDL		450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
Bis(2-chloroethyl) ether	ug/kg			450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
2-Chlorophenol	ug/kg	800		450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
2-Methylphenol	ug/kg	100 or MDL		450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
2,2'-Oxybis(1-Chloropropane)	ug/kg			450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
Acetophenone	ug/kg			900 UJ	5,600 U	5,100 U	760 U	830 U	10,000 U	
4-Methylphenol	ug/kg	900		450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
N-Nitroso-Di-n-propylamine	ug/kg			450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
Hexachloroethane	ug/kg			450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
Nitrobenzene	ug/kg	200 or MDL		450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	

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Table 3 - Phase 1 Test Pit Data

Sample ID ->	Units	TAGM 4046		TP-4	TP-5	TP-7	TP-12	TP-13	TP-14	TP-14 DL
Depth - >		RSCO	Eastern USA Background	3.5-4.2	4.6-5.2	4-7	3.1-5.1	3.5-5.3	4-5	4-5
Date Sampled ->				12/03/04	12/07/05	12/03/04	12/07/05	12/07/05	12/03/04	12/03/04
Isophorone	ug/kg	4400		450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
2-Nitrophenol	ug/kg	330 or MDL		450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
2,4-Dimethylphenol	ug/kg			450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
Bis(2-chloroethoxy) methane	ug/kg			450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
2,4-Dichlorophenol	ug/kg	400		450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
Naphthalene	ug/kg	1,300		3,400 J	2,800 U	2,500 U	380 U	410 U	610 J	
4-Chloroaniline	ug/kg	220 or MDL		450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
Hexachlorobutadiene	ug/kg			450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
Caprolactam	ug/kg			900 UJ	5,600 U	5,100 U	920 U	830 U	10,000 U	
4-Chloro-3-methylphenol	ug/kg	240 or MDL		450 UJ	2,800 U	2,500 U	760 U	410 U	5,300 U	
2-Methylnaphthalene	ug/kg	36,400		5,200	2,800 U	2,500 U	380 U	410 U	1,300 J	
Hexachlorocyclopentadiene	ug/kg			450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
2,4,6-Trichlorophenol	ug/kg			450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
2,4,5-Trichlorophenol	ug/kg	100		1,100 UJ	6,800 U	6,200 U	920 U	1,000 U	13,000 U	
Biphenyl	ug/kg			900 UJ	5,600 U	5,100 U	760 U	830 U	10,000 U	
2-Chloronaphthalene	ug/kg			450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
2-Nitroaniline	ug/kg	430 or MDL		1,100 UJ	6,800 U	6,200 U	920 U	1,000 U	13,000 U	
Dimethyl phthalate	ug/kg	2,000		450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
2,6-Dinitrotoluene	ug/kg	1,000		450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
Acenaphthylene	ug/kg	41,000		720 J	2,800 U	2,500 U	380 U	410 U	580 J	
3-Nitroaniline	ug/kg	500 or MDL		1,100 UJ	6,800 U	6,200 U	920 U	1,000 U	13,000 U	
Acenaphthene	ug/kg	50,000		3,500 J	2,800 U	99 J	380 U	410 U	800 J	
2,4-Dinitrophenol	ug/kg	200 or MDL		1,100 UJ	6,800 UJ	6,200 UJ	920 UJ	1,000 UJ	13,000 UJ	
4-Nitrophenol	ug/kg	100 or MDL		1,100 UJ	6,800 U	6,200 U	920 U	1,000 U	13,000 U	
Dibenzofuran	ug/kg	6,200		2,200 J	2,800 U	2,500 U	380 U	410 U	710 J	
2,4-Dinitrotoluene	ug/kg	1,000		450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
Diethyl phthalate	ug/kg	7,100		450 UJ	2,800 U	2,500 U	14 J	410 U	5,300 U	
Fluorene	ug/kg	50,000		6,100	77 J	120 J	380 U	410 U	1,400 J	
4-Chlorophenyl phenyl ether	ug/kg			450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
4-Nitroaniline	ug/kg			1,100 UJ	6,800 U	6,200 U	920 U	1,000 U	13,000 U	
4,6-Dinitro-2-methylphenol	ug/kg			1,100 UJ	6,800 U	6,200 U	920 U	1,000 U	13,000 U	
N-nitrosodiphenylamine	ug/kg			450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
4-Bromophenyl phenyl ether	ug/kg			450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
Hexachlorobenzene	ug/kg	410		450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
Atrazine	ug/kg			900 UJ	5,600 U	5,100 U	760 U	830 U	10,000 U	
Pentachlorophenol	ug/kg	1000 or MDL		1,100 UJ	6,800 U	6,200 U	920 U	1,000 U	13,000 U	
Phenanthrene	ug/kg	50,000		12,000	830 J	2,100 J	380 U	110 J	4,400 J	
Anthracene	ug/kg	50,000		1,700 J	140 J	340 J	380 U	16 J	1,100 J	
Carbazole	ug/kg			450 UJ	2,800 U	130 J	29 J	410 U	570 J	
Di-n-butyl phthalate	ug/kg	8,100		450 UJ	2,800 U	2,500 U	18 J	15 J	170 J	
Fluoranthene	ug/kg	50,000		3,800 J	1,000 J	2,100 J	36 J	180 J	14,000	
Pyrene	ug/kg	50,000		2,000	920 J	2,200 J	31 J	160 J	14,000	
Butyl benzyl phthalate	ug/kg	50,000		450 UJ	2,800 U	2,500 U	12 J	410 U	5,300 U	
3,3'-Dichlorobenzidine	ug/kg			450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
Benzo(a)anthracene	ug/kg	224 or MDL		1,500	430 J	820 J	16 J	86 J	8,100	
Chrysene	ug/kg	400		1,600	810 J	940 J	21 J	95 J	8,900	
Bis(2-ethylhexyl) phthalate	ug/kg			450 UJ	2,800 U	2,500 U	380 U	410 U	5,300 U	
Di-n-octyl phthalate	ug/kg	50,000.		450 UJ	110 J	2,500 U	380 U	410 U	5,300 U	
Benzo(b)fluoranthene	ug/kg	1,100		1,300	380 J	560 J	12 J	77 J	8,400	
Benzo(k)fluoranthene	ug/kg	1,100		940	360 J	480 J	12 J	76 J	9,200	
Benzo(a)pyrene	ug/kg	61 or MDL		1,200	370 J	680 J	12 J	87 J	9,400	
Indeno(1,2,3-cd)pyrene	ug/kg	3,200		560	140 J	430 J	380 U	55 J	5,600	
Dibenzo(a,h)anthracene	ug/kg	14 or MDL		300 J	78 J	190 J	380 U	25 J	3,000 J	
Benzo(ghi)perylene	ug/kg	50,000		340 J	100 J	310 J	380 U	35 J	3,600 J	
PESTICIDES/AROCLORS										

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Table 3 - Phase 1 Test Pit Data

Sample ID ->	Units	TAGM 4046 RSCO	TAGM 4046 Eastern USA Background	TP-4	TP-5	TP-7	TP-12	TP-13	TP-14	TP-14 DL
Depth - >				3.5-4.2	4.6-5.2	4-7	3.1-5.1	3.5-5.3	4-5	4-5
Date Sampled ->				12/03/04	12/07/05	12/03/04	12/07/05	12/07/05	12/03/04	12/03/04
alpha-BHC	ug/kg	110		**5.3 JP**	13 U	5.4 U	2.0 U	2.0 U	35 U	
beta-BHC	ug/kg	200		**7.6 JP**	13 U	5.4 U	2.0 U	2.0 U	27 U	
delta-BHC	ug/kg	300		12 U	13 U	5.4 U	2.0 U	2.0 U	27 U	
gamma-BHC (Lindane)	ug/kg	60		12 U	13 U	5.4 U	2.0 U	2.0 U	27 U	
Heptachlor	ug/kg	100		12 U	13 U	5.4 U	2.0 U	2.0 U	27 U	
Aldrin	ug/kg	41		12 U	13 U	5.4 U	2.0 U	2.0 U	27 U	
Heptachlor epoxide	ug/kg	20		12 U	13 U	5.4 U	2.0 U	2.0 U	28 U	
Endosulfan I	ug/kg	900		12 U	13 U	5.4 U	2.0 U	2.0 U	27 U	
Dieldrin	ug/kg	44		23 U	25 U	10 U	3.9 U	3.8 U	52 U	
4,4'-DDE	ug/kg	2,100		23 U	25 U	10 U	3.9 U	3.8 U	52 U	
Endrin	ug/kg	100		23 U	25 U	10 U	3.9 U	3.8 U	**140 J**	
Endosulfan II	ug/kg	900		23 U	25 U	10 U	3.9 U	3.8 U	52 U	
4,4'-DDD	ug/kg	2,900		23 U	25 U	10 U	3.9 U	3.8 U	52 U	
Endosulfan Sulfate	ug/kg	100		23 U	25 U	10 U	3.9 U	3.8 U	52 U	
4,4'-DDT	ug/kg	2,100		23 U	25 U	10 U	3.9 U	3.8 U	**250 PJ**	
Methoxychlor	ug/kg			120 U	130 U	54 U	20 U	20 U	270 U	
Endrin ketone	ug/kg			23 U	25 U	10 U	3.9 U	3.8 U	120 U	
Endrin aldehyde	ug/kg			23 U	25 U	10 U	3.9 U	3.8 U	**150 PJ**	
alpha-Chlordane	ug/kg	540		12 U	13 U	5.4 U	2.0 U	2.0 U	27 U	
gamma-Chlordane	ug/kg	540		12 U	13 U	5.4 U	2.0 U	2.0 U	27 U	
Toxaphene	ug/kg			1,200 U	1,300 U	540 U	200 U	200 U	2700 U	
Aroclor 1016	ug/kg	1,000 - surface soils, 10,000 - subsurface soils		230 U	250 U	100 U	39 U	38 U	520 U	
Aroclor 1221	ug/kg			470 U	510 U	2210 U	80 U	77 U	1000 U	
Aroclor 1232	ug/kg			230 U	250 U	100 U	39 U	38 U	520 U	
Aroclor 1242	ug/kg			230 U	250 U	100 U	39 U	38 U	520 U	
Aroclor 1248	ug/kg			230 U	250 U	100 U	39 U	38 U	520 U	
Aroclor 1254	ug/kg			230 U	250 U	100 U	39 U	38 U	520 U	
Aroclor 1260	ug/kg			230 U	250 U	100 U	39 U	38 U	520 U	
INORGANICS										
Aluminum	mg/kg	SB	33000	4930	7950	3940	3070	15200	7340	
Antimony	mg/kg	SB		0.64 U N*J	0.96 BN*J	0.53 UN*J	0.55 U N*J	0.50 U N*J	2.0 N*J	
Arsenic	mg/kg	7.5 or SB	3 - 12	3.0 N*J	5.1 N*J	5.5 N*J	1.6 N*J	4.6 N*J	9.8 N*J	
Barium	mg/kg	300 or SB	15 - 600	35.9	82.3	41.0	16	82.0	61.5	
Beryllium	mg/kg	0.16 or SB	0 - 1.75	0.25	0.35	0.44	0.18	0.81	0.38	
Cadmium	mg/kg	1 or SB	0.1 - 1	0.14	0.25	0.22	0.03 U	0.03 U	5.7	
Calcium	mg/kg	SB	130 - 35,000	33200	44700	69500	25700	41500	61500	
Chromium	mg/kg	10 or SB	1.5 - 40	6.5 N*J	10.2 N*J	6.5 N*J	3.1 N*J	22.8 N*J	37.9 N*J	
Cobalt	mg/kg	30 or SB	2.5 - 60	3.2	3.8	4.2	1.6	5.3	7.5	
Copper	mg/kg	25 or SB	1 - 50	15.7 *	14.7 *	17.1 *	2.3 *	11.8 *	187 *	
Iron	mg/kg	2,000 or SB	2,000 - 550,000	11900	20300	37500	6350	25900	48500	
Lead	mg/kg	SB	200 - 500	22.8 NJ	25.4 N*J	16.6 NJ	3.8 N*J	16.2 N*J	167 N*J	
Magnesium	mg/kg	SB	100 - 5,000	1930	3680	2260	2750	2490	3160	
Manganese	mg/kg	SB	50 - 5,000	144 *	422 *	171 *	126 *	3150 *	2140 *	
Mercury	mg/kg	0.1	0.001 - 0.2	0.125	0.035 U	0.035 U	0.025 U	0.027 U	0.064 B	
Nickel	mg/kg	13 or SB	0.5 - 25	8.4 *	9.1 *	9.3 *	2.8 *	10.0	327 *	
Potassium	mg/kg	SB	8,500 - 43,000	773	1590	586	464	2010	637	
Selenium	mg/kg	2 or SR	0.1 - 3.9	1.1 B*	1.0 B*	1.1 B*	0.36 U *	1.6 B*	2.4 B*	
Silver	mg/kg	SB		0.14 U	0.18 U	0.12 B	0.12 U	0.54 B	0.61 B	
Sodium	mg/kg	SB	6,000 - 8,000	142	368	60.3	124	573	195	
Thallium	mg/kg	SB		0.38 U*	0.54 B*	0.49 B*	0.33 U *	1.1 *	1.0 B*	
Vanadium	mg/kg	150 or SB	1 - 300	12.3 N*J	17.9 N*J	12.4 N*J	7.2 N*J	53.6 N*J	56.7 N*J	
Zinc	mg/kg	20 or SB	9 - 50	49.1	290	24.8	15.8	22.2	364	
WET CHEMISTRY ANALYSIS										
Cyanide - Total				4000 UJ	4000 UJ	4000 UJ	4000 UJ	4000 UJ	4000 UJ	
Leachable pH				7.08	7.33	7.17	8.12	7.73	7.18	

RSCO = Recommended Soil Cleanup Objectives

1,000 - indicates detected value for organics.

(shaded) - indicates value exceeds TAGM 4046 RSCO

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 4 - Phase 2 Soil Boring Data for Clay Unit Wells

Sample ID ->	Units	TAGM 4046	MW-2D	MW-3D	MW-3D DL	MW-3D	MW-4D	MW-9D	MS-9D	MW-10D	MW-11D	MW-11D DL
Depth - >		RSCO	16-18	20-22	20-22	24-26	14-16	16-18	18-20	16-18	20-22	20-22
Date Sampled ->			1/27/2005	1/25/2005	1/25/2005	1/25/2005	1/26/2005	1/27/2005	1/27/2005	1/26/2005	1/24/2005	1/24/2005
VOLATILES	ug/kg											
Chloromethane	ug/kg		18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
Bromomethane	ug/kg		18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
Vinyl chloride	ug/kg	200	18 U	**160**	4,300 U	14 U	13 U	16 U	15 U	**7 J**	11 U	1,300 U
Chloroethane	ug/kg	1,900	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
Methylene chloride	ug/kg	100	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
Acetone	ug/kg	200	**10 J**	**10 J**	4,300 U	**5 J**	**11 J**	**16**	**9 J**	**15 J**	**6 J**	1,300 U
Carbon disulfide	ug/kg	2,700	**3 J**	**2 J**	4,300 U	14 U	**3 J**	**7 J**	**3 J**	**8 J**	**4 J**	1,300 U
1,1-Dichloroethene	ug/kg	400	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	**2 J**	1,300 U
1,1-Dichloroethane	ug/kg	200	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
Chloroform	ug/kg	300	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
1,2-Dichloroethane	ug/kg	100	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
2-Butanone	ug/kg	300	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
1,1,1-Trichloroethane	ug/kg	800	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
Carbon tetrachloride	ug/kg	600	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
Bromodichloromethane	ug/kg		18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
1,2-Dichloropropane	ug/kg		18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
cis-1,3-Dichloropropene	ug/kg		18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
Trichloroethene	ug/kg	700	18 U	**3 J**	4,300 U	14 U	13 U	16 U	15 U	18 U	**550 E**	**650 DJ**
Dibromochloromethane	ug/kg		18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
1,1,2-Trichloroethane	ug/kg		18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
Benzene	ug/kg	60 or MDL	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
trans-1,3-Dichloropropene	ug/kg		18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
Bromoform	ug/kg		18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
4-Methyl-2-pentanone	ug/kg	1,000	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
2-Hexanone	ug/kg		18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
Tetrachloroethene	ug/kg	1,400	18 U	**12 J**	4,300 U	**2 J**	13 U	16 U	15 U	18 U	**13,000**	**13,000 D**
Toluene	ug/kg	1,500	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
1,1,2,2-Tetrachloroethane	ug/kg	600	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
Chlorobenzene	ug/kg	1,700	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
Ethylbenzene	ug/kg	5,500	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
Styrene	ug/kg		18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
Total xylenes	ug/kg	1,200	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
cis-1,2-Dichloroethene	ug/kg		18 U	**2,000 J**	**2,000 DJ**	14 U	13 U	16 U	15 U	**45**	**96**	1,300 U
trans-1,2-Dichloroethene	ug/kg	300	18 U	**140**	4,300 U	14 U	13 U	16 U	15 U	**2 J**	**2 J**	1,300 U
Dichlorodifluoromethane	ug/kg		18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
Trichlorofluoromethane	ug/kg		18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
Methyl acetate	ug/kg		18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
Methyl tert butyl ether	ug/kg	120	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
Cyclohexane	ug/kg		18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
Methylcyclohexane	ug/kg		18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
1,2-Dibromoethane	ug/kg		18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
Isopropylbenzene	ug/kg		18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
1,3-Dichlorobenzene	ug/kg	1,600	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
1,4-Dichlorobenzene	ug/kg	8,500	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
1,2-Dichlorobenzene	ug/kg	7,900	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
1,2-Dibromo-3-chloropropane	ug/kg		18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U
1,2,4-Trichlorobenzene	ug/kg	3,400	18 U	18 U	4,300 U	14 U	13 U	16 U	15 U	18 U	11 U	1,300 U

RSCO = Recommended Soil Cleanup Objectives

1,000 - indicates detected value for organics.

(shaded) - indicates value exceeds TAGM 4046 RSCO

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 5 - Phase 2 GeoProbe Boring Data

Sample ID ->	Units	TAGM 4046	GP-2		GP-2 DL		GP-2		GP-2 DL		GP-3		GP-3	
Depth - >		RSCO	12 - 16		12 - 16		16 - 19		16 - 19		16 - 19		19 - 19.5	
Date Sampled ->			03/17/05		03/17/05		03/17/05		03/17/05		03/17/05		03/17/05	
VOLATILES	ug/kg													
Chloromethane	ug/kg		17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
Bromomethane	ug/kg		17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
Vinyl chloride	ug/kg	200	**820**	**J**	**500**	**DJ**	**24**	**J**	3,500	U	980,000	UJ	360,000	U
Chloroethane	ug/kg	1,900	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	UJ
Methylene chloride	ug/kg	100	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
Acetone	ug/kg	200	**7**	**J**	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
Carbon disulfide	ug/kg	2,700	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
1,1-Dichloroethene	ug/kg	400	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
1,1-Dichloroethane	ug/kg	200	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
Chloroform	ug/kg	300	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
1,2-Dichloroethane	ug/kg	100	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
2-Butanone	ug/kg	300	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
1,1,1-Trichloroethane	ug/kg	800	17	U	2,000	U	**24**	**J**	3,500	U	980,000	UJ	360,000	U
Carbon tetrachloride	ug/kg	600	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
Bromodichloromethane	ug/kg		17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
1,2-Dichloropropane	ug/kg		17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
cis-1,3-Dichloropropene	ug/kg		17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
Trichloroethene	ug/kg	700	**12**	**J**	2,000	U	**92**		3,500	U	**250,000**	**J**	**240,000**	**J**
Dibromochloromethane	ug/kg		17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
1,1,2-Trichloroethane	ug/kg		17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
Benzene	ug/kg	60 or MDL	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
trans-1,3-Dichloropropene	ug/kg		17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
Bromoform	ug/kg		17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
4-Methyl-2-pentanone	ug/kg	1,000	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
2-Hexanone	ug/kg		17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
Tetrachloroethene	ug/kg	1,400	**80**		**360**	**DJ**	**82**		**710**	**DJ**	**13,000,000**	**J**	**5,900,000**	
Toluene	ug/kg	1,500	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
1,1,2,2-Tetrachloroethane	ug/kg	600	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
Chlorobenzene	ug/kg	1,700	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
Ethylbenzene	ug/kg	5,500	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
Styrene	ug/kg		17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
Total xylenes	ug/kg	1,200	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
cis-1,2-Dichloroethene	ug/kg		**1,700**	**J**	**1,700**	**DJ**	**1600**	**J**	**1,600**	**DJ**	980,000	UJ	360,000	U

Pioneer Midler Avenue LLC
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Table 5 - Phase 2 GeoProbe Boring Data

Sample ID ->	Units	TAGM 4046	GP-2		GP-2 DL		GP-2		GP-2 DL		GP-3		GP-3	
Depth - >		RSCO	12 - 16		12 - 16		16 - 19		16 - 19		16 - 19		19 - 19.5	
Date Sampled ->			03/17/05		03/17/05		03/17/05		03/17/05		03/17/05		03/17/05	
trans-1,2-Dichloroethene	ug/kg	300	**240**		2,000	U	**39**		3,500	U	980,000	UJ	360,000	U
Dichlorodifluoromethane	ug/kg		17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
Trichlorofluoromethane	ug/kg		17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
Methyl acetate	ug/kg		17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
Methyl tert butyl ether	ug/kg	120	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
Cyclohexane	ug/kg		17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
Methylcyclohexane	ug/kg		17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
1,2-Dibromoethane	ug/kg		17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
Isopropylbenzene	ug/kg		17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
1,3-Dichlorobenzene	ug/kg	1,600	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
1,4-Dichlorobenzene	ug/kg	8,500	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
1,2-Dichlorobenzene	ug/kg	7,900	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
1,2-Dibromo-3-chloropropane	ug/kg		17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U
1,2,4-Trichlorobenzene	ug/kg	3,400	17	U	2,000	U	30	U	3,500	U	980,000	UJ	360,000	U

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 5 - Phase 2 GeoProbe Boring Data

Sample ID ->	Units	TAGM 4046	GP-4		GP-7		GP-7		GP-9		GP-9 DL		GP-9	
Depth - >		RSCO	P		8 - 12		16 - 18.9		8 - 10.5		8 - 10.5		16 - 18.5	
Date Sampled ->			03/17/05		03/18/05		03/18/05		03/18/05		03/18/05		03/18/05	
VOLATILES	ug/kg													
Chloromethane	ug/kg		16,000	U	20	U	29	U	33	U	3,900	U	20	U
Bromomethane	ug/kg		16,000	U	20	U	29	U	33	U	3,900	U	20	U
Vinyl chloride	ug/kg	200	**80,000**		**5**	**J**	**3**	**J**	**2,700**	**J**	**2,700**	**DJ**	**4**	**J**
Chloroethane	ug/kg	1,900	16,000	UJ	20	UJ	29	UJ	33	UJ	3,900	U	20	UJ
Methylene chloride	ug/kg	100	16,000	U	20	U	29	U	33	U	3,900	U	20	U
Acetone	ug/kg	200	16,000	U	20	U	29	U	**240**	**B**	3,900	U	25	U
Carbon disulfide	ug/kg	2,700	16,000	U	20	U	29	U	33	U	3,900	U	**2**	**J**
1,1-Dichloroethene	ug/kg	400	16,000	U	20	U	29	U	33	U	3,900	U	20	U
1,1-Dichloroethane	ug/kg	200	16,000	U	20	U	29	U	33	U	3,900	U	20	U
Chloroform	ug/kg	300	16,000	U	20	U	29	U	33	U	3,900	U	20	U
1,2-Dichloroethane	ug/kg	100	16,000	U	20	U	29	U	33	U	3,900	U	20	U
2-Butanone	ug/kg	300	16,000	U	20	U	29	U	33	U	3,900	U	20	U
1,1,1-Trichloroethane	ug/kg	800	16,000	U	20	U	29	U	33	U	3,900	U	20	U
Carbon tetrachloride	ug/kg	600	16,000	U	20	U	29	U	33	U	3,900	U	20	U
Bromodichloromethane	ug/kg		16,000	U	20	U	29	U	33	U	3,900	U	20	U
1,2-Dichloropropane	ug/kg		16,000	U	20	U	29	U	33	U	3,900	U	20	U
cis-1,3-Dichloropropene	ug/kg		16,000	U	20	U	29	U	33	U	3,900	U	20	U
Trichloroethene	ug/kg	700	16,000	U	20	U	**3**	**J**	33	U	3,900	U	**14**	**J**
Dibromochloromethane	ug/kg		16,000	U	20	U	29	U	33	U	3,900	U	20	U
1,1,2-Trichloroethane	ug/kg		16,000	U	20	U	29	U	33	U	3,900	U	20	U
Benzene	ug/kg	60 or MDL	16,000	U	20	U	29	U	33	U	3,900	U	20	U
trans-1,3-Dichloropropene	ug/kg		16,000	U	20	U	29	U	33	U	3,900	U	20	U
Bromoform	ug/kg		16,000	U	20	U	29	U	33	U	3,900	U	20	U
4-Methyl-2-pentanone	ug/kg	1,000	16,000	U	20	U	29	U	33	U	3,900	U	20	U
2-Hexanone	ug/kg		16,000	U	20	U	29	U	33	U	3,900	U	20	U
Tetrachloroethene	ug/kg	1,400	**4,400**	**J**	20	U	29	U	33	U	3,900	U	20	U
Toluene	ug/kg	1,500	16,000	U	20	U	29	U	**8**	**J**	3,900	U	20	U
1,1,2,2-Tetrachloroethane	ug/kg	600	16,000	U	20	U	29	U	33	U	3,900	U	20	U
Chlorobenzene	ug/kg	1,700	16,000	U	20	U	29	U	33	U	3,900	U	20	U
Ethylbenzene	ug/kg	5,500	16,000	U	20	U	29	U	33	U	3,900	U	20	U
Styrene	ug/kg		16,000	U	20	U	29	U	33	U	3,900	U	20	U
Total xylenes	ug/kg	1,200	16,000	U	20	U	29	U	33	U	3,900	U	20	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	16,000	U	20	U	29	U	33	U	3,900	U	20	U
cis-1,2-Dichloroethene	ug/kg		**170,000**		**37**		**89**		**530**		**2,200**	**DJ**	**69**	

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Table 5 - Phase 2 GeoProbe Boring Data

Sample ID ->	Units	TAGM 4046	GP-4		GP-7		GP-7		GP-9		GP-9 DL		GP-9	
Depth - >		RSCO	P		8 - 12		16 - 18.9		8 - 10.5		8 - 10.5		16 - 18.5	
Date Sampled ->			03/17/05		03/18/05		03/18/05		03/18/05		03/18/05		03/18/05	
trans-1,2-Dichloroethene	ug/kg	300	16,000	U	**5**	**J**	**10**	**J**	**68**		3,900	U	**13**	**J**
Dichlorodifluoromethane	ug/kg		16,000	U	20	U	29	U	33	U	3,900	U	20	U
Trichlorofluoromethane	ug/kg		16,000	U	20	U	29	U	33	U	3,900	U	20	U
Methyl acetate	ug/kg		16,000	U	20	U	29	U	33	U	3,900	U	20	U
Methyl tert butyl ether	ug/kg	120	16,000	U	20	U	29	U	33	U	3,900	U	20	U
Cyclohexane	ug/kg		16,000	U	20	U	29	U	33	U	3,900	U	20	U
Methylcyclohexane	ug/kg		16,000	U	20	U	29	U	33	U	3,900	U	20	U
1,2-Dibromoethane	ug/kg		16,000	U	20	U	29	U	33	U	3,900	U	20	U
Isopropylbenzene	ug/kg		16,000	U	20	U	29	U	33	U	3,900	U	20	U
1,3-Dichlorobenzene	ug/kg	1,600	16,000	U	20	U	29	U	33	U	3,900	U	20	U
1,4-Dichlorobenzene	ug/kg	8,500	16,000	U	20	U	29	U	33	U	3,900	U	20	U
1,2-Dichlorobenzene	ug/kg	7,900	16,000	U	20	U	29	U	33	U	3,900	U	20	U
1,2-Dibromo-3-chloropropane	ug/kg		16,000	U	20	U	29	U	33	U	3,900	U	20	U
1,2,4-Trichlorobenzene	ug/kg	3,400	16,000	U	20	U	29	U	33	U	3,900	U	20	U

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Table 5 - Phase 2 GeoProbe Boring Data

Sample ID ->	Units	TAGM 4046	GP-10		GP-10		GP-11		GP-11	
Depth - >		RSCO	9 - 10		14 - 16		15 - 16		16 - 18	
Date Sampled ->			03/18/05		03/21/05		03/21/05		03/21/05	
VOLATILES	ug/kg									
Chloromethane	ug/kg		29	U	34	U	28	U	29	U
Bromomethane	ug/kg		29	U	34	U	28	U	29	U
Vinyl chloride	ug/kg	200	**10**	**J**	34	U	28	U	29	U
Chloroethane	ug/kg	1,900	29	UJ	34	UJ	28	UJ	29	UJ
Methylene chloride	ug/kg	100	29	U	34	U	28	U	29	U
Acetone	ug/kg	200	68	U	**31**	**J**	**22**	**J**	**60**	
Carbon disulfide	ug/kg	2,700	29	U	**7**	**J**	**4**	**J**	**15**	**J**
1,1-Dichloroethene	ug/kg	400	29	U	34	U	28	U	29	U
1,1-Dichloroethane	ug/kg	200	29	U	34	U	28	U	29	U
Chloroform	ug/kg	300	29	U	34	U	28	U	29	U
1,2-Dichloroethane	ug/kg	100	29	U	34	U	28	U	29	U
2-Butanone	ug/kg	300	29	U	34	U	28	U	29	U
1,1,1-Trichloroethane	ug/kg	800	29	U	34	U	28	U	29	U
Carbon tetrachloride	ug/kg	600	29	U	34	U	28	U	29	U
Bromodichloromethane	ug/kg		29	U	34	U	28	U	29	U
1,2-Dichloropropane	ug/kg		29	U	34	U	28	U	29	U
cis-1,3-Dichloropropene	ug/kg		29	U	34	U	28	U	29	U
Trichloroethene	ug/kg	700	29	U	34	U	28	U	29	U
Dibromochloromethane	ug/kg		29	U	34	U	28	U	29	U
1,1,2-Trichloroethane	ug/kg		29	U	34	U	28	U	29	U
Benzene	ug/kg	60 or MDL	29	U	34	U	28	U	29	U
trans-1,3-Dichloropropene	ug/kg		29	U	34	U	28	U	29	U
Bromoform	ug/kg		29	U	34	U	28	U	29	U
4-Methyl-2-pentanone	ug/kg	1,000	29	U	34	U	28	U	29	U
2-Hexanone	ug/kg		29	U	34	U	28	U	29	U
Tetrachloroethene	ug/kg	1,400	29	U	**22**	**J**	**14**	**J**	**4**	**J**
Toluene	ug/kg	1,500	29	U	34	U	28	U	29	U
1,1,2,2-Tetrachloroethane	ug/kg	600	29	U	34	U	28	U	29	U
Chlorobenzene	ug/kg	1,700	29	U	**4**	**J**	28	U	29	U
Ethylbenzene	ug/kg	5,500	29	U	34	U	28	U	29	U
Styrene	ug/kg		29	U	34	U	28	U	29	U
Total xylenes	ug/kg	1,200	29	U	34	U	28	U	29	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	29	U	34	U	28	U	29	U
cis-1,2-Dichloroethene	ug/kg		**32**		**32**	**J**	**20**	**J**	**20**	**J**

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Table 5 - Phase 2 GeoProbe Boring Data

Sample ID ->	Units	TAGM 4046	GP-10		GP-10		GP-11		GP-11	
Depth - >		RSCO	9 - 10		14 - 16		15 - 16		16 - 18	
Date Sampled ->			03/18/05		03/21/05		03/21/05		03/21/05	
trans-1,2-Dichloroethene	ug/kg	300	**11**	**J**	**7**	**J**	28	U	**7**	**J**
Dichlorodifluoromethane	ug/kg		29	U	34	UJ	28	UJ	29	UJ
Trichlorofluoromethane	ug/kg		29	U	34	U	28	U	29	U
Methyl acetate	ug/kg		29	U	34	U	28	U	29	U
Methyl tert butyl ether	ug/kg	120	29	U	34	U	28	U	29	U
Cyclohexane	ug/kg		29	U	34	U	28	U	29	U
Methylcyclohexane	ug/kg		29	U	34	U	28	U	29	U
1,2-Dibromoethane	ug/kg		29	U	34	U	28	U	29	U
Isopropylbenzene	ug/kg		29	U	34	U	28	U	29	U
1,3-Dichlorobenzene	ug/kg	1,600	29	U	34	U	28	U	29	U
1,4-Dichlorobenzene	ug/kg	8,500	29	U	34	U	28	U	29	U
1,2-Dichlorobenzene	ug/kg	7,900	29	U	34	U	28	U	29	U
1,2-Dibromo-3-chloropropane	ug/kg		29	U	34	U	28	U	29	U
1,2,4-Trichlorobenzene	ug/kg	3,400	29	U	34	U	28	U	29	U

Pioneer Midler Avenue LLC
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Table 5 - Phase 2 GeoProbe Boring Data

Sample ID ->	Units	TAGM 4046	GP-12		GP-14		GP-14 DL		GP-15	
Depth - >		RSCO	8 - 12		18.5 - 19.5		18.5 - 19.5		24 - 25	
Date Sampled ->			03/21/05		03/21/05		03/21/05		03/21/05	
VOLATILES	ug/kg									
Chloromethane	ug/kg		1,900	U	23	U	2,700	U	38,000	U
Bromomethane	ug/kg		1,900	U	23	U	2,700	U	38,000	U
Vinyl chloride	ug/kg	200	**1,300**	**J**	**6**	**J**	2,700	U	38,000	U
Chloroethane	ug/kg	1,900	1,900	UJ	23	U	2,700	U	38,000	UJ
Methylene chloride	ug/kg	100	1,900	U	23	U	2,700	U	38,000	U
Acetone	ug/kg	200	1,900	U	**24**		2,700	U	38,000	U
Carbon disulfide	ug/kg	2,700	1,900	U	**10**	**J**	2,700	U	38,000	U
1,1-Dichloroethene	ug/kg	400	1,900	U	23	U	2,700	U	38,000	U
1,1-Dichloroethane	ug/kg	200	1,900	U	23	U	2,700	U	38,000	U
Chloroform	ug/kg	300	1,900	U	23	U	2,700	U	38,000	U
1,2-Dichloroethane	ug/kg	100	1,900	U	23	U	2,700	U	38,000	U
2-Butanone	ug/kg	300	1,900	U	23	U	2,700	U	38,000	U
1,1,1-Trichloroethane	ug/kg	800	1,900	U	23	U	2,700	U	38,000	U
Carbon tetrachloride	ug/kg	600	1,900	U	23	U	2,700	U	38,000	U
Bromodichloromethane	ug/kg		1,900	U	23	U	2,700	U	38,000	U
1,2-Dichloropropane	ug/kg		1,900	U	23	U	2,700	U	38,000	U
cis-1,3-Dichloropropene	ug/kg		1,900	U	23	U	2,700	U	38,000	U
Trichloroethene	ug/kg	700	1,900	U	**710**	**J**	**710**	**DJ**	**13,000**	**J**
Dibromochloromethane	ug/kg		1,900	U	23	U	2,700	U	38,000	U
1,1,2-Trichloroethane	ug/kg		1,900	U	23	U	2,700	U	38,000	U
Benzene	ug/kg	60 or MDL	1,900	U	23	U	2,700	U	38,000	U
trans-1,3-Dichloropropene	ug/kg		1,900	U	23	U	2,700	U	38,000	U
Bromoform	ug/kg		1,900	U	23	U	2,700	U	38,000	U
4-Methyl-2-pentanone	ug/kg	1,000	1,900	U	23	U	2,700	U	38,000	U
2-Hexanone	ug/kg		1,900	U	23	U	2,700	U	38,000	U
Tetrachloroethene	ug/kg	1,400	1,900	U	**660**	**J**	**660**	**DJ**	**510,000**	
Toluene	ug/kg	1,500	1,900	U	23	U	2,700	U	38,000	U
1,1,2,2-Tetrachloroethane	ug/kg	600	1,900	U	23	U	2,700	U	38,000	U
Chlorobenzene	ug/kg	1,700	1,900	U	23	U	2,700	U	38,000	U
Ethylbenzene	ug/kg	5,500	1,900	U	23	U	2,700	U	38,000	U
Styrene	ug/kg		1,900	U	23	U	2,700	U	38,000	U
Total xylenes	ug/kg	1,200	1,900	U	23	U	2,700	U	38,000	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	1,900	U	23	U	2,700	U	38,000	U
cis-1,2-Dichloroethene	ug/kg		**2,800**		**790**	**J**	2,700	U	38,000	U

Pioneer Midler Avenue LLC
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Table 5 - Phase 2 GeoProbe Boring Data

Sample ID ->	Units	TAGM 4046	GP-12		GP-14		GP-14 DL		GP-15	
Depth - >		RSCO	8 - 12		18.5 - 19.5		18.5 - 19.5		24 - 25	
Date Sampled ->			03/21/05		03/21/05		03/21/05		03/21/05	
trans-1,2-Dichloroethene	ug/kg	300	1,900	U	**230**		2,700	U	38,000	U
Dichlorodifluoromethane	ug/kg		1,900	UJ	23	U	2,700	U	38,000	UJ
Trichlorofluoromethane	ug/kg		1,900	U	23	U	2,700	U	38,000	U
Methyl acetate	ug/kg		1,900	U	23	UJ	2,700	U	38,000	U
Methyl tert butyl ether	ug/kg	120	1,900	U	23	U	2,700	U	38,000	U
Cyclohexane	ug/kg		1,900	U	23	U	2,700	U	38,000	U
Methylcyclohexane	ug/kg		1,900	U	23	U	2,700	U	13,200	U
1,2-Dibromoethane	ug/kg		1,900	U	23	U	2,700	U	38,000	U
Isopropylbenzene	ug/kg		1,900	U	23	U	2,700	U	38,000	U
1,3-Dichlorobenzene	ug/kg	1,600	1,900	U	23	U	2,700	U	38,000	U
1,4-Dichlorobenzene	ug/kg	8,500	1,900	U	23	U	2,700	U	38,000	U
1,2-Dichlorobenzene	ug/kg	7,900	1,900	U	23	U	2,700	U	38,000	U
1,2-Dibromo-3-chloropropane	ug/kg		1,900	U	23	U	2,700	U	38,000	U
1,2,4-Trichlorobenzene	ug/kg	3,400	1,900	U	23	U	2,700	U	38,000	U

RSCO = Recommended Soil Cleanup Objectives

1,000 - indicates detected value for organics.

- indicates value exceeds TAGM 4046 RSCO

Pioneer Midler Avenue BCP
Remedial Investigation
Table 6 - Phase 2 Soil Data for Borings Within Structures

Sample ID ->	Units	TAGM 4046	SB 2-1	SB 2-1 RE	SB 2-1	SB 3-1	SB 3-1	SB 7-1	SB 7-1	SB 9-1	SB 9-1
Depth - >		RSCO	5 - 7	5 - 7	8 - 10	2 - 4	12 - 14	2 - 4	16 - 18	4 - 6	16 - 18
Date Sampled ->			3/16/2005	3/16/2005	3/16/2005	3/16/2005	3/16/2005	3/17/2005	3/17/2005	3/17/2005	3/17/2005
VOLATILES	ug/kg										
Chloromethane	ug/kg		15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
Bromomethane	ug/kg		15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
Vinyl chloride	ug/kg	200	15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
Chloroethane	ug/kg	1,900	15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
Methylene chloride	ug/kg	100	15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
Acetone	ug/kg	200	**7 J**	**8 J**	**11 J**	**25 J**	**13 J**	20 U	29 U	**6 J**	**8 J**
Carbon disulfide	ug/kg	2,700	15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
1,1-Dichloroethene	ug/kg	400	15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
1,1-Dichloroethane	ug/kg	200	15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
Chloroform	ug/kg	300	15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
1,2-Dichloroethane	ug/kg	100	15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
2-Butanone	ug/kg	300	15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
1,1,1-Trichloroethane	ug/kg	800	15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
Carbon tetrachloride	ug/kg	600	15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
Bromodichloromethane	ug/kg		15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
1,2-Dichloropropane	ug/kg		15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
cis-1,3-Dichloropropene	ug/kg		15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
Trichloroethene	ug/kg	700	15 U	15 U	18 U	34 U	19 U	**18 J**	29 U	**39**	**240**
Dibromochloromethane	ug/kg		15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
1,1,2-Trichloroethane	ug/kg		15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
Benzene	ug/kg	60 or MDL	15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
trans-1,3-Dichloropropene	ug/kg		15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
Bromoform	ug/kg		15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
4-Methyl-2-pentanone	ug/kg	1,000	15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
2-Hexanone	ug/kg		15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
Tetrachloroethene	ug/kg	1,400	15 U	15 U	18 U	34 U	19 U	**260**	29 U	**130**	**64**
Toluene	ug/kg	1,500	15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
1,1,2,2-Tetrachloroethane	ug/kg	600	15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
Chlorobenzene	ug/kg	1,700	15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
Ethylbenzene	ug/kg	5,500	15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
Styrene	ug/kg		15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
Total xylenes	ug/kg	1,200	15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
cis-1,2-Dichloroethene	ug/kg		15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	**160**
trans-1,2-Dichloroethene	ug/kg	300	15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	**89**
Dichlorodifluoromethane	ug/kg		15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U
Trichlorofluoromethane	ug/kg		15 U	15 U	18 U	34 U	19 U	20 U	29 U	15 U	21 U

Pioneer Midler Avenue BCP
Remedial Investigation
Table 6 - Phase 2 Soil Data for Borings Within Structures

Sample ID ->	Units	TAGM 4046	SB 2-1		SB 2-1 RE		SB 2-1		SB 3-1		SB 3-1		SB 7-1		SB 7-1		SB 9-1		SB 9-1	
Depth - >		RSCO	5 - 7		5 - 7		8 - 10		2 - 4		12 - 14		2 - 4		16 - 18		4 - 6		16 - 18	
Date Sampled ->			3/16/2005		3/16/2005		3/16/2005		3/16/2005		3/16/2005		3/17/2005		3/17/2005		3/17/2005		3/17/2005	
Methyl acetate	ug/kg		15	U	15	U	18	U	34	U	19	U	20	U	29	U	15	U	21	U
Methyl tert butyl ether	ug/kg	120	15	U	15	U	18	U	34	U	19	U	20	U	29	U	15	U	21	U
Cyclohexane	ug/kg		15	U	15	U	18	U	34	U	19	U	20	U	29	U	15	U	21	U
Methylcyclohexane	ug/kg		15	U	15	U	18	U	34	U	19	U	20	U	29	U	15	U	21	U
1,2-Dibromoethane	ug/kg		15	U	15	U	18	U	34	U	19	U	20	U	29	U	15	U	21	U
Isopropylbenzene	ug/kg		15	U	15	U	18	U	34	U	19	U	20	U	29	U	15	U	21	U
1,3-Dichlorobenzene	ug/kg	1,600	15	U	15	U	18	U	34	U	19	U	20	U	29	U	15	U	21	U
1,4-Dichlorobenzene	ug/kg	8,500	15	U	15	U	18	U	34	U	19	U	20	U	29	U	15	U	21	U
1,2-Dichlorobenzene	ug/kg	7,900	15	U	15	U	18	U	34	U	19	U	20	U	29	U	15	U	21	U
1,2-Dibromo-3-chloropropane	ug/kg		15	U	15	U	18	U	34	U	19	U	20	U	29	U	15	U	21	U
1,2,4-Trichlorobenzene	ug/kg	3,400	15	U	15	U	18	U	34	U	19	U	20	U	29	U	15	U	21	U

RSCO = Recommended Soil Cleanup Objectives

1,000 - indicates detected value for organics.

- indicates value exceeds TAGM 4046 RSCO

Pioneer Midler Avenue BCP
Remedial Investigation
Table 6 - Phase 2 Soil Data for Borings Within Stru

Sample ID ->	Units	TAGM 4046	SB 12-1	SB 12-1	SB 13-2	SB 13-2 DL	SB 13-2	SB 13-4	SB 13-4
Depth - >		RSCO	0 - 2	16 - 18	12 - 14	12 - 14	20 - 22	4 - 6	20 - 22
Date Sampled ->			03/18/05	03/18/05	3/21/2005	03/21/05	03/21/05	03/18/05	03/18/05
VOLATILES	ug/kg								
Chloromethane	ug/kg		12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
Bromomethane	ug/kg		12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
Vinyl chloride	ug/kg	200	12 U	1,600 U	**3,200**	**3,200 D**	**2,700**	**120**	**1 J**
Chloroethane	ug/kg	1,900	12 UJ	1,600 U	18 U	2,100 U	2,100 UJ	14 UJ	13 UJ
Methylene chloride	ug/kg	100	12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
Acetone	ug/kg	200	54 U	1,600 U	18 U	2,100 U	2,100 U	23 U	15 U
Carbon disulfide	ug/kg	2,700	12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
1,1-Dichloroethene	ug/kg	400	12 U	1,600 U	**21**	2,100 U	2,100 U	14 U	13 U
1,1-Dichloroethane	ug/kg	200	12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
Chloroform	ug/kg	300	12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
1,2-Dichloroethane	ug/kg	100	12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
2-Butanone	ug/kg	300	12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
1,1,1-Trichloroethane	ug/kg	800	12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
Carbon tetrachloride	ug/kg	600	12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
Bromodichloromethane	ug/kg		12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
1,2-Dichloropropane	ug/kg		12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
cis-1,3-Dichloropropene	ug/kg		12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
Trichloroethene	ug/kg	700	**220**	**1,800**	18 U	2,100 U	2,100 U	**14**	13 U
Dibromochloromethane	ug/kg		12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
1,1,2-Trichloroethane	ug/kg		12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
Benzene	ug/kg	60 or MDL	**4 J**	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
trans-1,3-Dichloropropene	ug/kg		12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
Bromoform	ug/kg		12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
4-Methyl-2-pentanone	ug/kg	1,000	12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
2-Hexanone	ug/kg		12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
Tetrachloroethene	ug/kg	1,400	12 U	**5,000**	18 U	2,100 U	2,100 U	14 U	**13 U**
Toluene	ug/kg	1,500	**6 J**	1,600 U	**4 J**	2,100 U	2,100 U	14 U	13 U
1,1,2,2-Tetrachloroethane	ug/kg	600	12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
Chlorobenzene	ug/kg	1,700	12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
Ethylbenzene	ug/kg	5,500	**3 J**	1,600 U	**3 J**	2,100 U	2,100 U	14 U	13 U
Styrene	ug/kg		12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
Total xylenes	ug/kg	1,200	**7 J**	1,600 U	**8 J**	2,100 U	2,100 U	14 U	13 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U
cis-1,2-Dichloroethene	ug/kg		**4 J**	**2,700**	**20,000**	**20,000 D**	**14,000**	**45**	13 U
trans-1,2-Dichloroethene	ug/kg	300	12 U	1,600 U	**60**	2,100 U	2,100 U	**2 J**	13 U
Dichlorodifluoromethane	ug/kg		**2 J**	1,600 U	18 U	2,100 U	2,100 UJ	14 U	13 U
Trichlorofluoromethane	ug/kg		12 U	1,600 U	18 U	2,100 U	2,100 U	14 U	13 U

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Remedial Investigation
Table 6 - Phase 2 Soil Data for Borings Within Stru

Sample ID ->	Units	TAGM 4046	SB 12-1		SB 12-1		SB 13-2		SB 13-2 DL		SB 13-2		SB 13-4		SB 13-4	
Depth - >		RSCO	0 - 2		16 - 18		12 - 14		12 - 14		20 - 22		4 - 6		20 - 22	
Date Sampled ->			03/18/05		03/18/05		3/21/2005		03/21/05		03/21/05		03/18/05		03/18/05	
Methyl acetate	ug/kg		12	U	1,600	U	18	U	2,100	U	2,100	U	14	U	13	U
Methyl tert butyl ether	ug/kg	120	12	U	1,600	U	18	U	2,100	U	2,100	U	14	U	13	U
Cyclohexane	ug/kg		12	U	1,600	U	18	U	2,100	U	2,100	U	14	U	13	U
Methylcyclohexane	ug/kg		12	U	1,600	U	**9**	**J**	2,100	U	2,100	U	14	U	13	U
1,2-Dibromoethane	ug/kg		12	U	1,600	U	18	U	2,100	U	2,100	U	14	U	13	U
Isopropylbenzene	ug/kg		12	U	1,600	U	18	U	2,100	U	2,100	U	14	U	13	U
1,3-Dichlorobenzene	ug/kg	1,600	12	U	1,600	U	18	U	2,100	U	2,100	U	14	U	13	U
1,4-Dichlorobenzene	ug/kg	8,500	12	U	1,600	U	18	U	2,100	U	2,100	U	14	U	13	U
1,2-Dichlorobenzene	ug/kg	7,900	12	U	1,600	U	18	U	2,100	U	2,100	U	14	U	13	U
1,2-Dibromo-3-chloropropane	ug/kg		12	U	1,600	U	18	U	2,100	U	2,100	U	14	U	13	U
1,2,4-Trichlorobenzene	ug/kg	3,400	12	U	1,600	U	18	U	2,100	U	2,100	U	14	U	13	U

RSCO = Recommended Soil Cleanup Objectives

1,000 - indicates detected value for c

- indicates value exceeds TAG

Pioneer Midler Avenue BCP
Remedial Investigation Report
Table 6 - Phase 2 Soil Data for Borings Within Structures

Sample ID ->	Units	TAGM 4046		SB 2-1		SB 3-1		SB 7-1		SB 9-1		SB 12-1		SB 13-4		SB 13-2	
Depth - >		RSCO	Eastern USA Background	5 - 7		2 - 4		2 - 4		4 - 6		0 - 2		4 - 6		12 - 14	
Date Sampled ->				03/16/05		03/16/05		03/17/05		03/17/05		03/18/05		03/18/05		03/21/05	
PCBs																	
Aroclor 1016	ug/kg	1,000 - surface soils, 10,000 - subsurface soils		130	U	200	U	140	U	95	U	100	U	97	U	150	U
Aroclor 1221	ug/kg			130	U	200	U	140	U	95	U	100	U	97	U	150	U
Aroclor 1232	ug/kg			130	U	200	U	140	U	95	U	100	U	97	U	150	U
Aroclor 1242	ug/kg			130	U	200	U	140	U	95	U	100	U	97	U	150	U
Aroclor 1248	ug/kg			130	U	200	U	140	U	95	U	100	U	97	U	150	U
Aroclor 1254	ug/kg			130	U	200	U	140	U	**14**	**J**	100	U	97	U	150	U
Aroclor 1260	ug/kg			130	U	200	U	140	U	95	U	100	U	97	U	150	U
INORGANICS																	
Aluminum	mg/kg	SB	33000	1,810		103		48.9	*	1,810	*	9,810	EJ	3,440	EJ	101	
Antimony	mg/kg	SB		0.59	U	0.93	U	0.50	UN*J	0.33	UNJ	1.6	BN	0.41	UN	0.62	U
Arsenic	mg/kg	7.5 or SB	3 - 12	1.7		0.76	U	0.44	U*	8.8	*	9.8		1.1	B	0.54	UNJ
Barium	mg/kg	300 or SB	15 - 600	23.2	B	26.0	B	15.7	BENJ	32.1	ENJ	117		13.7	B	31.8	B
Beryllium	mg/kg	0.16 or SB	0 - 1.75	0.21	B	0.30	B	0.16	BNJ	0.15	BNJ	0.54	B	0.10	B	0.19	B
Cadmium	mg/kg	1 or SB	0.1 - 1	0.04	U	0.07	U	0.1	BNJ	0.02	UNJ	0.03	U	0.03	U	0.04	U
Calcium	mg/kg	SB	130 - 35,000	91,158	J	228,000	E*J	189,000	J	50,042	J	37,700		18,200		421,171	
Chromium	mg/kg	10 or SB	1.5 - 40	3.0		0.35	B	0.23	BNJ	10.4	NJ	44.1	EJ	3.6	EJ	0.5	B
Cobalt	mg/kg	30 or SB	2.5 - 60	6.8	B	0.17	U	0.11	BNJ	52.6	NJ	10.9	EJ	1.9	BEJ	0.06	B
Copper	mg/kg	25 or SB	1 - 50	13.7		1.4	B	1.0	B	18.1		94.5		3.1		1.2	B
Iron	mg/kg	2,000 or SB	2,000 - 550,000	4,800		139		70.1	N*J	56,400	N*J	63,100		6,410		191	
Lead	mg/kg	SB	200 - 500	4.1		0.34	U	0.20	UN*J	13.1	N*J	187	N	7.3	N	0.3	U
Magnesium	mg/kg	SB	100 - 5,000	1,170		1,600		1,040	E*J	2,250	E*J	2,300		2,280		2,150	
Manganese	mg/kg	SB	50 - 5,000	101		11.9		6.9	EN*J	338	EN*J	1,870	N	115	N	9.4	
Mercury	mg/kg	0.1	0.001 - 0.2	0.046	B	0.032	U	0.029	BNJ	0.022	BNJ	0.063		0.016	U	0.023	UNJ
Nickel	mg/kg	13 or SB	0.5 - 25	11.5		3.1	B	1.3	BNJ	8.7	NJ	31.8		3.3	B	3.9	B
Potassium	mg/kg	SB	8,500 - 43,000	385	B	35.7	B	28.4	B*J	514	*J	1,220		563	B	63.5	B
Selenium	mg/kg	2 or SR	0.1 - 3.9	0.99	U	1.6	U	0.53	UN*J	0.35	UNJ	0.47	U	0.43	U	0.65	U
Silver	mg/kg	SB		0.44	B	0.30	U	0.10	U	1.1		0.29	B	0.08	U	0.12	U
Sodium	mg/kg	SB	6,000 - 8,000	374	B	448	B	78.0	BJ	172	B	292	B	125	B	310	B
Thallium	mg/kg	SB		0.73	U	1.1	U	0.39	UNJ	1.2	NJ	0.35	U	0.32	U	0.82	B
Vanadium	mg/kg	150 or SB	1 - 300	4.2	B	0.29	B	0.13	BNJ	20.9	NJ	33.1	EJ	6.3	EJ	0.1	U
Zinc	mg/kg	20 or SB	9 - 50	17.7		3.8	B	6.4	ENJ	29.3	ENJ	220		13.7		1.8	B

RSCO = Recommended Soil Cleanup Objectives
1,000 - indicates detected value for organics.
- indicates value exceeds TAGM 4046 RSCO

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 7 - Phase 3 Soil Boring Data for Sand Unit Wells to Till

Sample ID ->	Units	TAGM 4046	DW-1	DW-1	DW-2	DW-2	DW-2R	DW-2	DW-2R	DW-3	DW-4
Depth - >		RSCO	16-18	20-24	20-22	24-26	24-26	40-43	40-43	16-18.5	6-8
Date Sampled ->			7/27/2005	7/27/2005	7/26/2005	7/26/2005	7/26/2005	7/26/2005	7/26/2005	7/27/2005	7/28/2005
VOLATILES via EPA Method 8260											
Chloromethane	ug/kg		12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
Bromomethane	ug/kg		12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
Vinyl chloride	ug/kg	200	12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	210 J
Chloroethane	ug/kg	1,900	12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
Methylene chloride	ug/kg	100	12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
Acetone	ug/kg	200	12	10 J	14 UJ	12 UJ	12	12 UJ	12 U	32 U	48 J
Carbon disulfide	ug/kg	2,700	7 J	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	4.7 J	52 U
1,1-Dichloroethene	ug/kg	400	12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
1,1-Dichloroethane	ug/kg	200	12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
Chloroform	ug/kg	300	12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
1,2-Dichloroethane	ug/kg	100	12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
2-Butanone	ug/kg	300	12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
1,1,1-Trichloroethane	ug/kg	800	12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
Carbon tetrachloride	ug/kg	600	12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
Bromodichloromethane	ug/kg		12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
1,2-Dichloropropane	ug/kg		12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
cis-1,3-Dichloropropene	ug/kg		12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
Trichloroethene	ug/kg	700	12 U	12 U	14 UJ	12 UJ	12 U	17 J	25	19 U	52 U
Dibromochloromethane	ug/kg		12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
1,1,2-Trichloroethane	ug/kg		12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
Benzene	ug/kg	60 or MDL	12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
trans-1,3-Dichloropropene	ug/kg		12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
Bromoform	ug/kg		12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
4-Methyl-2-pentanone	ug/kg	1,000	12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
2-Hexanone	ug/kg		12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
Tetrachloroethene	ug/kg	1,400	12 U	12 U	14 UJ	12 UJ	12 U	86 J	150	19 U	52 U
Toluene	ug/kg	1,500	12 U	12 U	1.5 J	12 UJ	12 U	12 UJ	12 U	19 U	8 J
1,1,2,2-Tetrachloroethane	ug/kg	600	12 U	12 U	14 UJ	12 UJ	12 J	12 UJ	12 U	19 U	52 U
Chlorobenzene	ug/kg	1,700	12 U	12 U	3.1 J	12 UJ	12 U	12 UJ	12 U	19 U	52 U
Ethylbenzene	ug/kg	5,500	12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	6 J
Styrene	ug/kg		12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
Total xylenes	ug/kg	1,200	12 U	12 U	3.7 J	12 UJ	12 U	12 UJ	12 U	19 U	34 J
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	11 J	19 U	52 U
cis-1,2-Dichloroethene	ug/kg		12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	990 J
trans-1,2-Dichloroethene	ug/kg	300	12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	14 J

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Table 7 - Phase 3 Soil Boring Data for Sand Unit Wells to Till

Sample ID ->	Units	TAGM 4046	DW-1	DW-1	DW-2	DW-2	DW-2R	DW-2	DW-2R	DW-3	DW-4
Depth - >		RSCO	16-18	20-24	20-22	24-26	24-26	40-43	40-43	16-18.5	6-8
Date Sampled ->			7/27/2005	7/27/2005	7/26/2005	7/26/2005	7/26/2005	7/26/2005	7/26/2005	7/27/2005	7/28/2005
Dichlorodifluoromethane	ug/kg		12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
Trichlorofluoromethane	ug/kg		12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
Methyl acetate	ug/kg		12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
Methyl tert butyl ether	ug/kg	120	12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
Cyclohexane	ug/kg		12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
Methylcyclohexane	ug/kg		12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	**5 J**
1,2-Dibromoethane	ug/kg		12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
Isopropylbenzene	ug/kg		12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	**7 J**
1,3-Dichlorobenzene	ug/kg	1,600	12 U	12 U	**5.6 J**	12 UJ	12 U	12 UJ	12 U	19 U	52 U
1,4-Dichlorobenzene	ug/kg	8,500	12 U	12 U	**6.2 J**	12 UJ	12 U	12 UJ	12 U	19 U	52 U
1,2-Dichlorobenzene	ug/kg	7,900	12 U	12 U	**5.1 J**	12 UJ	12 U	12 UJ	12 U	19 U	52 U
1,2-Dibromo-3-chloropropane	ug/kg		12 U	12 U	14 UJ	12 UJ	12 U	12 UJ	12 U	19 U	52 U
1,2,4-Trichlorobenzene	ug/kg	3,400	12 U	12 U	**5.2 J**	12 UJ	12 U	12 UJ	12 U	19 U	52 U

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Table 7 - Phase 3 Soil Boring Data for Sand Unit Wells to Till

Sample ID ->	Units	TAGM 4046	DW-4		DW-4		DW-4		DW-4	
Depth - >		RSCO	6-8 RI		16-18.5		16-18.5DL		24-28.5	
Date Sampled ->			7/28/2005		7/28/2005		7/28/2005		7/28/2005	
VOLATILES via EPA Method 8260										
Chloromethane	ug/kg		51	U	1500	U	60000	U	12	U
Bromomethane	ug/kg		51	U	1500	U	60000	U	12	U
Vinyl chloride	ug/kg	200	**190**	**J**	**910**	**J**	60000	U	12	U
Chloroethane	ug/kg	1,900	51	U	1500	U	60000	U	12	U
Methylene chloride	ug/kg	100	51	U	1500	U	60000	U	12	U
Acetone	ug/kg	200	**65**		1500	U	60000	U	**5**	**J**
Carbon disulfide	ug/kg	2,700	51	U	1500	U	60000	U	12	U
1,1-Dichloroethene	ug/kg	400	51	U	1500	U	60000	U	12	U
1,1-Dichloroethane	ug/kg	200	51	U	1500	U	60000	U	12	U
Chloroform	ug/kg	300	51	U	1500	U	60000	U	12	U
1,2-Dichloroethane	ug/kg	100	51	U	1500	U	60000	U	12	U
2-Butanone	ug/kg	300	51	U	1500	U	60000	U	12	U
1,1,1-Trichloroethane	ug/kg	800	51	U	1500	U	60000	U	12	U
Carbon tetrachloride	ug/kg	600	51	U	1500	U	60000	U	12	U
Bromodichloromethane	ug/kg		51	U	1500	U	60000	U	12	U
1,2-Dichloropropane	ug/kg		51	U	1500	U	60000	U	12	U
cis-1,3-Dichloropropene	ug/kg		51	U	1500	U	60000	U	12	U
Trichloroethene	ug/kg	700	51	U	**26000**		**26000**	**DJ**	12	U
Dibromochloromethane	ug/kg		51	U	1500	U	60000	U	12	U
1,1,2-Trichloroethane	ug/kg		51	U	1500	U	60000	U	12	U
Benzene	ug/kg	60 or MDL	51	U	1500	U	60000	U	12	U
trans-1,3-Dichloropropene	ug/kg		51	U	1500	U	60000	U	12	U
Bromoform	ug/kg		51	U	1500	U	60000	U	12	U
4-Methyl-2-pentanone	ug/kg	1,000	51	U	1500	U	60000	U	12	U
2-Hexanone	ug/kg		51	U	1500	U	60000	U	12	U
Tetrachloroethene	ug/kg	1,400	51	U	**600000**		**600000**	**D**	**2**	**J**
Toluene	ug/kg	1,500	**8**	**J**	1500	U	60000	U	12	U
1,1,2,2-Tetrachloroethane	ug/kg	600	51	U	1500	U	60000	U	12	U
Chlorobenzene	ug/kg	1,700	51	U	1500	U	60000	U	12	U
Ethylbenzene	ug/kg	5,500	**7**	**J**	1500	U	60000	U	12	U
Styrene	ug/kg		51	U	1500	U	60000	U	12	U
Total xylenes	ug/kg	1,200	**35**	**J**	1500	U	60000	U	12	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	51	U	1500	U	60000	U	12	U
cis-1,2-Dichloroethene	ug/kg		**1000**		**20000**	**J**	**20000**	**DJ**	**2**	**J**
trans-1,2-Dichloroethene	ug/kg	300	**12**	**J**	**300**	**J**	60000	U	12	U

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Table 7 - Phase 3 Soil Boring Data for Sand Unit Wells to Till

Sample ID ->	Units	TAGM 4046	DW-4		DW-4		DW-4		DW-4	
Depth - >		RSCO	6-8 RI		16-18.5		16-18.5DL		24-28.5	
Date Sampled ->			7/28/2005		7/28/2005		7/28/2005		7/28/2005	
Dichlorodifluoromethane	ug/kg		51	U	1500	U	60000	U	12	U
Trichlorofluoromethane	ug/kg		51	U	1500	U	60000	U	12	U
Methyl acetate	ug/kg		51	U	1500	U	60000	U	12	U
Methyl tert butyl ether	ug/kg	120	51	U	1500	U	60000	U	12	U
Cyclohexane	ug/kg		51	U	1500	U	60000	U	12	U
Methylcyclohexane	ug/kg		**5**	**J**	1500	U	60000	U	12	U
1,2-Dibromoethane	ug/kg		51	U	1500	U	60000	U	12	U
Isopropylbenzene	ug/kg		**7**	**J**	1500	U	60000	U	12	U
1,3-Dichlorobenzene	ug/kg	1,600	51	U	1500	U	60000	U	12	U
1,4-Dichlorobenzene	ug/kg	8,500	51	U	1500	U	60000	U	12	U
1,2-Dichlorobenzene	ug/kg	7,900	51	U	1500	U	60000	U	12	U
1,2-Dibromo-3-chloropropane	ug/kg		51	U	1500	U	60000	U	12	U
1,2,4-Trichlorobenzene	ug/kg	3,400	51	U	1500	U	60000	U	12	U

RSCO = Recommended Soil Cleanup Objectives
1,000 - indicates detected value for organics.
- indicates value exceeds TAGM 4046 RSCO

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Table 8 - Phase 3 GeoProbe Boring Data for
Source Area Delineation - GPD Series

Sample ID ->	Units	TAGM	GPD-1	GPD-1	GPD-1	GPD-1	GPD-2	GPD-2	GPD-3	GPD-3	GPD-3	GPD-3
Depth - >		4046	7 - 9	7 - 9 DL	11 - 14	11 - 14 DL	15.8 - 17.5	15.8 - 17.5 DL	4 - 8	4 - 8 DL	15 - 17	15 - 17 DL
Date Sampled ->		RSCO	9/6/2005	9/6/2005	9/6/2005	9/6/2005	9/6/2005	9/6/2005	9/6/2005	9/6/2005	9/6/2005	9/6/2005
VOLATILES	ug/kg											
Chloromethane	ug/kg		14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Bromomethane	ug/kg		14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Vinyl chloride	ug/kg	200	4 J	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Chloroethane	ug/kg	1,900	14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	170 J	1,400,000 U
Methylene chloride	ug/kg	100	14 UJ	**79 D**	13 UJ	**41 DJ**	**40 J**	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Acetone	ug/kg	200	14 UJ	**41 DJ**	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Carbon disulfide	ug/kg	2,700	14 UJ	69 U	13 UJ	64 U	**19 J**	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
1,1-Dichloroethene	ug/kg	400	14 UJ	69 U	13 UJ	64 U	**8 J**	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
1,1-Dichloroethane	ug/kg	200	14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Chloroform	ug/kg	300	14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
1,2-Dichloroethane	ug/kg	100	14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
2-Butanone	ug/kg	300	14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
1,1,1-Trichloroethane	ug/kg	800	14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Carbon tetrachloride	ug/kg	600	14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Bromodichloromethane	ug/kg		14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
1,2-Dichloropropane	ug/kg		14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
cis-1,3-Dichloropropene	ug/kg		14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Trichloroethene	ug/kg	700	14 UJ	69 U	13 UJ	64 U	**2,200**	**2,200 D**	**110,000 J**	1,600,000,000 U	**2,700**	**310,000 DJ**
Dibromochloromethane	ug/kg		14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
1,1,2-Trichloroethane	ug/kg		14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Benzene	ug/kg	60 or MDL	14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
trans-1,3-Dichloropropene	ug/kg		14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Bromoform	ug/kg		14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
4-Methyl-2-pentanone	ug/kg	1,000	14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
2-Hexanone	ug/kg		14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Tetrachloroethene	ug/kg	1,400	14 UJ	69 U	**7 J**	64 U	**2,100**	**2,100 D**	**1,000,000,000**	**1,000,000,000 DJ**	**12,000,000**	**12,000,000 BD**
Toluene	ug/kg	1,500	14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
1,1,2,2-Tetrachloroethane	ug/kg	600	14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Chlorobenzene	ug/kg	1,700	14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Ethylbenzene	ug/kg	5,500	14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Styrene	ug/kg		14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Total xylenes	ug/kg	1,200	14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	**800 J**	1,600,000,000 U	1,400 U	1,400,000 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	14 UJ	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
cis-1,2-Dichloroethene	ug/kg		**5 J**	69 U	13 UJ	64 U	**340**	**230 DJ**	**30,000**	1,600,000,000 U	1,400 U	1,400,000 U
trans-1,2-Dichloroethene	ug/kg	300	**2 J**	69 U	13 UJ	64 U	**38 J**	1,500 U	**330 J**	1,600,000,000 U	1,400 U	1,400,000 U
Dichlorodifluoromethane	ug/kg		14 U	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Trichlorofluoromethane	ug/kg		14 U	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Methyl acetate	ug/kg		14 U	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Methyl tert butyl ether	ug/kg	120	14 U	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Cyclohexane	ug/kg		14 U	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Methylcyclohexane	ug/kg		14 U	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
1,2-Dibromoethane	ug/kg		14 U	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
Isopropylbenzene	ug/kg		14 U	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
1,3-Dichlorobenzene	ug/kg	1,600	14 U	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
1,4-Dichlorobenzene	ug/kg	8,500	14 U	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
1,2-Dichlorobenzene	ug/kg	7,900	14 U	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
1,2-Dibromo-3-chloropropane	ug/kg		14 U	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U
1,2,4-Trichlorobenzene	ug/kg	3,400	14 U	69 U	13 UJ	64 U	60 U	1,500 U	1,600 U	1,600,000,000 U	1,400 U	1,400,000 U

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Table 8 - Phase 3 GeoProbe Boring Data for
Source Area Delineation - GPD Series

Sample ID ->	Units	TAGM	GPD-3	GPD-3	GPD-3	GPD-5	GPD-5	GPD-5	GPD-6	GPD-6	GPD-6	GPD-6
Depth - >		4046	17 - 20	17 - 20 DL	23 - 26	14 - 15.2	16 - 18	16 - 18 DL	4 - 8	12 - 13	12 - 13 DL	13 - 15
Date Sampled ->		RSCO	9/6/2005	9/6/2005	9/6/2005	9/7/2005	9/7/2005	9/7/2005	9/7/2005	9/7/2005	9/7/2005	9/7/2005
VOLATILES	ug/kg											
Chloromethane	ug/kg		1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
Bromomethane	ug/kg		1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
Vinyl chloride	ug/kg	200	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
Chloroethane	ug/kg	1,900	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
Methylene chloride	ug/kg	100	1,300 U	2,600,000 U	1,400 U	1,500 U	**41 J**	1,500 U	1,500 U	**41 J**	1,500 U	1,600 U
Acetone	ug/kg	200	1,300 U	2,600,000 U	1,400 U	1,500 U	**20 J**	1,500 U	1,500 U	**35 J**	1,500 U	1,600 U
Carbon disulfide	ug/kg	2,700	1,300 U	2,600,000 U	1,400 U	1,500 U	**30 J**	1,500 U	1,500 U	**10 J**	1,500 U	1,600 U
1,1-Dichloroethene	ug/kg	400	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
1,1-Dichloroethane	ug/kg	200	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
Chloroform	ug/kg	300	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
1,2-Dichloroethane	ug/kg	100	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
2-Butanone	ug/kg	300	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
1,1,1-Trichloroethane	ug/kg	800	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
Carbon tetrachloride	ug/kg	600	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
Bromodichloromethane	ug/kg		1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
1,2-Dichloropropane	ug/kg		1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
cis-1,3-Dichloropropene	ug/kg		1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
Trichloroethene	ug/kg	700	**4,100**	**370,000 DJ**	**1,500**	**1,500**	**2,400**	**2,800 D**	1,500 U	**260**	**260 DJ**	**3,400**
Dibromochloromethane	ug/kg		1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
1,1,2-Trichloroethane	ug/kg		1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
Benzene	ug/kg	60 or MDL	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
trans-1,3-Dichloropropene	ug/kg		1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
Bromoform	ug/kg		1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
4-Methyl-2-pentanone	ug/kg	1,000	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
2-Hexanone	ug/kg		1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
Tetrachloroethene	ug/kg	1,400	**23,000,000**	**23,000,000 BD**	**6,700 B**	**4,500**	**11 J**	**2,400 D**	**1,900**	**8 J**	**1,600 D**	**2,800**
Toluene	ug/kg	1,500	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
1,1,2,2-Tetrachloroethane	ug/kg	600	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
Chlorobenzene	ug/kg	1,700	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
Ethylbenzene	ug/kg	5,500	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
Styrene	ug/kg		1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
Total xylenes	ug/kg	1,200	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
cis-1,2-Dichloroethene	ug/kg		1,300 U	2,600,000 U	1,400 U	**550 J**	**410**	**340 DJ**	1,500 U	**760 J**	**760 DJ**	**1,600**
trans-1,2-Dichloroethene	ug/kg	300	1,300 U	2,600,000 U	1,400 U	1,500 U	**62**	1,500 U	1,500 U	**78**	1,500 U	1,600 U
Dichlorodifluoromethane	ug/kg		1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
Trichlorofluoromethane	ug/kg		1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
Methyl acetate	ug/kg		1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
Methyl tert butyl ether	ug/kg	120	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
Cyclohexane	ug/kg		1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
Methylcyclohexane	ug/kg		1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
1,2-Dibromoethane	ug/kg		1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
Isopropylbenzene	ug/kg		1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
1,3-Dichlorobenzene	ug/kg	1,600	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
1,4-Dichlorobenzene	ug/kg	8,500	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
1,2-Dichlorobenzene	ug/kg	7,900	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
1,2-Dibromo-3-chloropropane	ug/kg		1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U
1,2,4-Trichlorobenzene	ug/kg	3,400	1,300 U	2,600,000 U	1,400 U	1,500 U	57 U	1,500 U	1,500 U	59 U	1,500 U	1,600 U

Pioneer Midler Avenue LLC
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Table 8 - Phase 3 GeoProbe Boring Data for
Source Area Delineation - GPD Series

Sample ID ->	Units	TAGM	GPD-7	GPD-8	GPD-8	GPD-10	GPD-10	GPD-10	GPD-12	GPD-12	GPD-12	GPD-12
Depth - >		4046	4 - 8	4 - 7.6	11.5-15	4 - 7.6	4 - 7.6 DL	17 - 19	4 - 7	4 - 7 DL	15 - 16	16 - 19
Date Sampled ->		RSCO	9/7/2005	9/8/2005	9/19/2005	9/8/2005	9/8/2005	9/8/2005	9/8/2005	9/8/2005	9/8/2005	9/8/2005
VOLATILES	ug/kg											
Chloromethane	ug/kg		11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
Bromomethane	ug/kg		11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
Vinyl chloride	ug/kg	200	7 J	7 J	18 U	**70**	1,400 U	14 U	**180** U	**180** DJ	4 J	2 J
Chloroethane	ug/kg	1,900	11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
Methylene chloride	ug/kg	100	7 J	7 J	9 J	7 J	1,400 U	7 J	7 J	1,400 U	5 J	5 J
Acetone	ug/kg	200	11 U	4 J	11 J	17	1,400 U	10 J	7 J	1,400 U	7 J	9 J
Carbon disulfide	ug/kg	2,700	11 U	11 U	4 J	2 J	1,400 U	14 U	12 U	1,400 U	5 J	12 U
1,1-Dichloroethene	ug/kg	400	11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
1,1-Dichloroethane	ug/kg	200	11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
Chloroform	ug/kg	300	11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
1,2-Dichloroethane	ug/kg	100	11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
2-Butanone	ug/kg	300	11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
1,1,1-Trichloroethane	ug/kg	800	11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
Carbon tetrachloride	ug/kg	600	11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
Bromodichloromethane	ug/kg		11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
1,2-Dichloropropane	ug/kg		11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
cis-1,3-Dichloropropene	ug/kg		11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
Trichloroethene	ug/kg	700	11 U	11 U	14 J	2 J	1,400 U	14 U	12 U	1,400 U	20	12 U
Dibromochloromethane	ug/kg		11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
1,1,2-Trichloroethane	ug/kg		11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
Benzene	ug/kg	60 or MDL	11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
trans-1,3-Dichloropropene	ug/kg		11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
Bromoform	ug/kg		11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
4-Methyl-2-pentanone	ug/kg	1,000	11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
2-Hexanone	ug/kg		11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
Tetrachloroethene	ug/kg	1,400	11 U	11 U	2 J	12 U	180 DJ	14 U	12 U	1,400 U	26	12 U
Toluene	ug/kg	1,500	11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
1,1,2,2-Tetrachloroethane	ug/kg	600	11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
Chlorobenzene	ug/kg	1,700	11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
Ethylbenzene	ug/kg	5,500	11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
Styrene	ug/kg		11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
Total xylenes	ug/kg	1,200	11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
cis-1,2-Dichloroethene	ug/kg		11 U	11 U	**44**	**3,200**	**3,200** D	14 U	**2,000**	**2,000** D	**92**	3 J
trans-1,2-Dichloroethene	ug/kg	300	11 U	11 U	10 J	**180**	**1,000** DJ	14 U	**24**	1,400 U	6 J	12 U
Dichlorodifluoromethane	ug/kg		11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
Trichlorofluoromethane	ug/kg		11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
Methyl acetate	ug/kg		11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
Methyl tert butyl ether	ug/kg	120	11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
Cyclohexane	ug/kg		11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
Methylcyclohexane	ug/kg		11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
1,2-Dibromoethane	ug/kg		11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
Isopropylbenzene	ug/kg		11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
1,3-Dichlorobenzene	ug/kg	1,600	11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
1,4-Dichlorobenzene	ug/kg	8,500	11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
1,2-Dichlorobenzene	ug/kg	7,900	11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
1,2-Dibromo-3-chloropropane	ug/kg		11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U
1,2,4-Trichlorobenzene	ug/kg	3,400	11 U	11 U	18 U	12 U	1,400 U	14 U	12 U	1,400 U	12 U	12 U

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Table 8 - Phase 3 GeoProbe Boring Data for
Source Area Delineation - GPD Series

Sample ID ->	Units	TAGM	GPD-13	GPD-14	GPD-14	GPD-14	GPD-16	GPD-16	GPD-17	GPD-18	GPD-18	GPD-18
Depth - >		4046	4 - 7	7 - 9.8	15 - 17.5	15 - 17.5 DL	4 - 7	11 - 15	7 - 11	4 - 7	4 - 7 DL	11 - 15
Date Sampled ->		RSCO	9/8/2005	9/8/2005	9/8/2005	9/8/2005	9/9/2005	9/9/2005	9/9/2005	9/9/2005	9/9/2005	9/9/2005
VOLATILES	ug/kg											
Chloromethane	ug/kg		13 U	2,000 U	11 U	1,300 U	2 J	12 U	19 U	11 U	1,300 U	14 U
Bromomethane	ug/kg		13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
Vinyl chloride	ug/kg	200	**120**	**5,000**	**14**	1,300 U	**27**	**1** J	19 U	**200**	1,300 U	**100**
Chloroethane	ug/kg	1,900	13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
Methylene chloride	ug/kg	100	**8** J	2,000 U	**6** J	1,300 U	**8** J	**7** J	**11** J	**5** J	1,300 U	14 U
Acetone	ug/kg	200	13 U	2,000 U	**7** J	1,300 U	**17**	**8** J	**9** J	**4** J	1,300 U	14 U
Carbon disulfide	ug/kg	2,700	13 U	2,000 U	**4** J	1,300 U	12 U	12 U	19 U	11 U	1,300 U	**2** J
1,1-Dichloroethene	ug/kg	400	13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
1,1-Dichloroethane	ug/kg	200	13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
Chloroform	ug/kg	300	13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
1,2-Dichloroethane	ug/kg	100	13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
2-Butanone	ug/kg	300	13 U	2,000 U	11 U	1,300 U	**4** J	12 U	19 U	11 U	1,300 U	14 U
1,1,1-Trichloroethane	ug/kg	800	13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
Carbon tetrachloride	ug/kg	600	13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
Bromodichloromethane	ug/kg		13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
1,2-Dichloropropane	ug/kg		13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
cis-1,3-Dichloropropene	ug/kg		13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
Trichloroethene	ug/kg	700	**4** J	**5,800**	**84**	**480** DJ	12 U	12 U	19 U	11 U	1,300 U	**120**
Dibromochloromethane	ug/kg		13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
1,1,2-Trichloroethane	ug/kg		13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
Benzene	ug/kg	60 or MDL	13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
trans-1,3-Dichloropropene	ug/kg		13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
Bromoform	ug/kg		13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
4-Methyl-2-pentanone	ug/kg	1,000	13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
2-Hexanone	ug/kg		13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
Tetrachloroethene	ug/kg	1,400	13 U	**7,100**	**110**	**740** DJ	12 U	12 U	19 U	11 U	1,300 U	**5** J
Toluene	ug/kg	1,500	13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
1,1,2,2-Tetrachloroethane	ug/kg	600	13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
Chlorobenzene	ug/kg	1,700	13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
Ethylbenzene	ug/kg	5,500	13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
Styrene	ug/kg		13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
Total xylenes	ug/kg	1,200	13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
cis-1,2-Dichloroethene	ug/kg		**100**	**33,000**	**790**	**790** DJ	**19**	**10** J	19 U	**1,300**	**1,300** D	**2,100**
trans-1,2-Dichloroethene	ug/kg	300	**2** J	**12,000**	**21**	1,300 U	12 U	**2** J	19 U	**15**	1,300 U	**56**
Dichlorodifluoromethane	ug/kg		13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
Trichlorofluoromethane	ug/kg		13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
Methyl acetate	ug/kg		13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
Methyl tert butyl ether	ug/kg	120	13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
Cyclohexane	ug/kg		13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
Methylcyclohexane	ug/kg		13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
1,2-Dibromoethane	ug/kg		13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
Isopropylbenzene	ug/kg		13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
1,3-Dichlorobenzene	ug/kg	1,600	13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
1,4-Dichlorobenzene	ug/kg	8,500	13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
1,2-Dichlorobenzene	ug/kg	7,900	13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
1,2-Dibromo-3-chloropropane	ug/kg		13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U
1,2,4-Trichlorobenzene	ug/kg	3,400	13 U	2,000 U	11 U	1,300 U	12 U	12 U	19 U	11 U	1,300 U	14 U

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Table 8 - Phase 3 GeoProbe Boring Data for
Source Area Delineation - GPD Series

Sample ID ->	Units	TAGM	GPD-18	GPD-19	GPD-19	GPD-20	GPD-20	GPD-20	GPD-21	GPD-21	GPD-21	GPD-24
Depth - >		4046	11 - 15 DL	3 - 4	7 - 11	2 - 4	15 - 17.7	17.7 - 19	3.3 - 4	15 - 18.2	19 - 21	2 - 4
Date Sampled ->		RSCO	9/9/2005	9/9/2005	9/9/2005	9/9/2005	9/9/2005	9/9/2005	9/9/2005	9/9/2005	9/9/2005	9/12/2005
VOLATILES	ug/kg											
Chloromethane	ug/kg		1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Bromomethane	ug/kg		1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Vinyl chloride	ug/kg	200	1,700 U	1,600 U	**9,100**	12 U	11 U	14 U	1,300 U	**660 J**	14 U	11 U
Chloroethane	ug/kg	1,900	1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Methylene chloride	ug/kg	100	1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Acetone	ug/kg	200	1,700 U	1,600 U	1,300 U	46 U	11 U	17 U	1,300 U	1,300 U	14 U	45 U
Carbon disulfide	ug/kg	2,700	1,700 U	1,600 U	1,300 UJ	12 U	**9 J**	**6 J**	1,300 UJ	1,300 UJ	14 U	11 U
1,1-Dichloroethene	ug/kg	400	1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
1,1-Dichloroethane	ug/kg	200	1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Chloroform	ug/kg	300	1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
1,2-Dichloroethane	ug/kg	100	1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
2-Butanone	ug/kg	300	1,700 U	1,600 U	1,300 U	**12**	11 U	14 U	1,300 U	1,300 U	14 U	**8 J**
1,1,1-Trichloroethane	ug/kg	800	1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Carbon tetrachloride	ug/kg	600	1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Bromodichloromethane	ug/kg		1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
1,2-Dichloropropane	ug/kg		1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
cis-1,3-Dichloropropene	ug/kg		1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Trichloroethene	ug/kg	700	**480 DJ**	**440 J**	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Dibromochloromethane	ug/kg		1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
1,1,2-Trichloroethane	ug/kg		1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Benzene	ug/kg	60 or MDL	1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
trans-1,3-Dichloropropene	ug/kg		1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Bromoform	ug/kg		1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
4-Methyl-2-pentanone	ug/kg	1,000	1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
2-Hexanone	ug/kg		1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Tetrachloroethene	ug/kg	1,400	1,700 U	**4,500**	1,300 U	**1 J**	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Toluene	ug/kg	1,500	1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
1,1,2,2-Tetrachloroethane	ug/kg	600	1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Chlorobenzene	ug/kg	1,700	1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Ethylbenzene	ug/kg	5,500	1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Styrene	ug/kg		1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Total xylenes	ug/kg	1,200	1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	**980 J**	1,300 U	14 U	11 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
cis-1,2-Dichloroethene	ug/kg		**2,100 D**	**850 J**	**11,000**	12 U	**2 J**	14 U	1,300 U	**5,000**	14 U	11 U
trans-1,2-Dichloroethene	ug/kg	300	1,700 U	1,600 U	**200 J**	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Dichlorodifluoromethane	ug/kg		1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Trichlorofluoromethane	ug/kg		1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Methyl acetate	ug/kg		1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	**490 J**	1,300 U	14 U	11 U
Methyl tert butyl ether	ug/kg	120	1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Cyclohexane	ug/kg		1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	**360 J**	1,300 U	14 U	11 U
Methylcyclohexane	ug/kg		1,700 U	**190 J**	1,300 U	12 U	11 U	14 U	**3,000**	1,300 U	14 U	11 U
1,2-Dibromoethane	ug/kg		1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
Isopropylbenzene	ug/kg		1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	**620 J**	1,300 U	14 U	11 U
1,3-Dichlorobenzene	ug/kg	1,600	1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
1,4-Dichlorobenzene	ug/kg	8,500	1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
1,2-Dichlorobenzene	ug/kg	7,900	1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
1,2-Dibromo-3-chloropropane	ug/kg		1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U
1,2,4-Trichlorobenzene	ug/kg	3,400	1,700 U	1,600 U	1,300 U	12 U	11 U	14 U	1,300 U	1,300 U	14 U	11 U

Pioneer Midler Avenue LLC
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Table 8 - Phase 3 GeoProbe Boring Data for
Source Area Delineation - GPD Series

Sample ID ->	Units	TAGM	GPD-24	GPD-24	GPD-25	GPD-25	GPD-26	GPD-26	GPD-26	GPD-26	GPD-26	GPD-27
Depth - >		4046	11 - 15	16 - 17	3 - 3.4	11 - 15	4 - 7	4 -7 DL	11 - 15	11 - 15 DL	17.5 - 19	0 - 4
Date Sampled ->		RSCO	9/12/2005	9/12/2005	9/12/2005	9/12/2005	9/12/2005	9/12/2005	9/12/2005	9/12/2005	9/12/2005	9/12/2005
VOLATILES	ug/kg											
Chloromethane	ug/kg		11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Bromomethane	ug/kg		11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Vinyl chloride	ug/kg	200	11 U	12 U	12 U	11 U	**3,200**	**2,200 DJ**	1,400 U	1,400,000 U	1,700 U	51 U
Chloroethane	ug/kg	1,900	11 U	12 U	12 U	11 U	**1,700**	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Methylene chloride	ug/kg	100	11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Acetone	ug/kg	200	12 U	12 U	13 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Carbon disulfide	ug/kg	2,700	11 U	**14**	12 U	11 U	1,500 UJ	15,000 U	1,400 UJ	1,400,000 U	1,700 U	51 U
1,1-Dichloroethene	ug/kg	400	11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
1,1-Dichloroethane	ug/kg	200	11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Chloroform	ug/kg	300	11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
1,2-Dichloroethane	ug/kg	100	11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
2-Butanone	ug/kg	300	11 U	12 U	4 J	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
1,1,1-Trichloroethane	ug/kg	800	11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Carbon tetrachloride	ug/kg	600	11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Bromodichloromethane	ug/kg		11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
1,2-Dichloropropane	ug/kg		11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
cis-1,3-Dichloropropene	ug/kg		11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Trichloroethene	ug/kg	700	11 U	12 U	12 U	11 U	**29,000**	**29,000 D**	**32,000 EJ**	1,400,000 U	1,700 U	**23 J**
Dibromochloromethane	ug/kg		11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
1,1,2-Trichloroethane	ug/kg		11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Benzene	ug/kg	60 or MDL	11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
trans-1,3-Dichloropropene	ug/kg		11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Bromoform	ug/kg		11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
4-Methyl-2-pentanone	ug/kg	1,000	11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
2-Hexanone	ug/kg		11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Tetrachloroethene	ug/kg	1,400	11 U	12 U	12 U	11 U	**210,000**	**210,000 D**	**2,500,000**	**2,500,000 D**	**500 J**	**39 J**
Toluene	ug/kg	1,500	11 U	12 U	12 U	11 U	300 J	15,000 U	610 J	1,400,000 U	1,700 U	51 U
1,1,2,2-Tetrachloroethane	ug/kg	600	11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Chlorobenzene	ug/kg	1,700	11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Ethylbenzene	ug/kg	5,500	11 U	12 U	12 U	11 U	230 J	15,000 U	290 J	1,400,000 U	1,700 U	51 U
Styrene	ug/kg		11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Total xylenes	ug/kg	1,200	11 U	12 U	12 U	11 U	1,200 J	15,000 U	1,000 J	1,400,000 U	1,700 U	51 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
cis-1,2-Dichloroethene	ug/kg		11 U	12 U	12 U	11 U	**28,000**	**28,000 D**	**11,000**	1,400,000 U	1,700 U	51 U
trans-1,2-Dichloroethene	ug/kg	300	11 U	12 U	12 U	11 U	**400 J**	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Dichlorodifluoromethane	ug/kg		11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Trichlorofluoromethane	ug/kg		11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Methyl acetate	ug/kg		11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Methyl tert butyl ether	ug/kg	120	11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Cyclohexane	ug/kg		11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Methylcyclohexane	ug/kg		11 U	12 U	12 U	11 U	440 J	15,000 U	660 J	1,400,000 U	1,700 U	51 U
1,2-Dibromoethane	ug/kg		11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
Isopropylbenzene	ug/kg		11 U	12 U	12 U	11 U	1,500	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
1,3-Dichlorobenzene	ug/kg	1,600	11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
1,4-Dichlorobenzene	ug/kg	8,500	11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
1,2-Dichlorobenzene	ug/kg	7,900	11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
1,2-Dibromo-3-chloropropane	ug/kg		11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U
1,2,4-Trichlorobenzene	ug/kg	3,400	11 U	12 U	12 U	11 U	1,500 U	15,000 U	1,400 U	1,400,000 U	1,700 U	51 U

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Table 8 - Phase 3 GeoProbe Boring Data for
Source Area Delineation - GPD Series

Sample ID ->	Units	TAGM	GPD-27	GPD-28	GPD-28	GPD-29	GPD-29	GPD-30	GPD-30	GPD-32	GPD-33	GPD-34
Depth - >		4046	7 - 11	0.5-4	11 - 15	0.5 - 4	12 - 16	0.3 - 4	11 - 15	11-15	15 - 18	7 - 11
Date Sampled ->		RSCO	9/12/2005	9/13/2005	9/13/2005	9/13/2005	9/13/2005	9/13/2005	9/13/2005	9/14/2005	9/14/2005	9/14/2005
VOLATILES	ug/kg											
Chloromethane	ug/kg		110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
Bromomethane	ug/kg		110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
Vinyl chloride	ug/kg	200	**1,400**	**2 J**	22 U	84 U	23 U	13 U	**4 J**	**3,700**	**930 J**	**2,000 J**
Chloroethane	ug/kg	1,900	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
Methylene chloride	ug/kg	100	110 U	16 U	22 U	84 U	23 U	13 U	**10 J**	2,800 U	3,000 U	2,100 U
Acetone	ug/kg	200	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
Carbon disulfide	ug/kg	2,700	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
1,1-Dichloroethene	ug/kg	400	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
1,1-Dichloroethane	ug/kg	200	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
Chloroform	ug/kg	300	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
1,2-Dichloroethane	ug/kg	100	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
2-Butanone	ug/kg	300	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
1,1,1-Trichloroethane	ug/kg	800	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
Carbon tetrachloride	ug/kg	600	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
Bromodichloromethane	ug/kg		110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
1,2-Dichloropropane	ug/kg		110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
cis-1,3-Dichloropropene	ug/kg		110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
Trichloroethene	ug/kg	700	110 U	**9 J**	22 U	**24 J**	**3 J**	**9 J**	21 U	2,800 U	**1,600 J**	2,100 U
Dibromochloromethane	ug/kg		110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
1,1,2-Trichloroethane	ug/kg		110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
Benzene	ug/kg	60 or MDL	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
trans-1,3-Dichloropropene	ug/kg		110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
Bromoform	ug/kg		110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
4-Methyl-2-pentanone	ug/kg	1,000	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
2-Hexanone	ug/kg		110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
Tetrachloroethene	ug/kg	1,400	110 U	**58**	22 U	**280**	**4 J**	**28**	**2 J**	2,800 U	3,000 U	**350 J**
Toluene	ug/kg	1,500	**38 J**	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
1,1,2,2-Tetrachloroethane	ug/kg	600	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
Chlorobenzene	ug/kg	1,700	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
Ethylbenzene	ug/kg	5,500	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
Styrene	ug/kg		110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
Total xylenes	ug/kg	1,200	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
cis-1,2-Dichloroethene	ug/kg		**1,500**	**20**	22 U	**23 J**	**8 J**	**24**	**15 J**	**24,000**	**17,000**	**1,000 J**
trans-1,2-Dichloroethene	ug/kg	300	**95 J**	**4 J**	22 U	84 U	**8 J**	**7 J**	**4 J**	2,800 U	**1,000 J**	2,100 U
Dichlorodifluoromethane	ug/kg		110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
Trichlorofluoromethane	ug/kg		110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
Methyl acetate	ug/kg		110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
Methyl tert butyl ether	ug/kg	120	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
Cyclohexane	ug/kg		110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
Methylcyclohexane	ug/kg		110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
1,2-Dibromoethane	ug/kg		110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
Isopropylbenzene	ug/kg		110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
1,3-Dichlorobenzene	ug/kg	1,600	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
1,4-Dichlorobenzene	ug/kg	8,500	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
1,2-Dichlorobenzene	ug/kg	7,900	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
1,2-Dibromo-3-chloropropane	ug/kg		110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U
1,2,4-Trichlorobenzene	ug/kg	3,400	110 U	16 U	22 U	84 U	23 U	13 U	21 U	2,800 U	3,000 U	2,100 U

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Table 8 - Phase 3 GeoProbe Boring Data for
Source Area Delineation - GPD Series

Sample ID ->	Units	TAGM	GPD-34	GPD-36	GPD-36	GPD-37	GPD-37	GPD-38	GPD-38	GPD-38	GPD-38	GPD-41
Depth ->		4046	15-17	4 - 7	11 - 15	7 - 11	15-18.3	4 - 7	4 - 7DL	15 -17	17 -19	7 - 11
Date Sampled ->		RSCO	9/14/2005	9/15/2005	9/15/2005	9/15/2005	9/15/2005	9/15/2005	9/15/2005	9/15/2005	9/15/2005	9/16/2005
VOLATILES	ug/kg											
Chloromethane	ug/kg		2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
Bromomethane	ug/kg		2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
Vinyl chloride	ug/kg	200	**2,700**	11 U	**1200 J**	**2800**	1,600 U	R	**27 J**	**170 J**	1700 U	**4400**
Chloroethane	ug/kg	1,900	2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
Methylene chloride	ug/kg	100	2,200 U	11 U	1400 U	1400 U	1,600 U	**7 J**	**44 BJ**	1600 U	1700 U	2200 U
Acetone	ug/kg	200	2,200 U	11 U	1400 U	1400 U	1,600 U	**20**	**53 J**	1600 U	1700 U	2200 U
Carbon disulfide	ug/kg	2,700	2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
1,1-Dichloroethene	ug/kg	400	2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
1,1-Dichloroethane	ug/kg	200	2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
Chloroform	ug/kg	300	2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
1,2-Dichloroethane	ug/kg	100	2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
2-Butanone	ug/kg	300	2,200 U	11 U	1400 U	1400 U	1,600 U	**5 J**	67 U	1600 U	1700 U	2200 U
1,1,1-Trichloroethane	ug/kg	800	2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
Carbon tetrachloride	ug/kg	600	2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
Bromodichloromethane	ug/kg		2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
1,2-Dichloropropane	ug/kg		2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
cis-1,3-Dichloropropene	ug/kg		2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
Trichloroethene	ug/kg	700	2,200 U	11 U	1400 U	1400 U	**910 J**	13 U	67 U	**230 J**	1700 U	2200 U
Dibromochloromethane	ug/kg		2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
1,1,2-Trichloroethane	ug/kg		2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
Benzene	ug/kg	60 or MDL	2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
trans-1,3-Dichloropropene	ug/kg		2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
Bromoform	ug/kg		2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
4-Methyl-2-pentanone	ug/kg	1,000	2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
2-Hexanone	ug/kg		2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
Tetrachloroethene	ug/kg	1,400	**310 J**	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	**22000**	2200 U
Toluene	ug/kg	1,500	2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
1,1,2,2-Tetrachloroethane	ug/kg	600	2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
Chlorobenzene	ug/kg	1,700	2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
Ethylbenzene	ug/kg	5,500	2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
Styrene	ug/kg		2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
Total xylenes	ug/kg	1,200	2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
cis-1,2-Dichloroethene	ug/kg		**1,900 J**	11 U	**7100**	**7800**	**7,400**	R	**330**	**7200**	1700 U	**13000**
trans-1,2-Dichloroethene	ug/kg	300	**430 J**	11 U	**540 J**	**260 J**	1,600 U	13 UJ	67 U	**280 J**	1700 U	2200 U
Dichlorodifluoromethane	ug/kg		2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	**10 J**	1600 U	1700 U	2200 U
Trichlorofluoromethane	ug/kg		2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
Methyl acetate	ug/kg		2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
Methyl tert butyl ether	ug/kg	120	2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
Cyclohexane	ug/kg		2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
Methylcyclohexane	ug/kg		2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
1,2-Dibromoethane	ug/kg		2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
Isopropylbenzene	ug/kg		2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
1,3-Dichlorobenzene	ug/kg	1,600	2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
1,4-Dichlorobenzene	ug/kg	8,500	2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
1,2-Dichlorobenzene	ug/kg	7,900	2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
1,2-Dibromo-3-chloropropane	ug/kg		2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U
1,2,4-Trichlorobenzene	ug/kg	3,400	2,200 U	11 U	1400 U	1400 U	1,600 U	13 U	67 U	1600 U	1700 U	2200 U

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 8 - Phase 3 GeoProbe Boring Data for Source Area Delineation - GPD Series

Sample ID ->	Units	TAGM	GPD-42	GPD-43	GPD-44	GPD-44	GPD-45	GPD-45	GPD-45	GPD-47	GPD-47	GPD-47
Depth - >		4046	11 - 15	11 - 15	4 - 7	15 -17.9	2 - 4	15-18.3	19-22	4 - 7	4 - 7 DL	11 - 15
Date Sampled ->		RSCO	9/16/2005	9/16/2005	9/16/2005	9/16/2005	9/19/2005	9/19/2005	9/19/2005	9/19/2005	9/19/2005	9/19/2005
VOLATILES	ug/kg											
Chloromethane	ug/kg		2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
Bromomethane	ug/kg		2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
Vinyl chloride	ug/kg	200	**2200**	**1700**	**1,800**	1600 U	**33**	**9 J**	14 U	**170**	**97 D**	**1300**
Chloroethane	ug/kg	1,900	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
Methylene chloride	ug/kg	100	2000 U	1400 U	1,500 U	1600 U	11 U	**7 BJ**	14 U	15 U	**35 DJ**	1100 U
Acetone	ug/kg	200	2000 U	1400 U	1,500 U	1600 U	11 U	**4 J**	14 U	28 U	**59 DJ**	1100 U
Carbon disulfide	ug/kg	2,700	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	**8 J**	15 U	60 U	1100 U
1,1-Dichloroethene	ug/kg	400	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
1,1-Dichloroethane	ug/kg	200	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
Chloroform	ug/kg	300	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
1,2-Dichloroethane	ug/kg	100	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
2-Butanone	ug/kg	300	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
1,1,1-Trichloroethane	ug/kg	800	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
Carbon tetrachloride	ug/kg	600	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
Bromodichloromethane	ug/kg		2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
1,2-Dichloropropane	ug/kg		2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
cis-1,3-Dichloropropene	ug/kg		2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
Trichloroethene	ug/kg	700	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
Dibromochloromethane	ug/kg		2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
1,1,2-Trichloroethane	ug/kg		2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
Benzene	ug/kg	60 or MDL	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
trans-1,3-Dichloropropene	ug/kg		2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
Bromoform	ug/kg		2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
4-Methyl-2-pentanone	ug/kg	1,000	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
2-Hexanone	ug/kg		2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
Tetrachloroethene	ug/kg	1,400	2000 U	1400 U	1,500 U	1600 U	**1 J**	13 U	14 U	15 U	60 U	1100 U
Toluene	ug/kg	1,500	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
1,1,2,2-Tetrachloroethane	ug/kg	600	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
Chlorobenzene	ug/kg	1,700	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
Ethylbenzene	ug/kg	5,500	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
Styrene	ug/kg		2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
Total xylenes	ug/kg	1,200	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
cis-1,2-Dichloroethene	ug/kg		**9600**	**6800**	**9,800**	**3700**	**27**	**12 J**	14 U	**430**	**430 D**	**5400**
trans-1,2-Dichloroethene	ug/kg	300	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	**5 J**	**10 DJ**	1100 U
Dichlorodifluoromethane	ug/kg		2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
Trichlorofluoromethane	ug/kg		2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
Methyl acetate	ug/kg		2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
Methyl tert butyl ether	ug/kg	120	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
Cyclohexane	ug/kg		2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
Methylcyclohexane	ug/kg		2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
1,2-Dibromoethane	ug/kg		2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
Isopropylbenzene	ug/kg		2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
1,3-Dichlorobenzene	ug/kg	1,600	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
1,4-Dichlorobenzene	ug/kg	8,500	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
1,2-Dichlorobenzene	ug/kg	7,900	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
1,2-Dibromo-3-chloropropane	ug/kg		2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U
1,2,4-Trichlorobenzene	ug/kg	3,400	2000 U	1400 U	1,500 U	1600 U	11 U	13 U	14 U	15 U	60 U	1100 U

RSCO = Recommended Soil Cleanup Objectives

1,000 - indicates detected value for organics.

(shaded) - indicates value exceeds TAGM 4046 RSCO

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 8 - Phase 3 GeoProbe Boring Data for Source Area Delineation - GPD Series

Sample ID ->	Units	TAGM	GPD-47	GPD-48	GPD-48	GPD-49	GPD-49	GPD-49	GPD-49	GPD-49	GPD-49
Depth - >		4046	18 -19	7 - 11	15 - 17.3	11 - 15	11 - 15 DL	15 -17	15 -17 DL	7 - 11	17 - 19
Date Sampled ->		RSCO	9/19/2005	9/19/2005	9/19/2005	9/19/2005	9/19/2005	9/19/2005	9/19/2005	9/19/2005	9/19/2005
VOLATILES	ug/kg										
Chloromethane	ug/kg		13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
Bromomethane	ug/kg		13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
Vinyl chloride	ug/kg	200	2 J	**63**	2 J	5 J	1400 U	13 U	1600 U	19 U	14 U
Chloroethane	ug/kg	1,900	13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
Methylene chloride	ug/kg	100	13 U	12 J	5 J	8 J	1400 U	13 U	1600 U	13 J	7 J
Acetone	ug/kg	200	13 U	9 J	7 J	12 U	1400 U	6 J	1600 U	9 J	**16**
Carbon disulfide	ug/kg	2,700	13 U	18 U	6 J	12 U	1400 U	6 J	1600 U	19 U	4 J
1,1-Dichloroethene	ug/kg	400	13 U	18 U	11 U	**14**	1400 U	2 J	1600 U	19 U	14 U
1,1-Dichloroethane	ug/kg	200	13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
Chloroform	ug/kg	300	13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
1,2-Dichloroethane	ug/kg	100	13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
2-Butanone	ug/kg	300	13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
1,1,1-Trichloroethane	ug/kg	800	13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
Carbon tetrachloride	ug/kg	600	13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
Bromodichloromethane	ug/kg		13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
1,2-Dichloropropane	ug/kg		13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
cis-1,3-Dichloropropene	ug/kg		13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
Trichloroethene	ug/kg	700	**32**	18 U	11 U	**1500**	**1500 D**	**810 J**	**810 DJ**	19 U	14 U
Dibromochloromethane	ug/kg		2 J	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
1,1,2-Trichloroethane	ug/kg		13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
Benzene	ug/kg	60 or MDL	13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
trans-1,3-Dichloropropene	ug/kg		13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
Bromoform	ug/kg		13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
4-Methyl-2-pentanone	ug/kg	1,000	13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
2-Hexanone	ug/kg		13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
Tetrachloroethene	ug/kg	1,400	2 J	18 U	11 U	**1800**	**1800 D**	**5100**	**5100 D**	19 U	14 U
Toluene	ug/kg	1,500	13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
1,1,2,2-Tetrachloroethane	ug/kg	600	13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
Chlorobenzene	ug/kg	1,700	13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
Ethylbenzene	ug/kg	5,500	13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
Styrene	ug/kg		13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
Total xylenes	ug/kg	1,200	13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
cis-1,2-Dichloroethene	ug/kg		**140**	**190**	6 J	**85**	1400 U	12 J	1600 U	2 J	14 U
trans-1,2-Dichloroethene	ug/kg	300	**30**	11 J	11 U	**100**	1400 U	13 U	1600 U	19 U	14 U
Dichlorodifluoromethane	ug/kg		13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
Trichlorofluoromethane	ug/kg		13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
Methyl acetate	ug/kg		13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
Methyl tert butyl ether	ug/kg	120	13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
Cyclohexane	ug/kg		13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
Methylcyclohexane	ug/kg		13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
1,2-Dibromoethane	ug/kg		13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
Isopropylbenzene	ug/kg		13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
1,3-Dichlorobenzene	ug/kg	1,600	13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
1,4-Dichlorobenzene	ug/kg	8,500	13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
1,2-Dichlorobenzene	ug/kg	7,900	13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
1,2-Dibromo-3-chloropropane	ug/kg		13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U
1,2,4-Trichlorobenzene	ug/kg	3,400	13 U	18 U	11 U	12 U	1400 U	13 U	1600 U	19 U	14 U

Pioneer Midler Avenue LLC
Remedial Investigation
Table 8 - Phase 3 GeoProbe Boring Data for
Source Area Delineation - GPD Series

Sample ID ->	Units	TAGM	GPD-50	GPD-50	GPD-50	GPD-50	GPD-51	GPD-51	GPD-52	GPD-55	GPD-55	GPD-55	GPD-57	GPD-57	GPD-58
Depth ->		4046	4 - 7	11 - 14	14 - 15	15 -19	15-18.2	19-23	15-17.5	4 - 7	15-18	15-18 DL	0.5-4	11-14.5	15-18.5
Date Sampled ->		RSCO	9/19/2005	9/19/2005	9/19/2005	9/19/2005	9/20/2005	9/20/2005	9/20/2005	9/21/2005	9/21/2005	9/21/2005	9/21/2005	9/21/2005	9/22/2005
VOLATILES	ug/kg														
Chloromethane	ug/kg		12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
Bromomethane	ug/kg		12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
Vinyl chloride	ug/kg	200	**96**	12 U	1 J	11 U	3,200,000 U	4 J	1,600 UJ	12 U	32	58 U	2,400 U	12 U	11 U
Chloroethane	ug/kg	1,900	12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
Methylene chloride	ug/kg	100	6 J	6 J	8 J	8 J	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
Acetone	ug/kg	200	6 J	7 J	11 J	5 J	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
Carbon disulfide	ug/kg	2,700	12 U	2 J	5 J	2 J	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	2 J	11 U
1,1-Dichloroethene	ug/kg	400	12 U	12 U	12 U	11 U	3,200,000 U	1 J	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
1,1-Dichloroethane	ug/kg	200	12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
Chloroform	ug/kg	300	12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
1,2-Dichloroethane	ug/kg	100	12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
2-Butanone	ug/kg	300	12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
1,1,1-Trichloroethane	ug/kg	800	12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
Carbon tetrachloride	ug/kg	600	12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
Bromodichloromethane	ug/kg		12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
1,2-Dichloropropane	ug/kg		12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
cis-1,3-Dichloropropene	ug/kg		12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
Trichloroethene	ug/kg	700	12 U	8 J	4 J	75	**1,000,000 J**	6 J	**4,800 J**	12 U	32	53 DJ	2,400 U	2 J	11 U
Dibromochloromethane	ug/kg		12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	25	58 U	2,400 U	12 U	11 U
1,1,2-Trichloroethane	ug/kg		12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
Benzene	ug/kg	60 or MDL	12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
trans-1,3-Dichloropropene	ug/kg		12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
Bromoform	ug/kg		12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
4-Methyl-2-pentanone	ug/kg	1,000	12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
2-Hexanone	ug/kg		12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
Tetrachloroethene	ug/kg	1,400	12 U	2 J	12 U	54	**42,000,000**	180	**29,000 J**	9 J	25	9 DJ	**14,000**	2 J	11 U
Toluene	ug/kg	1,500	12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
1,1,2,2-Tetrachloroethane	ug/kg	600	12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
Chlorobenzene	ug/kg	1,700	12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
Ethylbenzene	ug/kg	5,500	12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
Styrene	ug/kg		12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
Total xylenes	ug/kg	1,200	12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
cis-1,2-Dichloroethene	ug/kg		9 J	21	60	1 J	3,200,000 U	5 J	13,000 J	3 J	200	200 D	2,400 U	7 J	11 U
trans-1,2-Dichloroethene	ug/kg	300	10 J	4 J	30	11 U	3,200,000 U	12 U	1,600 UJ	12 U	120	28 DJ	2,400 U	6 J	11 U
Dichlorodifluoromethane	ug/kg		12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	26 DJ	2,400 U	12 U	11 U
Trichlorofluoromethane	ug/kg		12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
Methyl acetate	ug/kg		12 U	12 U	12 U	11 U	3,200,000 U	12 U	490 J	12 U	11 U	58 U	2,400 U	12 U	11 U
Methyl tert butyl ether	ug/kg	120	12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
Cyclohexane	ug/kg		12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
Methylcyclohexane	ug/kg		12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	21	11 U	58 U	2,400 U	12 U	2 J
1,2-Dibromoethane	ug/kg		12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
Isopropylbenzene	ug/kg		12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
1,3-Dichlorobenzene	ug/kg	1,600	12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
1,4-Dichlorobenzene	ug/kg	8,500	12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
1,2-Dichlorobenzene	ug/kg	7,900	12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
1,2-Dibromo-3-chloropropane	ug/kg		12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U
1,2,4-Trichlorobenzene	ug/kg	3,400	12 U	12 U	12 U	11 U	3,200,000 U	12 U	1,600 UJ	12 U	11 U	58 U	2,400 U	12 U	11 U

Pioneer Midler Avenue LLC
Remedial Investigation
Table 8 - Phase 3 GeoProbe Boring Data for
Source Area Delineation - GPD Series

Sample ID ->	Units	TAGM	GPD-59	GPD-59	GPD-59	GPD-59	GPD-59	GPD-59	GPD-60	GPD-61	GPD-62	GPD-62	GPD-62	GPD-63	GPD-63
Depth - >		4046	7 - 11	7 - 11 DL	11-14.3	11-14.3 DL	14.3-15	14.3-15 DL	4 - 7	15-17.8	11 - 15	15-16.5	16.5-19	1 - 4	15-16.6
Date Sampled ->		RSCO	9/22/2005	9/22/2005	9/22/2005	9/22/2005	9/22/2005	9/22/2005	9/22/2005	9/22/2005	9/22/2005	9/22/2005	9/22/2005	9/23/2005	9/23/2005
VOLATILES	ug/kg														
Chloromethane	ug/kg		12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
Bromomethane	ug/kg		12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
Vinyl chloride	ug/kg	200	12 U	52 U	2 J	1,400 U	920 J	1,400 U	46	250	10 J	12 U	35	14 U	12 U
Chloroethane	ug/kg	1,900	12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
Methylene chloride	ug/kg	100	12 U	30 BDJ	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
Acetone	ug/kg	200	12 U	52 U	5 J	1,400 U	4 J	1,400 U	11 U	13 U	6 J	12 U	15 U	14 U	12 U
Carbon disulfide	ug/kg	2,700	1 J	52 U	5 J	1,400 U	12 U	1,400 U	1 J	2 J	6 J	5 J	9 J	2 J	12 U
1,1-Dichloroethene	ug/kg	400	12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
1,1-Dichloroethane	ug/kg	200	12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
Chloroform	ug/kg	300	12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
1,2-Dichloroethane	ug/kg	100	12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
2-Butanone	ug/kg	300	12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
1,1,1-Trichloroethane	ug/kg	800	12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
Carbon tetrachloride	ug/kg	600	12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
Bromodichloromethane	ug/kg		12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
1,2-Dichloropropane	ug/kg		12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
cis-1,3-Dichloropropene	ug/kg		12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
Trichloroethene	ug/kg	700	240 J	45 DJ	880 J	880 DJ	2 J	5,300 D	6 J	5 J	14 U	12 U	15 U	14 U	12 U
Dibromochloromethane	ug/kg		12 U	52 U	130	1,400 U	2 J	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
1,1,2-Trichloroethane	ug/kg		12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
Benzene	ug/kg	60 or MDL	12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
trans-1,3-Dichloropropene	ug/kg		12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
Bromoform	ug/kg		12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
4-Methyl-2-pentanone	ug/kg	1,000	12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
2-Hexanone	ug/kg		12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
Tetrachloroethene	ug/kg	1,400	6 J	52 U	120	780 DJ	2 J	2,400 D	11 U	13 U	14 U	12 U	15 U	14 U	20
Toluene	ug/kg	1,500	12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
1,1,2,2-Tetrachloroethane	ug/kg	600	12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
Chlorobenzene	ug/kg	1,700	12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
Ethylbenzene	ug/kg	5,500	12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
Styrene	ug/kg		12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
Total xylenes	ug/kg	1,200	12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
cis-1,2-Dichloroethene	ug/kg		210	150 D	130	420 DJ	1700 J	180 DJ	200	180	4 J	12 U	16	14 U	12 U
trans-1,2-Dichloroethene	ug/kg	300	66	25 DJ	49	1,400 U	61 J	1,400 U	59	56	14 U	12 U	15 U	14 U	12 U
Dichlorodifluoromethane	ug/kg		12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
Trichlorofluoromethane	ug/kg		12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
Methyl acetate	ug/kg		12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
Methyl tert butyl ether	ug/kg	120	12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
Cyclohexane	ug/kg		12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
Methylcyclohexane	ug/kg		12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
1,2-Dibromoethane	ug/kg		12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
Isopropylbenzene	ug/kg		12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
1,3-Dichlorobenzene	ug/kg	1,600	12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
1,4-Dichlorobenzene	ug/kg	8,500	12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
1,2-Dichlorobenzene	ug/kg	7,900	12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
1,2-Dibromo-3-chloropropane	ug/kg		12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U
1,2,4-Trichlorobenzene	ug/kg	3,400	12 U	52 U	12 U	1,400 U	12 U	1,400 U	11 U	13 U	14 U	12 U	15 U	14 U	12 U

RSCO = Recommended Soil Cleanup Objectives
1,000 - indicates detected value for organics.
[shaded] - indicates value exceeds TAGM 4046 RSCO

Pioneer Midler Avenue LLC
Remedial Investigation
Table 8 - Phase 3 GeoProbe Boring Data for Source Area Delineation - GPD Series

Sample ID ->	Units	TAGM	GPD-64	GPD-64	GPD-65	GPD-65	GPD-66	GPD-66	GPD-67	GPD-67
Depth - >		4046	11 - 15	11 - 15 DL	11 - 15	17.2-19	11 - 15	11 - 15 DL	11 - 15	11 - 15 DL
Date Sampled ->		RSCO	9/23/2005	9/23/2005	9/23/2005	9/23/2005	9/23/2005	9/23/2005	9/23/2005	9/23/2005
VOLATILES	ug/kg									
Chloromethane	ug/kg		12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
Bromomethane	ug/kg		12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
Vinyl chloride	ug/kg	200	**550 J**	1,500 U	2 J	14 U	11 U	1,300 U	11 U	1,300 U
Chloroethane	ug/kg	1,900	12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
Methylene chloride	ug/kg	100	12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
Acetone	ug/kg	200	12 U	1,500 U	16 U	14 U	11 U	1,300 U	11 U	1,300 U
Carbon disulfide	ug/kg	2,700	12 U	1,500 U	7 J	14 U	11 U	1,300 U	11 U	1,300 U
1,1-Dichloroethene	ug/kg	400	12 U	1,500 U	11 U	14 U	11 U	1,300 U	**68**	1,300 U
1,1-Dichloroethane	ug/kg	200	12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
Chloroform	ug/kg	300	12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
1,2-Dichloroethane	ug/kg	100	12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
2-Butanone	ug/kg	300	12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
1,1,1-Trichloroethane	ug/kg	800	12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
Carbon tetrachloride	ug/kg	600	12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
Bromodichloromethane	ug/kg		12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
1,2-Dichloropropane	ug/kg		12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
cis-1,3-Dichloropropene	ug/kg		12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
Trichloroethene	ug/kg	700	2 J	1,500 U	11 U	14 U	**2600 J**	1,300 U	**5,800**	**5,800 D**
Dibromochloromethane	ug/kg		12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
1,1,2-Trichloroethane	ug/kg		12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
Benzene	ug/kg	60 or MDL	12 U	1,500 U	11 U	14 U	11 U	1,300 U	**54**	1,300 U
trans-1,3-Dichloropropene	ug/kg		12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
Bromoform	ug/kg		12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
4-Methyl-2-pentanone	ug/kg	1,000	12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
2-Hexanone	ug/kg		12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
Tetrachloroethene	ug/kg	1,400	**4 J**	**600 DJ**	11 U	14 U	11 U	**370 DJ**	11 U	**340 DJ**
Toluene	ug/kg	1,500	12 U	1,500 U	11 U	14 U	11 U	1,300 U	**55**	1,300 U
1,1,2,2-Tetrachloroethane	ug/kg	600	12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
Chlorobenzene	ug/kg	1,700	12 U	1,500 U	11 U	14 U	11 U	1,300 U	**50**	1,300 U
Ethylbenzene	ug/kg	5,500	12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
Styrene	ug/kg		12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
Total xylenes	ug/kg	1,200	12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	1,000	12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
cis-1,2-Dichloroethene	ug/kg		**990 J**	1,500 U	**1 J**	14 U	**510 J**	1,300 U	**600 J**	**600 DJ**
trans-1,2-Dichloroethene	ug/kg	300	**73**	1,500 U	11 U	14 U	**1200 J**	1,300 U	**1,600**	**1,600 D**
Dichlorodifluoromethane	ug/kg		12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
Trichlorofluoromethane	ug/kg		12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
Methyl acetate	ug/kg		12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
Methyl tert butyl ether	ug/kg	120	12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
Cyclohexane	ug/kg		12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
Methylcyclohexane	ug/kg		12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
1,2-Dibromoethane	ug/kg		12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
Isopropylbenzene	ug/kg		12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
1,3-Dichlorobenzene	ug/kg	1,600	12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
1,4-Dichlorobenzene	ug/kg	8,500	12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
1,2-Dichlorobenzene	ug/kg	7,900	12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
1,2-Dibromo-3-chloropropane	ug/kg		12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U
1,2,4-Trichlorobenzene	ug/kg	3,400	12 U	1,500 U	11 U	14 U	11 U	1,300 U	11 U	1,300 U

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 8 - Phase 3 GeoProbe Boring Data for
Source Area Delineation - MW-3D Area

Sample ID ->	Units	TAGM	GP3-1	GP3-1 DL	GP3-1	GP3-1 DL	GP3-2	GP3-2	GP3-2 DL	GP3-3	GP3-3 DL	GP3-3	GP3-3 DL	GP3-4	GP3-4 DL
Depth - >		4046	10 - 14	10 - 14	14 - 18	14 - 18	10 - 14	14 - 17.3	14 - 17.3	10 -14	10 -14	14 - 17.5	14 - 17.5	10 -14	10 -14
Date Sampled ->		RSCO	02/27/06	02/27/06	02/27/06	02/27/06	02/27/06	02/27/06	02/27/06	02/27/06	02/27/06	02/27/06	02/27/06	02/28/06	02/28/06
VOLATILES															
Chloromethane	µg/kg		17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
Bromomethane	µg/kg		17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
Vinyl chloride	µg/kg	200	**600 J**	**600 D**	**340 J**	**340 D**	**260**	**140**	**240 D**	**2,200 EJ**	2,100 U	**210**	2,300 U	**890 J**	**890 D**
Chloroethane	µg/kg	1,900	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
Methylene chloride	µg/kg	100	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
Acetone	µg/kg	200	6 J	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
Carbon disulfide	µg/kg	2,700	17 U	73 U	19 U	91 U	18 U	2 J	90 U	18 U	2,100 U	6 J	2,300 U	17 U	84 U
1,1-Dichloroethene	µg/kg	400	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
1,1-Dichloroethane	µg/kg	200	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
Chloroform	µg/kg	300	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
1,2-Dichloroethane	µg/kg	100	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
2-Butanone	µg/kg	300	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
1,1,1-Trichloroethane	µg/kg	800	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
Carbon tetrachloride	µg/kg	600	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
Bromodichloromethane	µg/kg		17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
1,2-Dichloropropane	µg/kg		17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
cis-1,3-Dichloropropene	µg/kg		17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
Trichloroethene	µg/kg	700	17 U	73 U	**43 J**	**43 DJ**	18 U	**270**	**550 D**	18 U	2,100 U	**48**	2,300 U	17 U	84 U
Dibromochloromethane	µg/kg		17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
1,1,2-Trichloroethane	µg/kg		17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
Benzene	µg/kg	60 or MDL	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
trans-1,3-Dichloropropene	µg/kg		17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
Bromoform	µg/kg		17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
4-Methyl-2-pentanone	µg/kg	1,000	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
2-Hexanone	µg/kg		17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
Tetrachloroethene	µg/kg	1,400	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	9 J	2,300 U	17 U	84 U
Toluene	µg/kg	1,500	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
1,1,2,2-Tetrachloroethane	µg/kg	600	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
Chlorobenzene	µg/kg	1,700	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
Ethylbenzene	µg/kg	5,500	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
Styrene	µg/kg		17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
Total Xylenes	µg/kg	1,200	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/kg	1,000	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
cis-1,2-Dichloroethene	µg/kg		**900 J**	**900 D**	**1,300 J**	**1,300 D**	**300**	**1,400**	**1,400 D**	**2,500**	**2,500 D**	**2,700**	**2,700 D**	**180 J**	**180 D**
trans-1,2-Dichloroethene	µg/kg	300	**130 J**	**130 D**	**260 J**	**260 D**	**95**	**260**	**450 D**	**140**	2,100 U	**120**	2,300 U	**14 J**	**26 DJ**
Dichlorodifluoromethane	µg/kg		17 UJ	73 U	19 UJ	91 U	18 UJ	20 UJ	90 U	18 UJ	2,100 U	19 UJ	2,300 U	17 U	84 U
Trichlorofluoromethane	µg/kg		17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
Methyl acetate	µg/kg		17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
Methyl tert butyl ether	µg/kg	120	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
Cyclohexane	µg/kg		17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
Methylcyclohexane	µg/kg		17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
1,2-Dibromoethane	µg/kg		17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
Isopropylbenzene	µg/kg		17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
1,3-Dichlorobenzene	µg/kg	1,600	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
1,4-Dichlorobenzene	µg/kg	8,500	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
1,2-Dichlorobenzene	µg/kg	7,900	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
1,2-Dibromo-3-chloropropane	µg/kg		17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U
1,2,4-Trichlorobenzene	µg/kg	3,400	17 U	73 U	19 U	91 U	18 U	20 U	90 U	18 U	2,100 U	19 U	2,300 U	17 U	84 U

Pioneer Midler Avenue LLC
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Table 8 - Phase 3 GeoProbe Boring Data for
Source Area Delineation - MW-3D Area

Sample ID ->	Units	TAGM	GP3-4	GP3-4 DL	GP3-5	GP3-5 DL	GP3-5	GP3-6	GP3-6	GP3-7	GP3-8	GP3-8 DL	GP3-8	GP3-8 DL
Depth - >		4046	14 - 17.7	14 -17.7	10 -14	10 -14	14 - 17.7	10 -14	14 -17	14 - 16.7	10 -14	10- 14	14 -18	14 -18
Date Sampled ->		RSCO	02/28/06	02/28/06	02/28/06	02/28/06	02/28/06	02/28/06	02/28/06	03/02/06	02/28/06	02/28/06	02/28/06	02/28/06
VOLATILES														
Chloromethane	µg/kg		17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
Bromomethane	µg/kg		17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
Vinyl chloride	µg/kg	200	220 J	220 D	1,000 J	1,000 D	42	280	28	4 J	1,200 EJ	11,000 U	27	12,000 U
Chloroethane	µg/kg	1,900	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
Methylene chloride	µg/kg	100	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
Acetone	µg/kg	200	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	7 J	12,000 U
Carbon disulfide	µg/kg	2,700	6 J	16 DJ	18 U	80 U	21 U	18 U	4 J	2 J	2 J	11,000 U	6 J	12,000 U
1,1-Dichloroethene	µg/kg	400	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	49 J	11,000 U	10 J	12,000 U
1,1-Dichloroethane	µg/kg	200	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
Chloroform	µg/kg	300	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
1,2-Dichloroethane	µg/kg	100	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
2-Butanone	µg/kg	300	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
1,1,1-Trichloroethane	µg/kg	800	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
Carbon tetrachloride	µg/kg	600	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
Bromodichloromethane	µg/kg		17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
1,2-Dichloropropane	µg/kg		17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
cis-1,3-Dichloropropene	µg/kg		17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
Trichloroethene	µg/kg	700	560 J	560 D	150 J	150 D	20 J	15 J	2 J	18 U	10,000 J	10,000 DJ	3,200 J	3,200 DJ
Dibromochloromethane	µg/kg		17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
1,1,2-Trichloroethane	µg/kg		17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
Benzene	µg/kg	60 or MDL	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
trans-1,3-Dichloropropene	µg/kg		17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
Bromoform	µg/kg		17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
4-Methyl-2-pentanone	µg/kg	1,000	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
2-Hexanone	µg/kg		17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
Tetrachloroethene	µg/kg	1,400	11 J	35 DJ	18 U	80 U	21 U	18 U	20 U	18 U	150,000 J	150,000 D	190,000	190,000 D
Toluene	µg/kg	1,500	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	54 J	11,000 U	35	12,000 U
1,1,2,2-Tetrachloroethane	µg/kg	600	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
Chlorobenzene	µg/kg	1,700	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
Ethylbenzene	µg/kg	5,500	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	8 J	11,000 U	2 J	12,000 U
Styrene	µg/kg		17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
Total Xylenes	µg/kg	1,200	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	68 J	11,000 U	21	12,000 U
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/kg	1,000	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
cis-1,2-Dichloroethene	µg/kg		860 J	860 D	920 J	920 D	91	240	75	8 J	21,000 J	21,000 D	320	12,000 U
trans-1,2-Dichloroethene	µg/kg	300	360 J	360 D	390 J	390 D	54	170	53	3 J	150	11,000 U	12 J	12,000 U
Dichlorodifluoromethane	µg/kg		17 UJ	82 U	18 U	80 U	21 UJ	18 UJ	20 UJ	18 U	18 UJ	11,000 U	20 UJ	12,000 U
Trichlorofluoromethane	µg/kg		17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
Methyl acetate	µg/kg		17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
Methyl tert butyl ether	µg/kg	120	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
Cyclohexane	µg/kg		17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
Methylcyclohexane	µg/kg		17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	5 J	11,000 U	20 U	12,000 U
1,2-Dibromoethane	µg/kg		17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
Isopropylbenzene	µg/kg		17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
1,3-Dichlorobenzene	µg/kg	1,600	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
1,4-Dichlorobenzene	µg/kg	8,500	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
1,2-Dichlorobenzene	µg/kg	7,900	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
1,2-Dibromo-3-chloropropane	µg/kg		17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U
1,2,4-Trichlorobenzene	µg/kg	3,400	17 U	82 U	18 U	80 U	21 U	18 U	20 U	18 U	18 U	11,000 U	20 U	12,000 U

Pioneer Midler Avenue LLC
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Table 8 - Phase 3 GeoProbe Boring Data for
Source Area Delineation - MW-3D Area

Sample ID ->	Units	TAGM	GP3-9	GP3-9 DL	GP3-9	GP3-9 DL	GP3-10	GP3-10 DL	GP3-11	GP3-11 DL	GP3-12	GP3-12 DL	GP3-13	GP3-13 DL	GP3-13
Depth ->		4046	10 -14	10 -14	14 -18	14-18	14 - 18	14 - 18	14 - 17.5	14 - 17.5	14 - 17.5	14 - 17.5	10 - 14	10 - 14	14 - 17
Date Sampled ->		RSCO	02/28/06	02/28/06	02/28/06	02/28/06	03/01/06	03/01/06	03/01/06	03/01/06	03/01/06	03/01/06	03/01/06	03/01/06	03/01/06
VOLATILES															
Chloromethane	µg/kg		2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Bromomethane	µg/kg		2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Vinyl chloride	µg/kg	200	2,200 U	44,000 U	2,500 U	620,000 U	**240**	2,400 U	**1,100 J**	**1,100 D**	**660 J**	**660 D**	**530**	**530 D**	**50**
Chloroethane	µg/kg	1,900	2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Methylene chloride	µg/kg	100	2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Acetone	µg/kg	200	2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Carbon disulfide	µg/kg	2,700	2,200 U	44,000 U	2,500 U	620,000 U	**4 J**	2,400 U	**4 J**	100 U	**4 J**	**12 DJ**	19 U	85 U	**2 J**
1,1-Dichloroethene	µg/kg	400	2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
1,1-Dichloroethane	µg/kg	200	2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Chloroform	µg/kg	300	2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
1,2-Dichloroethane	µg/kg	100	2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
2-Butanone	µg/kg	300	2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
1,1,1-Trichloroethane	µg/kg	800	2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Carbon tetrachloride	µg/kg	600	2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Bromodichloromethane	µg/kg		2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
1,2-Dichloropropane	µg/kg		2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
cis-1,3-Dichloropropene	µg/kg		2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Trichloroethene	µg/kg	700	**3,400**	44,000 U	**2,200 J**	620,000 U	**6 J**	2,400 U	**2 J**	100 U	19 U	96 U	19 U	85 U	18 U
Dibromochloromethane	µg/kg		2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
1,1,2-Trichloroethane	µg/kg		2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Benzene	µg/kg	60 or MDL	2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
trans-1,3-Dichloropropene	µg/kg		2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Bromoform	µg/kg		2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
4-Methyl-2-pentanone	µg/kg	1,000	2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
2-Hexanone	µg/kg		2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Tetrachloroethene	µg/kg	1,400	**830,000**	**830,000 BD**	**4,200,000**	**4,200,000 D**	42 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Toluene	µg/kg	1,500	2,200 U	44,000 U	**540 J**	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
1,1,2,2-Tetrachloroethane	µg/kg	600	2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Chlorobenzene	µg/kg	1,700	2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Ethylbenzene	µg/kg	5,500	2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Styrene	µg/kg		2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Total Xylenes	µg/kg	1,200	2,200 U	44,000 U	**1,400 J**	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/kg	1,000	2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
cis-1,2-Dichloroethene	µg/kg		**2,200**	44,000 U	2,500 U	620,000 U	**2,100**	**2,100 DJ**	**860 J**	**860 D**	**910 D**	**910 D**	**130**	**170 D**	**30**
trans-1,2-Dichloroethene	µg/kg	300	2,200 U	44,000 U	2,500 U	620,000 U	**180**	**510 DJ**	**120 J**	**120 D**	**86 J**	**86 DJ**	**20**	**25 DJ**	18 U
Dichlorodifluoromethane	µg/kg		2,200 UJ	44,000 U	2,500 UJ	620,000 U	20 UJ	2,400 U	21 UJ	100 U	19 UJ	96 U	19 UJ	85 U	18 U
Trichlorofluoromethane	µg/kg		2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Methyl acetate	µg/kg		2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Methyl tert butyl ether	µg/kg	120	2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Cyclohexane	µg/kg		2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Methylcyclohexane	µg/kg		2,200 U	44,000 U	**1,400 J**	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
1,2-Dibromoethane	µg/kg		2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
Isopropylbenzene	µg/kg		2,200 U	44,000 U	**370 J**	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
1,3-Dichlorobenzene	µg/kg	1,600	2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
1,4-Dichlorobenzene	µg/kg	8,500	2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
1,2-Dichlorobenzene	µg/kg	7,900	2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
1,2-Dibromo-3-chloropropane	µg/kg		2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U
1,2,4-Trichlorobenzene	µg/kg	3,400	2,200 U	44,000 U	2,500 U	620,000 U	20 U	2,400 U	21 U	100 U	19 U	96 U	19 U	85 U	18 U

RSCO = Recommended Soil Cleanup Objectives
1,000 - indicates detected value for organics.
- indicates value exceeds TAGM 4046 RSCO

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 8 - Phase 3 GeoProbe Boring Data for
Source Area Delineation - B1 Area

Sample ID ->	Units	TAGM	GPB1-1	GPB1-1 DL	GPB1-2	GPB1-2 DL	GPB1-3	GPB1-3 DL	GPB1-4	GPB1-5	GPB1-6	GPB1-7	GPB1-8	GPB1-9	GPB1-9 DL	GPB1-10
Depth ->		4046	14 - 17	14 - 17	14 - 18	14 - 18	10 - 11.8	10 - 11.8	14 - 17.6	14 - 17	14 - 17.7	14 - 18	14 - 18	14 - 17.4	14 - 17.4	14 - 16.8
Date Sampled ->		RSCO	03/02/06	03/02/06	03/02/06	03/02/06	03/03/06	03/03/06	03/03/06	03/03/06	03/03/06	03/06/06	03/06/06	03/09/06	03/09/06	03/09/06
VOLATILES																
Chloromethane	µg/kg		2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
Bromomethane	µg/kg		2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
Vinyl chloride	µg/kg	200	2,600 U	52,000 U	630 J	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,300 J	260,000 U	510 E	610,000 U	1,800,000 U
Chloroethane	µg/kg	1,900	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
Methylene chloride	µg/kg	100	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
Acetone	µg/kg	200	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	8 J	610,000 U	1,800,000 U
Carbon disulfide	µg/kg	2,700	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	3 J	610,000 U	1,800,000 U
1,1-Dichloroethene	µg/kg	400	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	25	610,000 U	1,800,000 U
1,1-Dichloroethane	µg/kg	200	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
Chloroform	µg/kg	300	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
1,2-Dichloroethane	µg/kg	100	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
2-Butanone	µg/kg	300	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
1,1,1-Trichloroethane	µg/kg	800	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
Carbon tetrachloride	µg/kg	600	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
Bromodichloromethane	µg/kg		2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
1,2-Dichloropropane	µg/kg		2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
cis-1,3-Dichloropropene	µg/kg		2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
Trichloroethene	µg/kg	700	**28,000**	**27,000 DJ**	**21,000**	550,000 U	310,000 U	620,000 U	290,000 U	25	**110,000 J**	2,500 U	260,000 U	**8,100 E**	**140,000 DJ**	**440,000 J**
Dibromochloromethane	µg/kg		2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
1,1,2-Trichloroethane	µg/kg		2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
Benzene	µg/kg	60 or MDL	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
trans-1,3-Dichloropropene	µg/kg		2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
Bromoform	µg/kg		2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
4-Methyl-2-pentanone	µg/kg	1,000	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
2-Hexanone	µg/kg		2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
Tetrachloroethene	µg/kg	1,400	**290,000 J**	**290,000 D**	**6,300,000**	**6,300,000 BD**	**6,900,000**	**6,900,000 BD**	**4,400,000**	42	**4,700,000 B**	2,500 U	**2,800,000**	**58,000 E**	**9,800,000 D**	**67,000,000**
Toluene	µg/kg	1,500	2,600 U	52,000 U	930 J	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	96	610,000 U	1,800,000 U
1,1,2,2-Tetrachloroethane	µg/kg	600	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
Chlorobenzene	µg/kg	1,700	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
Ethylbenzene	µg/kg	5,500	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	8 J	610,000 U	1,800,000 U
Styrene	µg/kg		2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
Total Xylenes	µg/kg	1,200	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	57	610,000 U	1,800,000 U
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/kg	1,000	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
cis-1,2-Dichloroethene	µg/kg		9,400	7,900 DJ	36,000	550,000 U	310,000 U	620,000 U	79,000 J	200	260,000 U	17,000	58,000 J	4,300 E	610,000 U	1,800,000 U
trans-1,2-Dichloroethene	µg/kg	300	2,600 U	52,000 U	**730 J**	550,000 U	310,000 U	620,000 U	290,000 U	13 J	260,000 U	2,500 U	260,000 U	260	610,000 U	1,800,000 U
Dichlorodifluoromethane	µg/kg		2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
Trichlorofluoromethane	µg/kg		2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
Methyl acetate	µg/kg		2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
Methyl tert butyl ether	µg/kg	120	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
Cyclohexane	µg/kg		2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
Methylcyclohexane	µg/kg		2,600 U	52,000 U	630 J	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	6 J	610,000 U	1,800,000 U
1,2-Dibromoethane	µg/kg		2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
Isopropylbenzene	µg/kg		2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
1,3-Dichlorobenzene	µg/kg	1,600	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
1,4-Dichlorobenzene	µg/kg	8,500	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
1,2-Dichlorobenzene	µg/kg	7,900	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
1,2-Dibromo-3-chloropropane	µg/kg		2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U
1,2,4-Trichlorobenzene	µg/kg	3,400	2,600 U	52,000 U	2,700 U	550,000 U	310,000 U	620,000 U	290,000 U	21 U	260,000 U	2,500 U	260,000 U	20 U	610,000 U	1,800,000 U

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 8 - Phase 3 GeoProbe Boring Data for Source Area Delineation - B1 Area

Sample ID ->	Units	TAGM	GPB1-10 DL	GPB1-11	GPB1-11 DL	GPB1-12	GPB1-12	GPB1-12	GPB1-12 DL	GPB1-13	GPB1-13	GPB1-14	GPB1-15	GPB1-16	GPB1-16
Depth - >		4046	14 - 16.8	14 - 17	14 - 17	2.5 - 4	10 - 14	14 - 18	14 - 18	6 - 10	14 - 17.2	6 - 10	14 - 17	15.5 - 17	17 - 18
Date Sampled ->		RSCO	03/09/06	03/09/06	03/09/06	03/09/06	03/09/06	03/09/06	03/09/06	03/10/06	03/10/06	03/10/06	03/13/06	04/19/06	04/19/06
VOLATILES															
Chloromethane	µg/kg		3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
Bromomethane	µg/kg		3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 UJ	14 UJ
Vinyl chloride	µg/kg	200	3,700,000 U	**1,500 J**	**1,500 DJ**	**960 J**	**1,900 J**	**130**	**130 D**	**1,200**	**3 J**	**31**	20 U	**680 J**	**170**
Chloroethane	µg/kg	1,900	3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
Methylene chloride	µg/kg	100	3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	**54 J**	24 U	22 U	20 U	2,600 U	14 U
Acetone	µg/kg	200	3,700,000 U	**7 J**	1,900 U	1,800 U	2,100 U	**9 J**	100 U	**39 J**	**11 J**	22 U	20 U	2,600 U	**10 J**
Carbon disulfide	µg/kg	2,700	3,700,000 U	**6 J**	1,900 U	1,800 U	2,100 U	**12 J**	100 U	100 U	**3 J**	22 U	20 U	2,600 U	**6 J**
1,1-Dichloroethene	µg/kg	400	3,700,000 U	**14 J**	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
1,1-Dichloroethane	µg/kg	200	3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
Chloroform	µg/kg	300	3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
1,2-Dichloroethane	µg/kg	100	3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
2-Butanone	µg/kg	300	3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
1,1,1-Trichloroethane	µg/kg	800	3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
Carbon tetrachloride	µg/kg	600	3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
Bromodichloromethane	µg/kg		3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
1,2-Dichloropropane	µg/kg		3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
cis-1,3-Dichloropropene	µg/kg		3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
Trichloroethene	µg/kg	700	3,700,000 U	**5,900 J**	**5,900 D**	**730 J**	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
Dibromochloromethane	µg/kg		3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
1,1,2-Trichloroethane	µg/kg		3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
Benzene	µg/kg	60 or MDL	3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
trans-1,3-Dichloropropene	µg/kg		3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
Bromoform	µg/kg		3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
4-Methyl-2-pentanone	µg/kg	1,000	3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
2-Hexanone	µg/kg		3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
Tetrachloroethene	µg/kg	1,400	**67,000,000 D**	**2,200 J**	**2,200 D**	**2,800**	2,100 U	20 U	**52 BDJ**	100 U	24 U	22 U	20 U	2,600 U	14 U
Toluene	µg/kg	1,500	3,700,000 U	**13 J**	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
1,1,2,2-Tetrachloroethane	µg/kg	600	3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
Chlorobenzene	µg/kg	1,700	3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
Ethylbenzene	µg/kg	5,500	3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
Styrene	µg/kg		3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
Total Xylenes	µg/kg	1,200	3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/kg	1,000	3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 UJ	2,600 U	14 U
cis-1,2-Dichloroethene	µg/kg		3,700,000 U	**18,000 J**	**18,000 D**	**5,200**	**8,200**	**990**	**990 D**	**1,500**	**48**	**6 J**	20 U	**6,600**	**120**
trans-1,2-Dichloroethene	µg/kg	300	3,700,000 U	**260 J**	**430 DJ**	1,800 U	2,100 U	**49**	**25 DJ**	**26 J**	**11 J**	**3 J**	20 U	2,600 U	14 U
Dichlorodifluoromethane	µg/kg		3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 UJ	2,600 U	14 U
Trichlorofluoromethane	µg/kg		3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 UJ	2,600 U	14 U
Methyl acetate	µg/kg		3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
Methyl tert butyl ether	µg/kg	120	3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
Cyclohexane	µg/kg		3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
Methylcyclohexane	µg/kg		3,700,000 U	20 U	1,900 U	**320 J**	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
1,2-Dibromoethane	µg/kg		3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
Isopropylbenzene	µg/kg		3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
1,3-Dichlorobenzene	µg/kg	1,600	3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
1,4-Dichlorobenzene	µg/kg	8,500	3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
1,2-Dichlorobenzene	µg/kg	7,900	3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
1,2-Dibromo-3-chloropropane	µg/kg		3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U
1,2,4-Trichlorobenzene	µg/kg	3,400	3,700,000 U	20 U	1,900 U	1,800 U	2,100 U	20 U	100 U	100 U	24 U	22 U	20 U	2,600 U	14 U

RSCO = Recommended Soil Cleanup Objectives

1,000 - Indicates detected value for organics.

- Indicates value exceeds TAGM 4046 RSCO

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 8 - Phase 3 GeoProbe Boring Data for
Source Area Delineation - B-3 Area

Sample ID ->	Units	TAGM	GPB3-1	GPB3-2	GPB3-2 DL	GPB3-3	GPB3-3 DL	GPB3-4	GPB3-5	GPB3-5	GPB3-6	GPB3-6	GPB3-6 DL	GPB3-7	GPB3-7
Depth - >		4046	14 - 18	14 - 18	14 - 18	14 - 17.5	14 - 17.5	14 - 17.6	6 - 10	14 - 16.7	0.5 - 4	10 - 14	10 - 14	6 - 10	14 - 17
Date Sampled ->		RSCO	03/06/06	03/06/06	03/06/06	03/06/06	03/06/06	03/06/06	03/06/06	03/06/06	03/06/06	03/06/06	03/06/06	03/07/06	03/07/06
VOLATILES															
Chloromethane	µg/kg		22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Bromomethane	µg/kg		22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Vinyl chloride	µg/kg	200	13 J	23,000 U	47,000 U	12,000 U	30,000 U	22 U	**1,400 J**	3,600 U	1,300 U	31 J	1,900 U	**5,900 J**	2,800 U
Chloroethane	µg/kg	1,900	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Methylene chloride	µg/kg	100	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Acetone	µg/kg	200	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Carbon disulfide	µg/kg	2,700	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
1,1-Dichloroethene	µg/kg	400	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
1,1-Dichloroethane	µg/kg	200	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Chloroform	µg/kg	300	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
1,2-Dichloroethane	µg/kg	100	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
2-Butanone	µg/kg	300	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
1,1,1-Trichloroethane	µg/kg	800	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Carbon tetrachloride	µg/kg	600	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Bromodichloromethane	µg/kg		22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
1,2-Dichloropropane	µg/kg		22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
cis-1,3-Dichloropropene	µg/kg		22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Trichloroethene	µg/kg	700	**49**	**69,000**	**73,000 D**	**100,000**	**93,000 D**	**4 J**	**18,000**	**12,000**	**640 J**	**350**	**390 DJ**	**160,000**	**3,800**
Dibromochloromethane	µg/kg		22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
1,1,2-Trichloroethane	µg/kg		22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Benzene	µg/kg	60 or MDL	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
trans-1,3-Dichloropropene	µg/kg		22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Bromoform	µg/kg		22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
4-Methyl-2-pentanone	µg/kg	1,000	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
2-Hexanone	µg/kg		22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Tetrachloroethene	µg/kg	1,400	3 J	**600,000**	**600,000 D**	**230,000**	**230,000 D**	22 U	**31,000**	**1,900 J**	**1,800**	**1,900**	**1,900 D**	**38,000**	**27,000**
Toluene	µg/kg	1,500	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
1,1,2,2-Tetrachloroethane	µg/kg	600	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Chlorobenzene	µg/kg	1,700	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Ethylbenzene	µg/kg	5,500	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Styrene	µg/kg		22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Total Xylenes	µg/kg	1,200	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/kg	1,000	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
cis-1,2-Dichloroethene	µg/kg		**310**	**14,000 J**	**13,000 DJ**	**28,000**	**24,000 DJ**	**24**	**48,000**	1,400 J	1,300 U	**1,800 J**	**1,800 DJ**	**75,000**	**3,700**
trans-1,2-Dichloroethene	µg/kg	300	35	23,000 U	47,000 U	12,000 U	30,000 U	9 J	2,700 U	3,600 U	1,300 U	42 J	1,900 U	9,500 U	2,800 U
Dichlorodifluoromethane	µg/kg		22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Trichlorofluoromethane	µg/kg		22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Methyl acetate	µg/kg		22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Methyl tert butyl ether	µg/kg	120	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Cyclohexane	µg/kg		22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Methylcyclohexane	µg/kg		22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
1,2-Dibromoethane	µg/kg		22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
Isopropylbenzene	µg/kg		22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
1,3-Dichlorobenzene	µg/kg	1,600	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
1,4-Dichlorobenzene	µg/kg	8,500	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
1,2-Dichlorobenzene	µg/kg	7,900	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
1,2-Dibromo-3-chloropropane	µg/kg		22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U
1,2,4-Trichlorobenzene	µg/kg	3,400	22 U	23,000 U	47,000 U	12,000 U	30,000 U	22 U	2,700 U	3,600 U	1,300 U	75 U	1,900 U	9,500 U	2,800 U

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 8 - Phase 3 GeoProbe Boring Data for Source Area Delineation - B-3 Area

Sample ID ->	Units	TAGM 4046	GPB3-8	GPB3-8 DL	GPB3-9	GPB3-9 DL	GPB3-10	GPB3-11	GPB3-12	GPB3-13	GPB3-14	GPB3-16	GPB3-16 DL	GPB3-16	GPB3-16 DL
Depth - >			14 - 17	14 - 17	14 - 17.5	14 - 17.5	14 - 17.5	14 - 18	14 - 17.5	6 - 10	14 - 17	6 - 10	6 - 10	14 - 17	14 - 17
Date Sampled ->		RSCO	03/07/06	03/07/06	03/07/06	03/07/06	03/07/06	03/08/06	03/08/06	03/08/06	03/08/06	03/08/06	03/08/06	03/08/06	03/08/06
VOLATILES															
Chloromethane	µg/kg		2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Bromomethane	µg/kg		2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Vinyl chloride	µg/kg	200	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,200	2,800 U	70 J	2,400 U	26 U	3,200 U
Chloroethane	µg/kg	1,900	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Methylene chloride	µg/kg	100	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Acetone	µg/kg	200	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Carbon disulfide	µg/kg	2,700	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	4 J	3,200 U
1,1-Dichloroethene	µg/kg	400	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	2 J	2,400 U	26 U	3,200 U
1,1-Dichloroethane	µg/kg	200	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Chloroform	µg/kg	300	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
1,2-Dichloroethane	µg/kg	100	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
2-Butanone	µg/kg	300	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
1,1,1-Trichloroethane	µg/kg	800	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Carbon tetrachloride	µg/kg	600	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Bromodichloromethane	µg/kg		2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
1,2-Dichloropropane	µg/kg		2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
cis-1,3-Dichloropropene	µg/kg		2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Trichloroethene	µg/kg	700	53,000 J	53,000 DJ	150,000	110,000 DJ	3,400	530 J	2,100 J	3,100 U	2,800 U	690 J	690 DJ	6,000	6,000 D
Dibromochloromethane	µg/kg		2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
1,1,2-Trichloroethane	µg/kg		2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Benzene	µg/kg	60 or MDL	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
trans-1,3-Dichloropropene	µg/kg		2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Bromoform	µg/kg		2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
4-Methyl-2-pentanone	µg/kg	1,000	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
2-Hexanone	µg/kg		2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Tetrachloroethene	µg/kg	1,400	620,000	620,000 D	7,300,000	7,300,000 D	8,800	570 J	19,000	3,100 U	2,200 J	6,400 J	6,400 D	6,100	6,100 D
Toluene	µg/kg	1,500	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
1,1,2,2-Tetrachloroethane	µg/kg	600	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Chlorobenzene	µg/kg	1,700	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Ethylbenzene	µg/kg	5,500	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Styrene	µg/kg		2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Total Xylenes	µg/kg	1,200	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/kg	1,000	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
cis-1,2-Dichloroethene	µg/kg		3,700	110,000 U	30,000 U	600,000 U	4,000	9,300	8,000	20,000	9,800	4,600 J	4,600 D	340	720 DJ
trans-1,2-Dichloroethene	µg/kg	300	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	1,800 J	2,800 U	38 J	2,400 U	60	3,200 U
Dichlorodifluoromethane	µg/kg		2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Trichlorofluoromethane	µg/kg		2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Methyl acetate	µg/kg		2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Methyl tert butyl ether	µg/kg	120	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Cyclohexane	µg/kg		2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Methylcyclohexane	µg/kg		2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
1,2-Dibromoethane	µg/kg		2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
Isopropylbenzene	µg/kg		2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
1,3-Dichlorobenzene	µg/kg	1,600	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
1,4-Dichlorobenzene	µg/kg	8,500	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
1,2-Dichlorobenzene	µg/kg	7,900	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
1,2-Dibromo-3-chloropropane	µg/kg		2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U
1,2,4-Trichlorobenzene	µg/kg	3,400	2,300 U	110,000 U	30,000 U	600,000 U	2,200 U	2,400 U	3,100 U	3,100 U	2,800 U	20 U	2,400 U	26 U	3,200 U

Pioneer Midler Avenue LLC
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Table 8 - Phase 3 GeoProbe Boring Data for Source Area Delineation - B-3 Area

Sample ID ->	Units	TAGM	GPB3-17	GPB3-17 DL	GPB3-18	GPB3-18	GPB3-19	GPB3-21	GPB3-21	GPB3-22	GPB3-22 DL	GPB3-24	GPB3-24
Depth - >		4046	14 - 18	14 - 18	14 - 16.9	6 - 10	14 - 18	14 - 16	6 - 10	6 - 10	6 - 10	15.5 - 17	6 - 10
Date Sampled ->		RSCO	03/08/06	03/08/06	04/18/06	04/18/06	04/18/06	04/18/06	04/18/06	04/18/06	04/18/06	04/19/06	04/18/06
VOLATILES													
Chloromethane	µg/kg		24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
Bromomethane	µg/kg		24 U	110,000 U	17,000 UJ	150,000 UJ	23 UJ	35 UJ	22 UJ	58,000 UJ	120,000 U	28 UJ	21 UJ
Vinyl chloride	µg/kg	200	**340**	110,000 U	17,000 U	150,000 U	23 U	19 J	410	58,000 U	120,000 U	28 U	21 U
Chloroethane	µg/kg	1,900	24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
Methylene chloride	µg/kg	100	24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
Acetone	µg/kg	200	24 U	110,000 U	17,000 U	150,000 U	23 U	30 J	22 U	58,000 U	120,000 U	12 J	21 U
Carbon disulfide	µg/kg	2,700	24 U	110,000 U	17,000 U	150,000 U	23 U	7 J	22 U	58,000 U	120,000 U	3 J	21 U
1,1-Dichloroethene	µg/kg	400	**44**	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
1,1-Dichloroethane	µg/kg	200	24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
Chloroform	µg/kg	300	24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
1,2-Dichloroethane	µg/kg	100	24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
2-Butanone	µg/kg	300	24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
1,1,1-Trichloroethane	µg/kg	800	24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
Carbon tetrachloride	µg/kg	600	24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
Bromodichloromethane	µg/kg		24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
1,2-Dichloropropane	µg/kg		24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
cis-1,3-Dichloropropene	µg/kg		24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
Trichloroethene	µg/kg	700	**53,000 J**	**53,000 DJ**	**46,000**	**160,000**	23 U	23 J	22 U	58,000 U	120,000 U	28 U	21 U
Dibromochloromethane	µg/kg		24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
1,1,2-Trichloroethane	µg/kg		24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
Benzene	µg/kg	60 or MDL	24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
trans-1,3-Dichloropropene	µg/kg		24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
Bromoform	µg/kg		24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
4-Methyl-2-pentanone	µg/kg	1,000	24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
2-Hexanone	µg/kg		24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
Tetrachloroethene	µg/kg	1,400	**1,300,000**	**1,300,000 D**	**260,000**	**1,900,000**	23 U	6 J	22 U	**1,400,000**	120,000 U	28 U	21 U
Toluene	µg/kg	1,500	**9 J**	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
1,1,2,2-Tetrachloroethane	µg/kg	600	24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
Chlorobenzene	µg/kg	1,700	24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
Ethylbenzene	µg/kg	5,500	**28**	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
Styrene	µg/kg		24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
Total Xylenes	µg/kg	1,200	**130**	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/kg	1,000	24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
cis-1,2-Dichloroethene	µg/kg		**23,000 J**	**23,000 DJ**	**85,000**	**66,000 J**	23 U	**360**	**180**	**30,000 J**	**29,000 DJ**	**52**	21 U
trans-1,2-Dichloroethene	µg/kg	300	**340**	110,000 U	17,000 U	150,000 U	23 U	72	15 J	58,000 U	120,000 U	10 J	21 U
Dichlorodifluoromethane	µg/kg		24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
Trichlorofluoromethane	µg/kg		24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
Methyl acetate	µg/kg		24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
Methyl tert butyl ether	µg/kg	120	24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
Cyclohexane	µg/kg		24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
Methylcyclohexane	µg/kg		24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
1,2-Dibromoethane	µg/kg		24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
Isopropylbenzene	µg/kg		24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
1,3-Dichlorobenzene	µg/kg	1,600	24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
1,4-Dichlorobenzene	µg/kg	8,500	24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
1,2-Dichlorobenzene	µg/kg	7,900	24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
1,2-Dibromo-3-chloropropane	µg/kg		24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U
1,2,4-Trichlorobenzene	µg/kg	3,400	24 U	110,000 U	17,000 U	150,000 U	23 U	35 U	22 U	58,000 U	120,000 U	28 U	21 U

RSCO = Recommended Soil Cleanup Objectives
1,000 - indicates detected value for organics.
(shaded) - indicates value exceeds TAGM 4046 RSCO

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 8 - Phase 3 GeoProbe Boring Data for
Source Area Delineation - B-5 Area

Sample ID ->	Units	TAGM 4046	GPB5-1	GPB5-1 DL	GPB5-2	GPB5-2 DL	GPB5-3	GPB5-3	GPB5-3	GPB5-3 DL
Depth - >			14 - 18	14 - 18	14 - 17.5	14 - 17.5	6 - 10	10 -14	14 - 17	14 - 17
Date Sampled ->		RSCO	03/09/06	03/09/06	03/09/06	03/09/06	03/09/06	03/09/06	03/09/06	03/09/06
VOLATILES										
Chloromethane	µg/kg		20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
Bromomethane	µg/kg		20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
Vinyl chloride	µg/kg	200	**330 J**	2,400 U	**480 E**	2,600 U	140 U	**170**	**54**	88 U
Chloroethane	µg/kg	1,900	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
Methylene chloride	µg/kg	100	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
Acetone	µg/kg	200	20 U	2,400 U	21 U	2,600 U	83 U	17 U	**8 J**	88 U
Carbon disulfide	µg/kg	2,700	20 U	2,400 U	**5 J**	2,600 U	83 U	17 U	**6 J**	88 U
1,1-Dichloroethene	µg/kg	400	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
1,1-Dichloroethane	µg/kg	200	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
Chloroform	µg/kg	300	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
1,2-Dichloroethane	µg/kg	100	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
2-Butanone	µg/kg	300	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
1,1,1-Trichloroethane	µg/kg	800	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
Carbon tetrachloride	µg/kg	600	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
Bromodichloromethane	µg/kg		20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
1,2-Dichloropropane	µg/kg		20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
cis-1,3-Dichloropropene	µg/kg		20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
Trichloroethene	µg/kg	700	**1,300 J**	**1,300 DJ**	**330**	**620 DJ**	83 U	17 U	**170**	**230 D**
Dibromochloromethane	µg/kg		20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
1,1,2-Trichloroethane	µg/kg		20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
Benzene	µg/kg	60 or MDL	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
trans-1,3-Dichloropropene	µg/kg		20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
Bromoform	µg/kg		20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
4-Methyl-2-pentanone	µg/kg	1,000	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
2-Hexanone	µg/kg		20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
Tetrachloroethene	µg/kg	1,400	**990 J**	**990 DJ**	**54**	2,600 U	83 U	17 U	**670**	**670 BD**
Toluene	µg/kg	1,500	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
1,1,2,2-Tetrachloroethane	µg/kg	600	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
Chlorobenzene	µg/kg	1,700	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
Ethylbenzene	µg/kg	5,500	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
Styrene	µg/kg		20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
Total Xylenes	µg/kg	1,200	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/kg	1,000	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
cis-1,2-Dichloroethene	µg/kg		**3,700 J**	**3,700 D**	**3,600**	**3,600 D**	**1,000**	**260**	**690**	**690 D**
trans-1,2-Dichloroethene	µg/kg	300	**64 J**	2,400 U	**170**	2,600 U	**18 J**	**5 J**	**24**	**18 DJ**
Dichlorodifluoromethane	µg/kg		20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
Trichlorofluoromethane	µg/kg		20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
Methyl acetate	µg/kg		20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
Methyl tert butyl ether	µg/kg	120	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
Cyclohexane	µg/kg		20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
Methylcyclohexane	µg/kg		20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
1,2-Dibromoethane	µg/kg		20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
Isopropylbenzene	µg/kg		20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
1,3-Dichlorobenzene	µg/kg	1,600	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
1,4-Dichlorobenzene	µg/kg	8,500	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
1,2-Dichlorobenzene	µg/kg	7,900	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
1,2-Dibromo-3-chloropropane	µg/kg		20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U
1,2,4-Trichlorobenzene	µg/kg	3,400	20 U	2,400 U	21 U	2,600 U	83 U	17 U	19 U	88 U

RSCO = Recommended Soil Cleanup Objectives
1,000 - indicates detected value for organics.
(shaded) - indicates value exceeds TAGM 4046 RSCO

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 8 - Phase 3 GeoProbe Boring Data for
Source Area Delineation - Conveyor Sump

Sample ID ->	Units	TAGM	GPCS-1	GPCS-1	GPCS-1	GPSC-2	GPCS-2	GPCS-3	GPCS-4	GPCS-5	GPCS-6
Depth - >		4046	2 - 4	4.8 - 10	14 - 18	1.3 - 4	14 - 18	14 - 18	14 - 18	2 - 4	4 - 6
Date Sampled ->		RSCO	03/13/06	03/13/06	03/13/06	03/13/06	03/13/06	03/13/06	03/13/06	03/13/06	03/13/06
VOLATILES											
Chloromethane	µg/kg		15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
Bromomethane	µg/kg		15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
Vinyl chloride	µg/kg	200	15 U	**31**	**10 J**	11 U	**5 J**	**8 J**	**4 J**	12 U	21 U
Chloroethane	µg/kg	1,900	15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
Methylene chloride	µg/kg	100	15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
Acetone	µg/kg	200	25 U	19 U	21 U	11 U	19 U	18 U	22 U	**63 B**	**170**
Carbon disulfide	µg/kg	2,700	15 U	19 U	**2 J**	11 U	19 U	18 U	22 U	12 U	21 U
1,1-Dichloroethene	µg/kg	400	15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
1,1-Dichloroethane	µg/kg	200	15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
Chloroform	µg/kg	300	15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
1,2-Dichloroethane	µg/kg	100	15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
2-Butanone	µg/kg	300	**6 J**	19 U	21 U	11 U	19 U	18 U	22 U	12 U	**55**
1,1,1-Trichloroethane	µg/kg	800	15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
Carbon tetrachloride	µg/kg	600	15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
Bromodichloromethane	µg/kg		15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
1,2-Dichloropropane	µg/kg		15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
cis-1,3-Dichloropropene	µg/kg		15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
Trichloroethene	µg/kg	700	15 U	19 U	21 U	11 U	19 U	18 U	22 U	**11 J**	21 U
Dibromochloromethane	µg/kg		15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
1,1,2-Trichloroethane	µg/kg		15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
Benzene	µg/kg	60 or MDL	15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
trans-1,3-Dichloropropene	µg/kg		15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
Bromoform	µg/kg		15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
4-Methyl-2-pentanone	µg/kg	1,000	15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
2-Hexanone	µg/kg		15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
Tetrachloroethene	µg/kg	1,400	15 U	19 U	21 U	11 U	19 U	18 U	22 U	**65**	21 U
Toluene	µg/kg	1,500	15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
1,1,2,2-Tetrachloroethane	µg/kg	600	15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
Chlorobenzene	µg/kg	1,700	15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
Ethylbenzene	µg/kg	5,500	15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
Styrene	µg/kg		15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
Total Xylenes	µg/kg	1,200	15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/kg	1,000	15 UJ	19 UJ	21 UJ	11 UJ	19 UJ	18 UJ	22 UJ	12 U	21 UJ
cis-1,2-Dichloroethene	µg/kg		15 U	**20**	**22**	11 U	**13 J**	**10 J**	**5 J**	**21**	**3 J**
trans-1,2-Dichloroethene	µg/kg	300	15 UJ	19 U	21 U	11 U	19 U	18 U	22 U	**2 J**	21 U
Dichlorodifluoromethane	µg/kg		15 UJ	19 UJ	21 U	11 UJ	19 UJ	18 UJ	22 UJ	12 U	21 UJ
Trichlorofluoromethane	µg/kg		15 U	19 UJ	21 U	11 UJ	19 UJ	18 UJ	22 UJ	12 U	21 UJ
Methyl acetate	µg/kg		15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
Methyl tert butyl ether	µg/kg	120	15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
Cyclohexane	µg/kg		**3 J**	**2 J**	21 U	11 U	19 U	18 U	22 U	12 U	**27**
Methylcyclohexane	µg/kg		**15**	**2 J**	21 U	11 U	19 U	18 U	22 U	12 U	**130**
1,2-Dibromoethane	µg/kg		15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
Isopropylbenzene	µg/kg		**5 J**	19 U	21 U	11 U	19 U	18 U	22 U	**3 J**	**28**
1,3-Dichlorobenzene	µg/kg	1,600	15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
1,4-Dichlorobenzene	µg/kg	8,500	15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
1,2-Dichlorobenzene	µg/kg	7,900	15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
1,2-Dibromo-3-chloropropane	µg/kg		15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U
1,2,4-Trichlorobenzene	µg/kg	3,400	15 U	19 U	21 U	11 U	19 U	18 U	22 U	12 U	21 U

RSCO = Recommended Soil Cleanup Objectives

1,000 - indicates detected value for organics.

- indicates value exceeds TAGM 4046 RSCO

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 8 - Phase 3 GeoProbe Boring Data for
Source Area Delineation - Conveyor Sump

Sample ID ->	Units	TAGM 4046		GPCS-1	GPCS-1	GPCS-2	GPCS-3	GPCS-4	GPCS-5	GPCS-5 DL	GPCS-6	GPCS-6 DL	GPCS-6
Depth - >		RSCO	Eastern USA Background	2 - 4	4.8 - 10	1.3 - 4	3.4 - 6	2.2 - 4	2 - 4	2 - 4	4 - 6	4 - 6	6 - 8
Date Sampled ->				03/13/06	03/13/06	03/13/06	03/13/06	03/13/06	03/13/06	03/13/06	03/13/06	03/13/06	03/13/06
SEMIVOLATILES													
Benzaldehyde	µg/kg			1,000 U	1,200 U	3,700 U			840 U	4,200 U	1,900 U	19,000 U	1100 U
Phenol	µg/kg	30 or MDL		**57 J**	**83 J**	1,800 U			**25 J**	2,100 U	970 U	9,700 U	**20 J**
Bis(2-chloroethyl) ether	µg/kg			510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
2-Chlorophenol	µg/kg	800		510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
2-Methylphenol	µg/kg	100 or MDL		510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
2,2'-Oxybis(1-Chloropropane)	µg/kg			510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
Acetophenone	µg/kg			1,000 U	1,200 U	3,700 U			840 U	4,200 U	1,900 U	19,000 U	1100 U
4-Methylphenol	µg/kg	900		510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
N-Nitroso-Di-n-propylamine	µg/kg			510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
Hexachloroethane	µg/kg			510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
Nitrobenzene	µg/kg	200 or MDL		510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
Isophorone	µg/kg	4400		510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
2-Nitrophenol	µg/kg	330 or MDL		510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
2,4-Dimethylphenol	µg/kg			510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
Bis(2-chloroethoxy) methane	µg/kg			510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
2,4-Dichlorophenol	µg/kg	400		510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
Naphthalene	µg/kg	1,300		**350 J**	630 U	**220 J**			**440**	**460 DJ**	**1,800**	**2,100 DJ**	560 U
4-Chloroaniline	µg/kg	220 or MDL		510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
Hexachlorobutadiene	µg/kg			510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
Caprolactam	µg/kg			510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
4-Chloro-3-methylphenol	µg/kg	240 or MDL		510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
2-Methylnaphthalene	µg/kg	36,400		**950**	630 U	**950 J**			**4,200 E**	**4,200 D**	**13,000**	**13,000 D**	560 U
Hexachlorocyclopentadiene	µg/kg			510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
2,4,6-Trichlorophenol	µg/kg			510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
2,4,5-Trichlorophenol	µg/kg	100		1,200 U	1,500 U	4,400 U			1,000 U	5,100 U	2,300 U	23,000 U	1400 U
Biphenyl	µg/kg			1,000 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
2-Chloronaphthalene	µg/kg			510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
2-Nitroaniline	µg/kg	430 or MDL		1,200 U	1,500 U	4,400 U			1,000 U	5,100 U	2,300 U	23,000 U	1400 U
Dimethyl phthalate	µg/kg	2,000		510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
2,6-Dinitrotoluene	µg/kg	1,000		510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
Acenaphthylene	µg/kg	41,000		510 U	630 U	**130 J**			**120 J**	**120 DJ**	**250 J**	9,700 U	560 U
3-Nitroaniline	µg/kg	500 or MDL		1,200 U	1,500 U	4,400 U			1,000 U	5,100 U	2,300 U	23,000 U	1400 U
Acenaphthene	µg/kg	50,000		**720**	630 U	**800 J**			**370 J**	**390 DJ**	**920 J**	**1,300 DJ**	560 U
2,4-Dinitrophenol	µg/kg	200 or MDL		1,200 U	1,500 U	4,400 U			1,000 U	5,100 U	2,300 U	23,000 U	1400 U
4-Nitrophenol	µg/kg	100 or MDL		1,200 U	1,500 U	4,400 U			1,000 U	5,100 U	2,300 U	23,000 U	1400 U
Dibenzofuran	µg/kg	6,200		510 U	630 U	**360 J**			**96 J**	**94 DJ**	**350 J**	**500 DJ**	560 U
2,4-Dinitrotoluene	µg/kg	1,000		510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
Diethyl phthalate	µg/kg	7,100		510 U	630 U	1,800 U			420 U	**68 DJ**	970 U	**460 DJ**	560 U
Fluorene	µg/kg	50,000		**1,000**	1,200 U	**520 J**			**370 J**	**400 DJ**	1,100 U	1,400 DJ	1100 U
4-Chlorophenyl phenyl ether	µg/kg			510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
4-Nitroaniline	µg/kg			1,200 U	1,500 U	4,400 U			1,000 U	5,100 U	2,300 U	23,000 U	1400 U
4,6-Dinitro-2-methylphenol	µg/kg			1,200 U	1,500 U	4,400 U			1,000 U	5,100 U	2,300 U	23,000 U	1400 U
N-nitrosodiphenylamine	µg/kg			510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
4-Bromophenyl phenyl ether	µg/kg			510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
Hexachlorobenzene	µg/kg	410		510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
Atrazine	µg/kg			1,000 U	1,200 U	3,700 U			840 U	4,200 U	1,900 U	19,000 U	1100 U
Pentachlorophenol	µg/kg	1000 or MDL		1,200 U	1,500 U	4,400 U			1,000 U	5,100 U	2,300 U	23,000 U	1400 U
Phenanthrene	µg/kg	50,000		**2,400**	630 U	**1,800**			**1,400**	**1,500 DJ**	**2,500**	**3,200 DJ**	560 U
Anthracene	µg/kg	50,000		**510**	630 U	**600 J**			**190 J**	**200 DJ**	**400 J**	**440 DJ**	560 U
Carbazole	µg/kg			510 U	630 U	**200 J**			**130 J**	**140 DJ**	**230 J**	9,700 U	560 U

Pioneer Midler Avenue LLC
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Table 8 - Phase 3 GeoProbe Boring Data for
Source Area Delineation - Conveyor Sump

Sample ID ->	Units	TAGM 4046		GPCS-1	GPCS-1	GPCS-2	GPCS-3	GPCS-4	GPCS-5	GPCS-5 DL	GPCS-6	GPCS-6 DL	GPCS-6
Depth - >		RSCO	Eastern USA Background	2 - 4	4.8 - 10	1.3 - 4	3.4 - 6	2.2 - 4	2 - 4	2 - 4	4 - 6	4 - 6	6 - 8
Date Sampled ->				03/13/06	03/13/06	03/13/06	03/13/06	03/13/06	03/13/06	03/13/06	03/13/06	03/13/06	03/13/06
Di-n-butyl phthalate	µg/kg	8,100		510 U	630 U	1,800 U			420 U	430 DJ	31 J	1,400 DJ	560 U
Fluoranthene	µg/kg	50,000		760	630 U	2,500			1,500	1,800 DJ	810 J	1,000 DJ	560 U
Pyrene	µg/kg	50,000		650	630 U	2,000			1,300	1,600 DJ	660 J	970 DJ	560 U
Butyl benzyl phthalate	µg/kg	50,000		510 U	23 J	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
3,3'-Dichlorobenzidine	µg/kg			510 U	630 U	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
Benzo(a)anthracene	µg/kg	224 or MDL		300 J	630 U	1,000 J			690	740 DJ	350 J	460 DJ	560 U
Chrysene	µg/kg	400		340 J	630 U	1,000 J			710	750 DJ	370 J	430 DJ	560 U
Bis(2-ethylhexyl) phthalate	µg/kg			510 BJ	630 U	1,800 U			420 U	84 BDJ	970 U	9,700 U	560 U
Di-n-octyl phthalate	µg/kg	50,000		510 U	17 J	1,800 U			420 U	2,100 U	970 U	9,700 U	560 U
Benzo(b)fluoranthene	µg/kg	1,100		360 J	630 U	1,100 J			800 J	880 DJ	450 J	560 DJ	560 U
Benzo(k)fluoranthene	µg/kg	1,100		170 J	630 U	420 J			220 J	340 DJ	130 J	9,700 U	560 U
Benzo(a)pyrene	µg/kg	61 or MDL		240 J	630 U	740 J			510 J	510 DJ	290 J	320 DJ	560 U
Indeno(1,2,3-cd)pyrene	µg/kg	3,200		210 J	630 U	580 J			400 J	400 DJ	180 J	270 DJ	560 U
Dibenzo(a,h)anthracene	µg/kg	14 or MDL		81 J	630 U	190 J			130 J	150 DJ	56 J	9,700 U	560 U
Benzo(ghi)perylene	µg/kg	50,000		30 J	630 U	95 J			60 J	78 DJ	30 J	9,700 U	560 U
AROCLORS													
Aroclor 1016	µg/kg	1,000 - surface soils, 10,000 - subsurface soils		120 U	150 U	91 U	90 U	90 U	100 U		230 U		130 U
Aroclor 1221	µg/kg			120 U	150 U	91 U	90 U	90 U	100 U		230 U		130 U
Aroclor 1232	µg/kg			120 U	150 U	91 U	90 U	90 U	100 U		230 U		130 U
Aroclor 1242	µg/kg			120 U	150 U	91 U	90 U	90 U	100 U		230 U		130 U
Aroclor 1248	µg/kg			120 U	150 U	91 U	90 U	90 U	100 U		230 U		130 U
Aroclor 1254	µg/kg			120 U	150 U	91 U	90 U	90 U	100 U		230 U		130 U
Aroclor 1260	µg/kg			120 U	150 U	91 U	90 U	90 U	100 U		230 U		130 U
INORGANICS													
Aluminum	mg/kg	SB	33000	3,740	37.2	5,930	3,150	6,000	5,080		1,730		
Antimony	mg/kg	SB		0.46 B	0.50 B	0.86 B	0.49 B	0.88 B	0.90 B		1.1 B		
Arsenic	mg/kg	7.5 or SB	3 - 12	2.8	0.36 U	5.9	3.4	3.4	9.2		2.1 B		
Barium	mg/kg	300 or SB	15 - 600	39.2	28.4 B	85.1	71.9	26.4	60.0		55.3 B		
Beryllium	mg/kg	0.16 or SB	0 - 1.75	0.23 B	0.16 B	0.41 B	0.24 B	0.31 B	0.35 B		0.10 B		
Cadmium	mg/kg	1 or SB	0.1 - 1	0.04 U	0.04 U	0.03 U	0.03 B	0.03 U	0.03		0.18 B		
Calcium	mg/kg	SB	130 - 35,000	49,000	389,000	82,800	153,000	43,000	54,900		51,500		
Chromium	mg/kg	10 or SB	1.5 - 40	6.2	0.3 B	11.9	5.6	10.4	9.0		3.4		
Cobalt	mg/kg	30 or SB	2.5 - 60	2.7 B	0.12 B	4.8 B	3.8 B	5.5 B	4.5 B		1.3 B		
Copper	mg/kg	25 or SB	1 - 50	10.5	0.16 B	24.6	16.2	14.0	19.8		11.0		
Iron	mg/kg	2,000 or SB	2,000 - 550,000	10,800 *	85 *	31,200 *	7,870 *	15,100 *	57,600 *		9,940 *		
Lead	mg/kg	SB	200 - 500	10.9	0.32 U	43.2	4.7	19.5	18.2		8.1		
Magnesium	mg/kg	SB	100 - 5,000	3,600	2,340	12,100	12,100	14,500	3,870		2,910		
Manganese	mg/kg	SB	50 - 5,000	171	7.3	682	293	269	1,680		238		
Mercury	mg/kg	0.1	0.001 - 0.2	0.073	0.004 U	0.039	0.010 B	0.021	0.040		0.074		
Nickel	mg/kg	13 or SB	0.5 - 25	6.5	1.6 B	10.5	14	12.4	8.6		8.7 B		
Potassium	mg/kg	SB	8,500 - 43,000	538 B	34.3 B	821	826	971	597 B		312 B		
Selenium	mg/kg	2 or SR	0.1 - 3.9	0.86 B	0.46 U	0.37 B	0.31 U	0.53 B	1.1 B		4.6 B		
Silver	mg/kg	SB		0.14 B	0.05 B	0.14 B	0.10 B	0.08 B	0.15 B		0.18 B		
Sodium	mg/kg	SB	6,000 - 8,000	206 B	188 B	226 B	138 B	103 B	197 B		556 B		
Thallium	mg/kg	SB		0.68 U	0.72 U	0.49 U	0.76 B	0.48 U	1.2 B		1.3		
Vanadium	mg/kg	150 or SB	1 - 300	10.3	0.09 B	21.2	7.2	12.2	18.4		4.6 B		
Zinc	mg/kg	20 or SB	9 - 50	22.7	1.4 B	90.2	23.0	34.8	32.7		33.8		
Leachable pH	S.U.			7.33	7.62	7.55	7.84	9.35	7.52		7.24		7.85

RSCO = Recommended Soil Cleanup Objectives

1,000 - indicates detected value for organics.

(shaded) - indicates value exceeds TAGM 4046 RSCO

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 8 - Phase 3 GeoProbe Boring Data for Source Area Delineation - Sump

Sample ID ->	Units	TAGM	GPS 1-1		GPS 1-4	
Depth - >		4046	10 - 14		10 - 14	
Date Sampled ->		RSCO	03/02/06		03/02/06	
VOLATILES						
Chloromethane	µg/kg		20	U	26	U
Bromomethane	µg/kg		20	U	26	U
Vinyl chloride	µg/kg	200	20	U	26	U
Chloroethane	µg/kg	1,900	20	U	26	U
Methylene chloride	µg/kg	100	20	U	26	U
Acetone	µg/kg	200	20	U	26	U
Carbon disulfide	µg/kg	2,700	20	U	26	U
1,1-Dichloroethene	µg/kg	400	20	U	26	U
1,1-Dichloroethane	µg/kg	200	20	U	26	U
Chloroform	µg/kg	300	20	U	26	U
1,2-Dichloroethane	µg/kg	100	20	U	26	U
2-Butanone	µg/kg	300	20	U	26	U
1,1,1-Trichloroethane	µg/kg	800	20	U	26	U
Carbon tetrachloride	µg/kg	600	20	U	26	U
Bromodichloromethane	µg/kg		20	U	26	U
1,2-Dichloropropane	µg/kg		20	U	26	U
cis-1,3-Dichloropropene	µg/kg		20	U	26	U
Trichloroethene	µg/kg	700	3	J	9	J
Dibromochloromethane	µg/kg		20	U	26	U
1,1,2-Trichloroethane	µg/kg		20	U	26	U
Benzene	µg/kg	60 or MDL	20	U	5	J
trans-1,3-Dichloropropene	µg/kg		20	U	26	U
Bromoform	µg/kg		20	U	26	U
4-Methyl-2-pentanone	µg/kg	1,000	20	U	26	U
2-Hexanone	µg/kg		20	U	26	U
Tetrachloroethene	µg/kg	1,400	20	U	5	J
Toluene	µg/kg	1,500	20	U	26	U
1,1,2,2-Tetrachloroethane	µg/kg	600	20	U	26	U
Chlorobenzene	µg/kg	1,700	20	U	26	U
Ethylbenzene	µg/kg	5,500	20	U	26	U
Styrene	µg/kg		20	U	26	U
Total Xylenes	µg/kg	1,200	20	U	26	U
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/kg	1,000	20	U	26	U
cis-1,2-Dichloroethene	µg/kg		7	J	7	J
trans-1,2-Dichloroethene	µg/kg	300	20	U	26	U
Dichlorodifluoromethane	µg/kg		20	U	26	U
Trichlorofluoromethane	µg/kg		20	U	26	U
Methyl acetate	µg/kg		20	U	26	U
Methyl tert butyl ether	µg/kg	120	20	U	26	U
Cyclohexane	µg/kg		20	U	26	U
Methylcyclohexane	µg/kg		20	U	26	U
1,2-Dibromoethane	µg/kg		20	U	26	U
Isopropylbenzene	µg/kg		20	U	26	U
1,3-Dichlorobenzene	µg/kg	1,600	20	U	26	U
1,4-Dichlorobenzene	µg/kg	8,500	20	U	26	U
1,2-Dichlorobenzene	µg/kg	7,900	20	U	26	U
1,2-Dibromo-3-chloropropane	µg/kg		20	U	26	U
1,2,4-Trichlorobenzene	µg/kg	3,400	20	U	26	U

RSCO = Recommended Soil Cleanup Objectives

1,000	- indicates detected value for organics.
	- indicates value exceeds TAGM 4046 RSCO

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 8B - Phase 3 GeoProbe Boring Data for Additional Locations

Sample ID ->	Units	TAGM	SVGP-1		SVGP-2		GPD-19	GPD-29	GPD-55	GPD-60
Depth - >		4046	7-10 ft.		7-10 ft.		3-4 ft.	0.5-4 ft.	4-7 ft.	4-7 ft.
Date Sampled ->		RSCO	9/27/2005		9/27/2005		9/9/2005	9/13/2005	9/21/2005	9/22/2005
SEMIVOLATILES										
Benzaldehyde	ug/kg		2100	U	1200	U	NS	NS	NS	NS
Phenol	ug/kg	30 or MDL	1000	U	600	U	NS	NS	NS	NS
Bis(2-chloroethyl) ether	ug/kg		1000	U	600	U	NS	NS	NS	NS
2-Chlorophenol	ug/kg	800	1000	U	600	U	NS	NS	NS	NS
2-Methylphenol	ug/kg	100 or MDL	1000	U	600	U	NS	NS	NS	NS
2,2'-Oxybis(1-Chloropropane)	ug/kg		1000	U	600	U	NS	NS	NS	NS
Acetophenone	ug/kg		2100	U	1200	U	NS	NS	NS	NS
4-Methylphenol	ug/kg	900	1000	U	600	U	NS	NS	NS	NS
N-Nitroso-Di-n-propylamine	ug/kg		1000	U	600	U	NS	NS	NS	NS
Hexachloroethane	ug/kg		1000	U	600	U	NS	NS	NS	NS
Nitrobenzene	ug/kg	200 or MDL	1000	U	600	U	NS	NS	NS	NS
Isophorone	ug/kg	4400	1000	U	600	U	NS	NS	NS	NS
2-Nitrophenol	ug/kg	330 or MDL	1000	U	600	U	NS	NS	NS	NS
2,4-Dimethylphenol	ug/kg		1000	U	600	U	NS	NS	NS	NS
Bis(2-chloroethoxy) methane	ug/kg		1000	U	600	U	NS	NS	NS	NS
2,4-Dichlorophenol	ug/kg	400	1000	U	600	U	NS	NS	NS	NS
Naphthalene	ug/kg	1,300	1000	U	600	U	NS	NS	NS	NS
4-Chloroaniline	ug/kg	220 or MDL	1000	U	600	U	NS	NS	NS	NS
Hexachlorobutadiene	ug/kg		1000	U	600	U	NS	NS	NS	NS
Caprolactam	ug/kg		2100	U	1200	U	NS	NS	NS	NS
4-Chloro-3-methylphenol	ug/kg	240 or MDL	1000	U	600	U	NS	NS	NS	NS
2-Methylnaphthalene	ug/kg	36,400	1000	U	600	U	NS	NS	NS	NS
Hexachlorocyclopentadiene	ug/kg		1000	U	600	U	NS	NS	NS	NS
2,4,6-Trichlorophenol	ug/kg		1000	U	600	U	NS	NS	NS	NS
2,4,5-Trichlorophenol	ug/kg	100	2500	U	1400	U	NS	NS	NS	NS
Biphenyl	ug/kg		2100	U	1200	U	NS	NS	NS	NS
2-Chloronaphthalene	ug/kg		1000	U	600	U	NS	NS	NS	NS
2-Nitroaniline	ug/kg	430 or MDL	2500	U	1400	U	NS	NS	NS	NS
Dimethyl phthalate	ug/kg	2,000	1000	U	600	U	NS	NS	NS	NS
2,6-Dinitrotoluene	ug/kg	1,000	1000	U	600	U	NS	NS	NS	NS
Acenaphthylene	ug/kg	41,000	1000	U	600	U	NS	NS	NS	NS
3-Nitroaniline	ug/kg	500 or MDL	2500	U	1400	U	NS	NS	NS	NS
Acenaphthene	ug/kg	50,000	1000	U	600	U	NS	NS	NS	NS
2,4-Dinitrophenol	ug/kg	200 or MDL	2500	U	1400	U	NS	NS	NS	NS
4-Nitrophenol	ug/kg	100 or MDL	2500	U	1400	U	NS	NS	NS	NS
Dibenzofuran	ug/kg	6,200	1000	U	600	U	NS	NS	NS	NS
2,4-Dinitrotoluene	ug/kg	1,000	1000	U	600	U	NS	NS	NS	NS
Diethyl phthalate	ug/kg	7,100	1000	U	600	U	NS	NS	NS	NS
Fluorene	ug/kg	50,000	1000	U	600	U	NS	NS	NS	NS
4-Chlorophenyl phenyl ether	ug/kg		1000	U	600	U	NS	NS	NS	NS
4-Nitroaniline	ug/kg		2500	U	1400	U	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	ug/kg		2500	U	1400	U	NS	NS	NS	NS
N-nitrosodiphenylamine	ug/kg		1000	U	600	U	NS	NS	NS	NS
4-Bromophenyl phenyl ether	ug/kg		1000	U	600	U	NS	NS	NS	NS
Hexachlorobenzene	ug/kg	410	1000	U	600	U	NS	NS	NS	NS
Atrazine	ug/kg		2100	U	1200	U	NS	NS	NS	NS
Pentachlorophenol	ug/kg	1000 or MDL	2500	U	1400	U	NS	NS	NS	NS
Phenanthrene	ug/kg	50,000	1000	U	600	U	NS	NS	NS	NS
Anthracene	ug/kg	50,000	1000	U	600	U	NS	NS	NS	NS
Carbazole	ug/kg		1000	U	600	U	NS	NS	NS	NS
Di-n-butyl phthalate	ug/kg	8,100	1000	U	600	U	NS	NS	NS	NS
Fluoranthene	ug/kg	50,000	1000	U	600	U	NS	NS	NS	NS
Pyrene	ug/kg	50,000	1000	U	600	U	NS	NS	NS	NS
Butyl benzyl phthalate	ug/kg	50,000	1000	U	600	U	NS	NS	NS	NS
3,3'-Dichlorobenzidine	ug/kg		1000	U	600	U	NS	NS	NS	NS
Benzo(a)anthracene	ug/kg	224 or MDL	1000	U	600	U	NS	NS	NS	NS
Chrysene	ug/kg	400	1000	U	600	U	NS	NS	NS	NS
Bis(2-ethylhexyl) phthalate	ug/kg		**81**	**BJ**	**48**	**BJ**	NS	NS	NS	NS
Di-n-octyl phthalate	ug/kg	50,000	**35**	**J**	600	U	NS	NS	NS	NS
Benzo(b)fluoranthene	ug/kg	1,100	1000	U	600	U	NS	NS	NS	NS

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 8B - Phase 3 GeoProbe Boring Data
for Additional Locations

Sample ID ->	Units	TAGM	SVGP-1		SVGP-2		GPD-19		GPD-29		GPD-55		GPD-60	
Depth - >		4046	7-10 ft.		7-10 ft.		3-4 ft.		0.5-4 ft.		4-7 ft.		4-7 ft.	
Date Sampled ->		RSCO	9/27/2005		9/27/2005		9/9/2005		9/13/2005		9/21/2005		9/22/2005	
SEMIVOLATILES														
Benzo(k)fluoranthene	ug/kg	1,100	1000	U	600	U	NS		NS		NS		NS	
Benzo(a)pyrene	ug/kg	61 or MDL	**380**	**J**	600	U	NS		NS		NS		NS	
Indeno(1,2,3-cd)pyrene	ug/kg	3,200	1000	U	600	U	NS		NS		NS		NS	
Dibenzo(a,h)anthracene	ug/kg	14 or MDL	1000	U	600	U	NS		NS		NS		NS	
Benzo(ghi)perylene	ug/kg	50,000	1000	U	600	U	NS		NS		NS		NS	
PETROLEUM PRODUCTS by USEPA Method 310.3														
Kerosene	mg/kg	NA	NS		NS		20	U	19	U	17	U	NS	
Gasoline	mg/kg	NA	NS		NS		20	U	19	U	17	U	NS	
Motor Oil	mg/kg	NA	NS		NS		20	U	**6000**		**1700**		NS	
Fuel Oil#2	mg/kg	NA	NS		NS		**310**		19	U	17	U	NS	
Fuel Oil #4	mg/kg	NA	NS		NS		20	U	19	U	17	U	NS	
Fuel Oil #6	mg/kg	NA	NS		NS		20	U	19	U	17	U	NS	
Other	mg/kg	NA	NS		NS		200	U	190	U	170	U	NS	
POLYCHLORINATED BIPHENYLS by USEPA Method 8082														
Aroclor 1016	mg/kg	1,000 - surface soils, 10,000 - subsurface soils	NS		NS		NS		NS		NS		87	U
Aroclor 1221	mg/kg		NS		NS		NS		NS		NS		87	U
Aroclor 1232	mg/kg		NS		NS		NS		NS		NS		87	U
Aroclor 1242	mg/kg		NS		NS		NS		NS		NS		87	U
Aroclor 1248	mg/kg		NS		NS		NS		NS		NS		87	U
Aroclor 1254	mg/kg		NS		NS		NS		NS		NS		87	U
Aroclor 1260	mg/kg		NS		NS		NS		NS		NS		87	U

Notes:

Data is preliminary pending data validation
NS = location was not sampled for the identified constituent
NA = not applicable
BOLD indicates constituent was detected
SHADED detected level exceedsTAGM 4046 recommended site cleanup objective (RSCO)

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 8B - Phase 3 GeoProbe Boring Data
for Additional Locations

Sample ID ->	Units	TAGM	DAW-4		DAW-4		DAW-4		MW-13D	
Depth - >		4046	13.5 - 14.5		16 - 18		22 - 24		14 - 16	
Date Sampled ->		RSCO	04/20/06		04/24/06		04/24/06		04/24/06	
VOLATILES										
Vinyl chloride	µg/kg	200	12	J	11	U	11	U	21	J
Trichloroethene	µg/kg	700	12	J	11	U	11	U	22	U
Tetrachloroethene	µg/kg	1,400	12	J	11	U	11	U	28	
trans-1,2-Dichloroethene	µg/kg	300	2	J	11	U	11	U	16	J
Dichlorodifluoromethane	µg/kg		12	J	11	U	11	U	22	U

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Table 8 - Phase 3 GeoProbe Boring Data for
Source Area Delineation - Sump

Sample ID ->	Units	TAGM	GPS 1-1		GPS 1-4	
Depth - >		4046	10 - 14		10 - 14	
Date Sampled ->		RSCO	03/02/06		03/02/06	
VOLATILES						
Vinyl chloride	µg/kg	200	20	U	26	U
Trichloroethene	µg/kg	700	3	J	9	J
Tetrachloroethene	µg/kg	1,400	20	U	5	J
cis-1,2-Dichloroethene	µg/kg		7	J	7	J
trans-1,2-Dichloroethene	µg/kg	300	20	U	26	U

RSCO = Recommended Soil Cleanup Objectives

1,000 - indicates detected value for organics.

- indicates value exceeds TAGM 4046 RSCO

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Table 9 - Phase 1 Surface Soil Data for PCBs/Pesticides

Sample ID ->	Units	TAGM 4046		P-1 0-6-C		P-2 0-6-C		P-3 0-6-C	
Depth - >		RSCO	Eastern USA	0-6 inches					
Date Sampled ->				11/18/2004					
PESTICIDES/AROCLORS									
alpha-BHC	ug/kg	110		19	U	21	U	19	U
beta-BHC	ug/kg	200		19	U	21	U	19	U
delta-BHC	ug/kg	300		19	U	21	U	19	U
gamma-BHC (Lindane)	ug/kg	60		19	U	21	U	19	U
Heptachlor	ug/kg	100		**4.7**	**J**	21	U	19	U
Aldrin	ug/kg	41		19	U	21	U	19	U
Heptachlor epoxide	ug/kg	20		35	U	21	U	19	U
Endosulfan I	ug/kg	900		19	U	21	U	19	U
Dieldrin	ug/kg	44		37	U	90	U	38	U
4,4'-DDE	ug/kg	2,100		**30**	**JP**	40	U	38	U
Endrin	ug/kg	100		37	U	40	U	38	U
Endosulfan II	ug/kg	900		37	U	40	U	38	U
4,4'-DDD	ug/kg	2,900		**71**		40	U	38	U
Endosulfan Sulfate	ug/kg	100		**76**	**PJ**	**24**	**JP**	38	U
4,4'-DDT	ug/kg	2,100		**140**	**PJ**	**40**	**P**	38	U
Methoxychlor	ug/kg			190	U	**44**	**JPN**	190	U
Endrin ketone	ug/kg			**190**	U	40	U	38	U
Endrin aldehyde	ug/kg			37	U	40	U	38	U
alpha-Chlordane	ug/kg	540		19	U	21	U	19	U
gamma-Chlordane	ug/kg	540		19	U	21	U	19	U
Toxaphene	ug/kg			1,900	U	2,100	U	1900	U
Aroclor 1016	ug/kg	1,000 - surface soils, 10,000 - subsurface soils		370	U	400	U	380	U
Aroclor 1221	ug/kg			760	U	810	U	770	U
Aroclor 1232	ug/kg			370	U	400	U	380	U
Aroclor 1242	ug/kg			370	U	400	U	380	U
Aroclor 1248	ug/kg			370	U	400	U	380	U
Aroclor 1254	ug/kg			370	U	400	U	380	U
Aroclor 1260	ug/kg			370	U	400	U	380	U

Notes:
BOLD indicates constituent was detected
SHADED indicates detected level exceeding applicable TAGM 4046 recommended site cleanup objective (RSCO)

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Remedial Investigation Report
Table 10 - Summary Subsurface Soils CVOCs Data

Sample ID	Depth	Date	Total	VC		TCE		PCE		cis		trans	
	TAGM 4046 RSCOs ->		CVOCs	200		700		1,400		NA		300	
	Proposed SSCOs ->			800		2,800		5,600		NA		1,200	
B-1	4 - 6	11/12/04	38,900	8,100		5,800		14,000		11,000		1,800	U
B-2	5 - 7	11/12/04	55	11	J	5	J	21		18		16	U
B-3	14 - 16	11/11/04	408,000	16,000	U	68,000		310,000		30,000		16,000	U
B-3	2 - 4	11/11/04	22	11	U	2	J	20		11	U	11	U
B-4	2 - 4	11/11/04	11	12	U	3	J	8	J	12	U	12	U
B-5	6 - 8	11/12/04	62,590	3,800		490	J	1,200	J	54,000		3,100	
B-5 DL	6 - 8	11/12/04	63,800	3,700	DJ	5,800	U	2,300	DJ	54,000	D	3,800	DJ
B-6	2 - 4	11/11/04	0	10	U	10	U	10	U	10	U	10	U
B-7	2 - 4	11/12/04	0	11	U	11	U	11	U	11	U	11	U
B-8	2 - 4	11/11/04	0	11	U	11	U	11	U	11	U	11	U
B-9	2 - 4	11/11/04	17	11	U	11	U	17		11	U	11	U
B-10	3 - 6	11/12/04	0	1,700	U	1,700	U	1,700	U	1,700	U	1,700	U
LB-8	4 - 6	11/09/04	0	15	U	15	U	15	U	15	U	15	U
PB-3	2 - 4	11/22/04	0	12	U	12	U	12	U	12	U	12	U
PB-4	2 - 4	11/18/04	0	12	U	12	U	12	U	12	U	12	U
PB-7	2 - 4	11/19/04	12	12	UJ	12	U	12	U	12	U	12	U
PB-12	18 - 20	11/24/04	85	17	UJ	17	UJ	17	UJ	17	UJ	17	UJ
MW-1	4 - 6	11/17/04	0	11	U	11	U	11	U	11	U	11	U
MW-2	2 - 4	11/18/04	0	12	U	12	U	12	U	12	U	12	U
MW-3	2 - 4	11/18/04	46	14	U	14	U	46		14	U	14	U
MW-4	2 - 4	11/17/04	0	14	U	14	U	14	U	14	U	14	U
MW-5	2 - 4	11/17/04	10	12	U	12	U	10	J	12	U	12	U
MW-6	4 - 7	11/16/04	0	13	U	13	U	13	U	13	U	13	U
MW-7	4 - 6	11/16/04	11	11	U	11	UJ	11	U	11	U	11	U
MW-8	2 - 5	11/18/04	0	18	U	18	U	18	U	18	U	18	U
MW-2D	16-18	01/27/05	0	18	U	18	U	18	U	18	U	18	U
MW-3D	20-22	01/25/05	2,315	160		3	J	12	J	2,000	J	140	
MW-3D DL	20-22	01/25/05	2,000	4,300	U	4,300	U	4,300	U	2,000	DJ	4,300	U
MW-3D	24-26	01/25/05	2	14	U	14	U	2	J	14	U	14	U
MW-4D	14-16	01/26/05	0	13	U	13	U	13	U	13	U	13	U
MW-9D	16-18	01/27/05	0	16	U	16	U	16	U	16	U	16	U
MW-9D	18-20	01/27/05	0	15	U	15	U	15	U	15	U	15	U
MW-10D	16-18	01/26/05	54	7	J	18	U	18	U	45		2	J
MW-11D	20-22	01/24/05	13,648	11	U	550	E	13,000		96		2	J
MW-11D DL	20-22	01/24/05	13,650	1,300	U	650	DJ	13,000	D	1,300	U	1,300	U
GP-2	12 - 16	03/17/05	2,852	820	J	12	J	80		1,700	J	240	
GP-2 DL	12 - 16	03/17/05	2,560	500	DJ	2,000	U	360	DJ	1,700	DJ	2,000	U
GP-2	16 - 19	03/17/05	1,837	24	J	92		82		1,600	J	39	
GP-2 DL	16 - 19	03/17/05	2,310	3,500	U	3,500	U	710	DJ	1,600	DJ	3,500	U
GP-3	16 - 19	03/17/05	13,250,000	980,000	U	250,000	J	13,000,000	J	980,000	U	980,000	U
GP-3	19 - 19.5	03/17/05	6,140,000	360,000	U	240,000	J	5,900,000		360,000	U	360,000	U
GP-4	10-12	03/17/05	254,400	80,000		16,000	U	4,400	J	170,000		16,000	U
GP-7	8 - 12	03/18/05	47	5	J	20	U	20	U	37		5	J
GP-7	16 - 18.9	03/18/05	105	3	J	3	J	29	U	89		10	J
GP-9	8 - 10.5	03/18/05	3,298	2,700	EJ	33	U	33	U	530		68	
GP-9 DL	8 - 10.5	03/18/05	4,900	2,700	DJ	3,900	U	3,900	U	2,200	DJ	3,900	U
GP-9	16 - 18.5	03/18/05	100	4	J	14	J	20	U	69		13	J
GP-10	9 - 10	03/18/05	53	10	J	29	U	29	U	32		11	J
GP-10	14 - 16	03/21/05	61	34	U	34	U	22	J	32	J	7	J
GP-11	15 - 16	03/21/05	34	28	U	28	U	14	J	20	J	28	U
GP-11	16 - 18	03/21/05	31	29	U	29	U	4	J	20	J	7	J
GP-12	8 - 12	03/21/05	4,100	1,300	J	1,900	U	1,900	U	2,800		1,900	U
GP-14	18.5 - 19.5	03/21/05	2,396	6	J	710	J	660	J	790	J	230	

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Table 10 - Summary Subsurface Soils CVOCs Data

Sample ID	Depth	Date	Total	VC		TCE		PCE		cis		trans	
		TAGM 4046 RSCOs ->	CVOCs	200		700		1,400		NA		300	
		Proposed SSCOs ->		800		2,800		5,600		NA		1,200	
GP-14 DL	18.5 - 19.5	03/21/05	1,370	2,700	U	710	DJ	660	DJ	2,700	U	2,700	U
GP-15	24 - 25	03/21/05	523,000	38,000	U	13,000	J	510,000		38,000	U	38,000	U
SB 2-1	5 - 7	03/16/05	0	15	U	15	U	15	U	15	U	15	U
SB 2-1 RE	5 - 7	03/16/05	0	15	U	15	U	15	U	15	U	15	U
SB 2-1	8 - 10	03/16/05	0	18	U	18	U	18	U	18	U	18	U
SB 3-1	2 - 4	03/16/05	0	34	U	34	U	34	U	34	U	34	U
SB 3-1	12 - 14	03/16/05	0	19	U	19	U	19	U	19	U	19	U
SB 7-1	2 - 4	03/17/05	278	20	U	18	J	260		20	U	20	U
SB 7-1	16 - 18	03/17/05	0	29	U	29	U	29	U	29	U	29	U
SB 9-1	4 - 6	03/17/05	169	15	U	39		130		15	U	15	U
SB 9-1	16 - 18	03/17/05	553	21	U	240		64		160		89	
SB 12-1	0 - 2	03/18/05	224	12	U	220		12	U	4	J	12	U
SB 12-1	16 - 18	03/18/05	6,800	1,600	U	1,800		5,000		2,700	U	1,600	U
SB 13-2	12 - 14	03/21/05	23,260	3,200		18	U	18	U	20,000		60	
SB 13-2 DL	12 - 14	03/21/05	23,200	3,200	D	2,100	U	2,100	U	20,000	D	2,100	U
SB 13-2	20 - 22	03/21/05	16,700	2,700		2,100	U	2,100	U	14,000		2,100	U
SB 13-4	4 - 6	03/18/05	181	120		14		14	U	45		2	J
SB 13-4	20 - 22	03/18/05	1	1	J	13	U	13	U	13	U	13	U
DW-1	16-18	07/27/05	0	12	U	12	U	12	U	12	U	12	U
DW-1	20-24	07/27/05	0	12	U	12	U	12	U	12	U	12	U
DW-2	20-22	07/26/05	70	14	UJ	14	UJ	14	UJ	14	UJ	14	UJ
DW-2	24-26	07/26/05	60	12	UJ	12	UJ	12	UJ	12	UJ	12	UJ
DW-2R	24-26	07/26/05	0	12	U	12	U	12	U	12	U	12	U
DW-2	40-43	07/26/05	139	12	UJ	17	J	86	J	12	UJ	12	UJ
DW-2R	40-43	07/26/05	175	12	U	25		150		12	U	12	U
DW-3	16-18.5	07/27/05	0	19	U	19	U	19	U	19	U	19	U
DW-4	6-8	07/28/05	1,214	210	J	52	U	52	U	990	J	14	J
DW-4 RI	6-8	07/28/05	1,202	190	J	51	U	51	U	1,000		12	J
DW-4	16-18.5	07/28/05	647,210	910	J	26,000		600,000		20,000	J	300	J
DW-4 DL	16-18.5	07/28/05	646,000	60,000	U	26,000	DJ	600,000	D	20,000	DJ	60,000	U
DW-4	24-28.5	07/28/05	4	12	U	12	U	2	J	2	J	12	U
GPD-1	7 - 9	09/06/05	39	4	J	14	UJ	14	UJ	5	J	2	J
GPD-1 DL	7 - 9	09/06/05	0	69	U	69	U	69	U	69	U	69	U
GPD-1	11 - 14	09/06/05	59	13	UJ	13	UJ	7	J	13	UJ	13	UJ
GPD-1 DL	11 - 14	09/06/05	0	64	U	64	U	64	U	64	U	64	U
GPD-2	15.8 - 17.5	09/06/05	4,678	60	U	2,200		2,100		340		38	J
GPD-2 DL	15.8 - 17.5	09/06/05	4,530	1,500	U	2,200	D	2,100	D	230	DJ	1,500	U
GPD-3	4 - 8	09/06/05	1,000,140,330	1,600	U	110,000	J	1.E+09		30,000		330	J
GPD-3 DL	4 - 8	09/06/05	1,000,000,000	2.E+09	U	2.E+09	U	1.E+09	DJ	2.E+09	U	2.E+09	U
GPD-3	15 - 17	09/06/05	12,002,700	1,400	U	2,700		12,000,000		1,400	U	1,400	U
GPD-3 DL	15 - 17	09/06/05	12,310,000	1,400,000	U	310,000	DJ	12,000,000	BD	1,400,000	U	1,400,000	U
GPD-3	17 - 20	09/06/05	23,004,100	1,300	U	4,100		23,000,000		1,300	U	1,300	U
GPD-3 DL	17 - 20	09/06/05	23,370,000	2,600,000	U	370,000	DJ	23,000,000	BD	2,600,000	U	2,600,000	U
GPD-3	23 - 26	09/06/05	8,200	1,400	U	1,500		6,700	B	1,400	U	1,400	U
GPD-5	14 - 15.2	09/07/05	6,550	1,500	U	1,500		4,500		550	J	1,500	U
GPD-5	16 - 18	09/07/05	3,283	57	U	2,800		11	J	410		62	
GPD-5 DL	16 - 18	09/07/05	5,540	1,500	U	2,800	D	2,400	D	340	DJ	1,500	U
GPD-6	4 - 8	09/07/05	1,900	1,500	U	1,500	U	1,900		1,500	U	1,500	U
GPD-6	12 - 13	09/07/05	1,106	59	U	260		8	J	760	J	78	
GPD-6 DL	12 - 13	09/07/05	2,620	1,500	U	260	DJ	1,600	D	760	DJ	1,500	U
GPD-6	13 - 15	09/07/05	7,800	1,600	U	3,400		2,800		1,600		1,600	U
GPD-7	4 - 8	09/07/05	7	7	J	11	U	11	U	11	U	11	U
GPD-8	4 - 7.6	09/08/05	7	7	J	11	U	11	U	11	U	11	U

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Table 10 - Summary Subsurface Soils CVOCs Data

Sample ID	Depth	Date	Total	VC		TCE		PCE		cis		trans	
	TAGM 4046 RSCOs ->		CVOCs	200		700		1,400		NA		300	
	Proposed SSCOs ->			800		2,800		5,600		NA		1,200	
GPD-8	11.5-15	09/19/05	70	18	U	14	J	2	J	44		10	J
GPD-10	4 - 7.6	09/08/05	3,452	70		2	J	12	U	3,200		180	
GPD-10 DL	4 - 7.6	09/08/05	4,380	1,400	U	1,400	U	180	DJ	3,200	D	1,000	DJ
GPD-10	17 - 19	09/08/05	0	14	U	14	U	14	U	14	U	14	U
GPD-12	4 - 7	09/08/05	2,024	180	U	12	U	12	U	2,000		24	
GPD-12 DL	4 - 7	09/08/05	2,180	180	DJ	1,400	U	1,400	U	2,000	D	1,400	U
GPD-12	15 - 16	09/08/05	148	4	J	20		26		92		6	J
GPD-12	16 - 19	09/08/05	5	2	J	12	U	12	U	3	J	12	U
GPD-13	4 - 7	09/08/05	226	120		4	J	13	U	100		2	J
GPD-14	7 - 9.8	09/08/05	62,900	5,000		5,800		7,100		33,000		12,000	
GPD-14	15 - 17.5	09/08/05	1,019	14		84		110		790		21	
GPD-14 DL	15 - 17.5	09/08/05	2,010	1,300	U	480	DJ	740	DJ	790	DJ	1,300	U
GPD-16	4 - 7	09/09/05	46	27		12	U	12	U	19		12	U
GPD-16	11 - 15	09/09/05	13	1	J	12	U	12	U	10	J	2	J
GPD-17	7 - 11	09/09/05	0	19	U	19	U	19	U	19	U	19	U
GPD-18	4 - 7	09/09/05	1,515	200		11	U	11	U	1,300		15	
GPD-18 DL	4 - 7	09/09/05	1,300	1,300	U	1,300	U	1,300	U	1,300	D	1,300	U
GPD-18	11 - 15	09/09/05	2,381	100		120		5	J	2,100		56	
GPD-18 DL	11 - 15	09/09/05	2,580	1,700	U	480	DJ	1,700	U	2,100	D	1,700	U
GPD-19	3 - 4	09/09/05	5,790	1,600	U	440	J	4,500		850	J	1,600	U
GPD-19	7 - 11	09/09/05	20,300	9,100		1,300	U	1,300	U	11,000		200	J
GPD-20	2 - 4	09/09/05	1	12	U	12	U	1	J	12	U	12	U
GPD-20	15 - 17.7	09/09/05	2	11	U	11	U	11	U	2	J	11	U
GPD-20	17.7 - 19	09/09/05	0	14	U	14	U	14	U	14	U	14	U
GPD-21	3.3 - 4	09/09/05	0	1,300	U	1,300	U	1,300	U	1,300	U	1,300	U
GPD-21	15 - 18.2	09/09/05	5,660	660	J	1,300	U	1,300	U	5,000		1,300	U
GPD-21	19 - 21	09/09/05	0	14	U	14	U	14	U	14	U	14	U
GPD-24	2 - 4	09/12/05	0	11	U	11	U	11	U	11	U	11	U
GPD-24	11 - 15	09/12/05	0	11	U	11	U	11	U	11	U	11	U
GPD-24	16 - 17	09/12/05	0	12	U	12	U	12	U	12	U	12	U
GPD-25	3 - 3.4	09/12/05	0	12	U	12	U	12	U	12	U	12	U
GPD-25	11 - 15	09/12/05	0	11	U	11	U	11	U	11	U	11	U
GPD-26	4 - 7	09/12/05	270,600	3,200		29,000		210,000		28,000		400	J
GPD-26 DL	4 -7	09/12/05	269,200	2,200	DJ	29,000	D	210,000	D	28,000	D	15,000	U
GPD-26	11 - 15	09/12/05	2,543,000	1,400	U	32,000	E	2,500,000		11,000		1,400	U
GPD-26 DL	11 - 15	09/12/05	2,500,000	1,400,000	U	1,400,000	U	2,500,000	D	1,400,000	U	1,400,000	U
GPD-26	17.5 - 19	09/12/05	500	1,700	U	1,700	U	500	J	1,700	U	1,700	U
GPD-27	0 - 4	09/12/05	62	51	U	23	J	39	J	51	U	51	U
GPD-27	7 - 11	09/12/05	2,995	1,400		110	U	110	U	1,500		95	J
GPD-28	0.5-4	09/13/05	93	2	J	9	J	58		20		4	J
GPD-28	11 - 15	09/13/05	0	22	U	22	U	22	U	22	U	22	U
GPD-29	0.5 - 4	09/13/05	327	84	U	24	J	280		23	J	84	U
GPD-29	12 - 16	09/13/05	23	23	U	3	J	4	J	8	J	8	J
GPD-30	0.3 - 4	09/13/05	68	13	U	9	J	28		24		7	J
GPD-30	11 - 15	09/13/05	25	4	J	21	U	2	J	15	J	4	J
GPD-32	11-15	09/14/05	27,700	3,700		2,800	U	2,800	U	24,000		2,800	U
GPD-33	15 - 18	09/14/05	20,530	930	J	1,600	J	3,000	U	17,000		1,000	J
GPD-34	7 - 11	09/14/05	3,350	2,000	J	2,100	U	350	J	1,000	J	2,100	U
GPD-34	15-17	09/14/05	5,340	2,700		2,200	U	310	J	1,900	J	430	J
GPD-36	4 - 7	09/15/05	0	11	U	11	U	11	U	11	U	11	U
GPD-36	11 - 15	09/15/05	8,840	1,200	J	1,400	U	1,400	U	7,100		540	J
GPD-37	7 - 11	09/15/05	10,860	2,800		1,400	U	1,400	U	7,800		260	J
GPD-37	15-18.3	09/15/05	8,310	1,600	U	910	J	1,600	U	7,400		1,600	U

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Table 10 - Summary Subsurface Soils CVOCs Data

Sample ID	Depth	Date	Total	VC		TCE		PCE		cis		trans	
	TAGM 4046 RSCOs ->		CVOCs	200		700		1,400		NA		300	
	Proposed SSCOs ->			800		2,800		5,600		NA		1,200	
GPD-38	4 - 7	09/15/05	13		R	13	U	13	U		R	13	UJ
GPD-38 DL	4 - 7	09/15/05	357	27	J	67	U	67	U	330		67	U
GPD-38	15 -17	09/15/05	7,880	170	J	230	J	1,600	U	7,200		280	J
GPD-38	17 -19	09/15/05	22,000	1,700	U	1,700	U	22,000		1,700	U	1,700	U
GPD-41	7 - 11	09/16/05	17,400	4,400		2,200	U	2,200	U	13,000		2,200	U
GPD-42	11 - 15	09/16/05	11,800	2,200		2,000	U	2,000	U	9,600		2,000	U
GPD-43	11 - 15	09/16/05	8,500	1,700		1,400	U	1,400	U	6,800		1,400	U
GPD-44	4 - 7	09/16/05	11,600	1,800		1,500	U	1,500	U	9,800		1,500	U
GPD-44	15 -17.9	09/16/05	3,700	1,600	U	1,600	U	1,600	U	3,700		1,600	U
GPD-45	2 - 4	09/19/05	61	33		11	U	1	J	27		11	U
GPD-45	15-18.3	09/19/05	21	9	J	13	U	13	U	12	J	13	U
GPD-45	19-22	09/19/05	0	14	U	14	U	14	U	14	U	14	U
GPD-47	4 - 7	09/19/05	605	170		15	U	15	U	430		5	J
GPD-47	4 - 7	09/19/05	537	97	D	60	U	60	U	430	D	10	DJ
GPD-47	11 - 15	09/19/05	6,700	1,300		1,100	U	1,100	U	5,400		1,100	U
GPD-47	18 -19	09/19/05	206	2	J	32		2	J	140		30	
GPD-48	7 - 11	09/19/05	264	63		18	U	18	U	190		11	J
GPD-48	15 - 17.3	09/19/05	8	2	J	11	U	11	U	6	J	11	U
GPD-49	11 - 15	09/19/05	3,490	5	J	1,500		1,800		85		100	
GPD-49 DL	11 - 15	09/19/05	3,300	1,400	U	1,500	D	1,800	D	1,400	U	1,400	U
GPD-49 DL	15 -17	09/19/05	5,922	13	U	810	J	5,100		12	J	13	U
GPD-49 DL	15 -17	09/19/05	5,910	1,600	U	810	DJ	5,100	D	1,600	U	1,600	U
GPD-49	7 - 11	09/19/05	2	19	U	19	U	19	U	2	J	19	U
GPD-49	17 - 19	09/19/05	0	14	U	14	U	14	U	14	U	14	U
GPD-50	4 - 7	09/19/05	115	96		12	U	12	U	9	J	10	J
GPD-50	11 - 14	09/19/05	35	12	U	8	J	2	J	21		4	J
GPD-50	14 - 15	09/19/05	95	1	J	4	J	12	U	60		30	
GPD-50	15 -19	09/19/05	130	11	U	75		54		1	J	11	U
GPD-51	15-18.2	09/20/05	43,000,000	3,200,000	U	1,000,000	J	42,000,000		3,200,000	U	3,200,000	U
GPD-51	19-23	09/20/05	195	4	J	6	J	180		5	J	12	U
GPD-52	15-17.5	09/20/05	46,800	1,600	U	4,800		29,000		13,000		1,600	U
GPD-55	4 - 7	09/21/05	12	12	U	12	U	9	J	3	J	12	U
GPD-55	15-18	09/21/05	409	32		32		25		200		120	
GPD-55 DL	15-18	09/21/05	290	58	U	53	DJ	9	DJ	200	D	28	DJ
GPD-57	0.5-4	09/21/05	14,000	2,400	U	2,400	U	14,000		2,400	U	2,400	U
GPD-57	11-14.5	09/21/05	17	12	U	2	J	2	J	7	J	6	J
GPD-58	15-18.5	09/22/05	0	11	U	11	U	11	U	11	U	11	U
GPD-59	7 - 11	09/22/05	522	12	U	240	J	6	J	210		66	
GPD-59 DL	7 - 11	09/22/05	220	52	U	45	DJ	52	U	150	D	25	DJ
GPD-59	11-14.3	09/22/05	1,181	2	J	880	J	120		130		49	
GPD-59 DL	11-14.3	09/22/05	2,080	1,400	U	880	DJ	780	DJ	420	DJ	1,400	U
GPD-59	14.3-15	09/22/05	2,685	920	J	2	J	2	J	1,700	J	61	J
GPD-59 DL	14.3-15	09/22/05	7,880	1,400	U	5,300	D	2,400	D	180	DJ	1,400	U
GPD-60	4 - 7	09/22/05	311	46		6	J	11	U	200		59	
GPD-61	15-17.8	09/22/05	491	250		5	J	13	U	180		56	
GPD-62	11 - 15	09/22/05	14	10	J	14	U	14	U	4	J	14	U
GPD-62	15-16.5	09/22/05	0	12	U	12	U	12	U	12	U	12	U
GPD-62	16.5-19	09/22/05	51	35		15	U	15	U	16		15	U
GPD-63	1 - 4	09/23/05	0	14	U	14	U	14	U	14	U	14	U
GPD-63	15-16.6	09/23/05	20	12	U	12	U	20		12	U	12	U
GPD-64	11 - 15	09/23/05	1,619	550	J	2	J	4	J	990	J	73	
GPD-64 DL	11 - 15	09/23/05	600	1,500	U	1,500	U	600	DJ	1,500	U	1,500	U
GPD-65	11 - 15	09/23/05	3	2	J	11	U	11	U	1	J	11	U

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Sample ID	Depth	Date	Total	VC		TCE		PCE		cis		trans	
	TAGM 4046 RSCOs ->		CVOCs	200		700		1,400		NA		300	
	Proposed SSCOs ->			800		2,800		5,600		NA		1,200	
GPD-65	17.2-19	09/23/05	0	14	U	14	U	14	U	14	U	14	U
GPD-66	11 - 15	09/23/05	4,310	11	U	2,600	J	11	U	510	J	1,200	J
GPD-66 DL	11 - 15	09/23/05	370	1,300	U	1,300	U	370	DJ	1,300	U	1,300	U
GPD-67	11 - 15	09/23/05	8,000	11	U	5,800		11	U	600	J	1,600	
GPD-67 DL	11 - 15	09/23/05	8,340	1,300	U	5,800	D	340	DJ	600	DJ	1,600	D
GP3-1	10 - 14	02/27/06	1,630	600	J	17	U	17	U	900	J	130	J
GP3-1 DL	10 - 14	02/27/06	1,630	600	D	73	U	73	U	900	D	130	D
GP 3-1	14 - 18	02/27/06	1,943	340	J	43	J	19	U	1,300	J	260	J
GP 3-1 DL	14 - 18	02/27/06	1,943	340	D	43	DJ	91	U	1,300	D	260	D
GP 3-2	10 - 14	02/27/06	655	260		18	U	18	U	300		95	
GP 3-2	14 - 17.3	02/27/06	2,070	140		270		20	U	1,400		260	
GP 3-2 DL	14 - 17.3	02/27/06	2,640	240	D	550	D	90	U	1,400	D	450	D
GP 3-3	10 -14	02/27/06	4,840	2,200	EJ	18	U	18	U	2,500		140	
GP 3-3 DL	10 -14	02/27/06	2,500	2,100	U	2,100	U	2,100	U	2,500	D	2,100	U
GP 3-3	14 - 17.5	02/27/06	3,087	210		48		9	J	2,700		120	
GP 3-3 DL	14 - 17.5	02/27/06	2,700	2,300	U	2,300	U	2,300	U	2,700	D	2,300	U
GP 3-4	10 -14	02/28/06	1,084	890	J	17	U	17	U	180	J	14	J
GP 3-4	10 -14	02/28/06	1,096	890	D	84	U	84	U	180	D	26	DJ
GP 3-4	14 - 17.7	02/28/06	2,011	220	J	560	J	11	J	860	J	360	J
GP 3-4 DL	14 -17.7	02/28/06	2,035	220	D	560	D	35	DJ	860	D	360	D
GP 3-5	10 -14	02/28/06	2,460	1,000	J	150	J	18	U	920	J	390	J
GP 3-5 DL	10 -14	02/28/06	2,460	1,000	D	150	D	80	U	920	D	390	D
GP 3-5	14 - 17.7	02/28/06	207	42		20	J	21	U	91		54	
GP 3-6	10 -14	02/28/06	705	280		15	J	18	U	240		170	
GP 3-6	14 -17	02/28/06	138	28		2	J	20	U	75		33	
GP 3-7	14 - 16.7	03/02/06	15	4	J	18	U	18	U	8	J	3	J
GP 3-8	10 -14	02/28/06	182,350	1,200	EJ	10,000	J	150,000	J	21,000	J	150	
GP 3-8	10- 14	02/28/06	181,000	11,000	U	10,000	DJ	150,000	D	21,000	D	11,000	U
GP 3-8	14 -18	02/28/06	193,559	27		3,200	J	190,000		320		12	J
GP 3-8 DL	14 -18	02/28/06	193,200	12,000	U	3,200	DJ	190,000	D	12,000	U	12,000	U
GP 3-9	10 -14	02/28/06	835,600	2,200	U	3,400		830,000		2,200		2,200	U
GP 3-9 DL	10 -14	02/28/06	830,000	44,000	U	44,000	U	830,000	BD	44,000	U	44,000	U
GP 3-9	14 -18	02/28/06	4,202,200	2,500	U	2,200	J	4,200,000		2,500	U	2,500	U
GP 3-9	14-18	02/28/06	4,200,000	620,000	U	620,000	U	4,200,000	D	620,000	U	620,000	U
GP 3-10	14 - 18	03/01/06	2,526	240		6	J	42	U	2,100		180	
GP 3-10 DL	14 18	03/01/06	2,610	2,400	U	2,400	U	2,400	U	2,100	DJ	510	DJ
GP 3-11	14 - 17.5	03/01/06	2,082	1,100	J	2	J	21	U	860	J	120	J
GP 3-11 DL	14 - 17.5	03/01/06	2,080	1,100	D	100	U	100	U	860	D	120	D
GP 3-12	14 - 17.5	03/01/06	1,656	660	J	19	U	19	U	910	D	86	J
GP 3-12 DL	14 - 17.5	03/01/06	1,656	660	D	96	U	96	U	910	D	86	DJ
GP 3-13	10 - 14	03/01/06	680	530		19	U	19	U	130		20	
GP 3-13 DL	10 - 14	03/01/06	725	530	D	85	U	85	U	170	D	25	DJ
GP 3-13	14 - 17	03/01/06	80	50		18	U	18	U	30		18	U
GPB 1-1	14 - 17	03/02/06	327,400	2,600	U	28,000		290,000	J	9,400		2,600	U
GPB 1-1 DL	14 - 17	03/02/06	324,900	52,000	U	27,000	DJ	290,000	D	7,900	DJ	52,000	U
GPB 1-2	14 - 18	03/02/06	6,358,360	630	J	21,000		6,300,000		36,000		730	J
GPB 1-2 DL	14 - 18	03/02/06	6,300,000	550,000	U	550,000	U	6,300,000	BD	550,000	U	550,000	U
GPB 1-3	10 - 11.8	03/03/06	6,900,000	310,000	U	310,000	U	6,900,000		310,000	U	310,000	U
GPB 1-3 DL	10 - 11.8	03/03/06	6,900,000	620,000	U	620,000	U	6,900,000	BD	620,000	U	620,000	U
GPB 1-4	14 - 17.6	03/03/06	4,479,000	290,000	U	290,000	U	4,400,000		79,000	J	290,000	U
GPB 1-5	14 - 17	03/03/06	280	21	U	25		42		200		13	J
GPB 1-6	14 - 17.7	03/03/06	4,810,000	260,000	U	110,000	J	4,700,000	B	260,000	U	260,000	U
GPB 1-7	14 - 18	03/06/06	19,300	2,300	J	2,500	U	2,500	U	17,000		2,500	U

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	TAGM 4046 RSCOs ->		CVOCs	200		700		1,400		NA		300	
	Proposed SSCOs ->			800		2,800		5,600		NA		1,200	
GPB 1-8	14 - 18	03/06/06	2,858,000	260,000	U	260,000	U	2,800,000		58,000	J	260,000	U
GPB 1-9	14 - 17.4	03/09/06	71,170	510	E	8,100	E	58,000	E	4,300	E	260	
GPB 1-9 DL	14 - 17.4	03/09/06	9,940,000	610,000	U	140,000	DJ	9,800,000	D	610,000	U	610,000	U
GPB 1-10	14 - 16.8	03/09/06	67,440,000	1,800,000	U	440,000	J	67,000,000		1,800,000	U	1,800,000	U
GPB 1-10 DL	14 - 16.8	03/09/06	67,000,000	3,700,000	U	3,700,000	U	67,000,000	D	3,700,000	U	3,700,000	U
GPB 1-11	14 - 17	03/09/06	27,860	1,500	J	5,900	J	2,200	J	18,000	J	260	J
GPB 1-11 DL	14 - 17	03/09/06	28,030	1,500	DJ	5,900	D	2,200	D	18,000	D	430	DJ
GPB 1-12	2.5 - 4	03/09/06	9,690	960	J	730	J	2,800		5,200		1,800	U
GPB 1-12	10 - 14	03/09/06	10,100	1,900	J	2,100	U	2,100	U	8,200		2,100	U
GPB 1-12	14 - 18	03/09/06	1,183	130		20	U	14	BJ	990		49	
GPB 1-12 DL	14 - 18	03/09/06	1,197	130	D	100	U	52	BDJ	990	D	25	DJ
GPB 1-13	6 - 10	03/10/06	2,726	1,200		100	U	100	U	1,500		26	J
GPB 1-13	14 - 17.2	03/10/06	62	3	J	24	U	24	U	48		11	J
GPB 1-14	6 - 10	03/10/06	40	31		22	U	22	U	6	J	3	J
GPB 1-15	14 - 17	03/13/06	0	20	U	20	U	20	U	20	U	20	U
GPB 3-1	14 - 18	03/06/06	410	13	J	49		3	J	310		35	
GPB 3-2	14 - 18	03/06/06	683,000	23,000	U	69,000		600,000		14,000	J	23,000	U
GPB 3-2 DL	14 - 18	03/06/06	686,000	47,000	U	73,000	D	600,000	D	13,000	DJ	47,000	U
GPB 3-3	14 - 17.5	03/06/06	358,000	12,000	U	100,000		230,000		28,000		12,000	U
GPB 3-3 DL	14 - 17.5	03/06/06	347,000	30,000	U	93,000	D	230,000	D	24,000	DJ	30,000	U
GPB 3-4	14 - 17.6	03/06/06	37	22	U	4	J	22	U	24		9	J
GPB 3-5	6 - 10	03/06/06	98,400	1,400	J	18,000		31,000		48,000		2,700	U
GPB 3-5	14 - 16.7	03/06/06	15,300	3,600	U	12,000		1,900	J	1,400	J	3,600	U
GPB 3-6	0.5 - 4	03/06/06	2,440	1,300	U	640	J	1,800		1,300	U	1,300	U
GPB 3-6	10 - 14	03/06/06	4,123	31	J	350		1,900		1,800	J	42	J
GPB 3-6 DL	10 - 14	03/06/06	4,090	1,900	U	390	DJ	1,900	D	1,800	DJ	1,900	U
GPB 3-7	6 - 10	03/07/06	278,900	5,900	J	160,000		38,000		75,000		9,500	U
GPB 3-7	14 - 17	03/07/06	34,500	2,800	U	3,800		27,000		3,700		2,800	U
GPB 3-8	14 - 17	03/07/06	676,700	2,300	U	53,000	J	620,000		3,700		2,300	U
GPB 3-8 DL	14 - 17	03/07/06	673,000	110,000	U	53,000	DJ	620,000	D	110,000	U	110,000	U
GPB 3-9	14 - 17.5	03/07/06	7,450,000	30,000	U	150,000		7,300,000		30,000	U	30,000	U
GPB 3-9 DL	14 - 17.5	03/07/06	7,410,000	600,000	U	110,000	DJ	7,300,000	D	600,000	U	600,000	U
GPB 3-10	14 - 17.5	03/07/06	16,200	2,200	U	3,400		8,800		4,000		2,200	U
GPB 3-11	14 - 18	03/08/06	10,400	2,400	U	530	J	570	J	9,300		2,400	U
GPB 3-12	14 - 17.5	03/08/06	29,100	3,100	U	2,100	J	19,000		8,000		3,100	U
GPB 3-13	6 - 10	03/08/06	25,000	3,200		3,100	U	3,100	U	20,000		1,800	J
GPB 3-14	14 - 17	03/08/06	12,000	2,800	U	2,800	U	2,200	J	9,800		2,800	U
GPB 3-16	6 - 10	03/08/06	11,798	70	J	690	J	6,400	J	4,600	J	38	J
GPB 3-16 DL	6 - 10	03/08/06	11,690	2,400	U	690	DJ	6,400	D	4,600	D	2,400	U
GPB 3-16	14 - 17	03/08/06	12,500	26	U	6,000		6,100		340		60	
GPB 3-16 DL	14 - 17	03/08/06	12,820	3,200	U	6,000	D	6,100	D	720	DJ	3,200	U
GPB 3-17	14 - 18	03/08/06	1,376,680	340		53,000	J	1,300,000		23,000	J	340	
GPB 3-17 DL	14 - 18	03/08/06	1,376,000	110,000	U	53,000	DJ	1,300,000	D	23,000	DJ	110,000	U
GPB 5-1	14 - 18	03/09/06	6,384	330	J	1,300	J	990	J	3,700	J	64	J
GPB 5-1 DL	14 - 18	03/09/06	5,990	2,400	U	1,300	DJ	990	DJ	3,700	D	2,400	U
GPB 5-2	14 - 17.5	03/09/06	4,634	480	E	330		54		3,600		170	
GPB 5-2 DL	14 - 17.5	03/09/06	4,220	2,600	U	620	DJ	2,600	U	3,600	D	2,600	U
GPB 5-3	6 - 10	03/09/06	1,018	140	U	83	U	83	U	1,000		18	J
GPB 5-3	10 -14	03/09/06	435	170		17	U	17	U	260		5	J
GPB 5-3	14 - 17	03/09/06	1,608	54		170		670		690		24	
GPB 5-3 DL	14 - 17	03/09/06	1,608	88	U	230	D	670	BD	690	D	18	DJ
GPS 1-1	10 - 14	03/02/06	10	20	U	3	J	20	U	7	J	20	U
GPS 1-4	10 - 14	03/02/06	21	26	U	9	J	5	J	7	J	26	U

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Sample ID	Depth	Date	Total CVOCs	VC		TCE		PCE		cis		trans	
	TAGM 4046 RSCOs ->			200		700		1,400		NA		300	
	Proposed SSCOs ->			800		2,800		5,600		NA		1,200	
GPCS-1	2 - 4	03/13/06	15	15	U	15	U	15	U	15	U	15	UJ
GPCS-1	4.8 - 10	03/13/06	51	31		19	U	19	U	20		19	U
GPCS-1	14 - 18	03/13/06	32	10	J	21	U	21	U	22		21	U
GPCS-2	1.3 - 4	03/13/06	0	11	U	11	U	11	U	11	U	11	U
GPCS-2	14 - 18	03/13/06	18	5	J	19	U	19	U	13	J	19	U
GPCS-3	14 - 18	03/13/06	18	8	J	18	U	18	U	10	J	18	U
GPCS-4	14 - 18	03/13/06	9	4	J	22	U	22	U	5	J	22	U
GPCS-5	2 - 4	03/13/06	99	12	U	11	J	65		21		2	J
GPCS-6	4 - 6	03/13/06	17	21	U	21	U	14	BJ	3	J	21	U
TP-4	3.5-4.2	12/03/04	0	14	U	14	U	14	U	14	U	14	U
TP-5	4.6-5.2	12/07/04	0	15	U	15	U	15	U	15	U	15	U
TP-7	4-7	12/03/04	15	13	J	15	U	15	U	2	J	15	U
TP-12	3.1-5.1	12/07/04	0	12	U	12	U	12	U	12	U	12	U
TP-13	3.5-5.3	12/07/04	189	37		36		67		23		26	
TP-14	4-5	12/03/04	91,010	300		310		83,000		7400		16	U
TP-14 DL	4-5	12/03/04	98,200	1,800	DJ	6,000	DJ	83,000	D	7,400	D	7,200	U
GPB1-16	15.5 - 17	04/19/06	7,280	680	J	2,600	U	2,600	U	6,600		2,600	U
GPB1-16	17 - 18	04/19/06	290	170		14	U	14	U	120		14	U
GPB3-18	14 - 16.9	04/18/06	391,000	17,000	U	46,000		260,000		85,000		17,000	U
GPB3-18	6 - 10	04/18/06	2,126,000	150,000	U	160,000		1,900,000		66,000	J	150,000	U
GPB3-19	14 - 18	04/18/06	0	23	U	23	U	23	U	23	U	23	U
GPB3-21	14 - 16	04/18/06	480	19	J	23	J	6	J	360		72	
GPB3-21	6 - 10	04/18/06	605	410		22	U	22	U	180		15	J
GPB3-22	6 - 10	04/18/06	1,459,000	58,000	U	29,000	J	1,400,000		30,000	J	58,000	U
GPB3-22	6 - 10 DL	04/18/06	1,460,000	120,000	U	31,000	DJ	1,400,000	D	29,000	DJ	120,000	U
GPB3-24	15.5 - 17	04/19/06	62	28	U	28	U	28	U	52		10	J
GPB3-24	6 - 10	04/18/06	0	21	U	21	U	21	U	21	U	21	U

Total CVOCs >31,000 ug/kg

One or more CVOC parameters > Site specific cleanup objective

All CVOC parameters < site specific cleanup objective)

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 11 - Phase 1 Site Utility Sediment Data

Sample ID ->	Units	S-1	S-1 DL	S-2	S-4	S-5	S-6	S-7	S-7 DL
Date Sampled ->					11/23/2004				
VOLATILES									
Chloromethane	ug/kg	15 UJ		16 UJ	2900 U	8,200 U	20 UJ	25 UJ	3,000 U
Bromomethane	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
Vinyl chloride	ug/kg	15 UJ		16 U	2900 U	8,200 U	**8 J**	25 UJ	3,000 U
Chloroethane	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
Methylene chloride	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	29 U	3,000 U
Acetone	ug/kg	15 U		16 UJ	2900 U	8,200 U	**15 J**	**78**	3,000 U
Carbon disulfide	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
1,1-Dichloroethene	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
1,1-Dichloroethane	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
Chloroform	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
1,2-Dichloroethane	ug/kg	15 UJ		16 U	2900 U	8,200 U	20 UJ	25 UJ	3,000 U
2-Butanone	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	**33**	3,000 U
1,1,1-Trichloroethane	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
Carbon tetrachloride	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
Bromodichloromethane	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
1,2-Dichloropropane	ug/kg	15 U		16 UJ	2900 U	8,200 U	20 U	25 U	3,000 U
cis-1,3-Dichloropropene	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
Trichloroethene	ug/kg	15 U		16 U	2900 U	**24,000**	**5 J**	**9 J**	3,000 U
Dibromochloromethane	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
1,1,2-Trichloroethane	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
Benzene	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
trans-1,3-Dichloropropene	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
Bromoform	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 UJ	3,000 U
4-Methyl-2-pentanone	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	**9 J**	3,000 U
2-Hexanone	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 UJ	3,000 U
Tetrachloroethene	ug/kg	15 U		16 U	**1000 J**	**140,000**	20 U	25 UJ	3,000 U
Toluene	ug/kg	15 U		16 U	**1600** U	8,200 U	20 U	**5,200**	**5,200 D**
1,1,2,2-Tetrachloroethane	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
Chlorobenzene	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 UJ	3,000 U
Ethylbenzene	ug/kg	15 U		16 U	**1600 J**	8,200 U	20 U	**11 J**	3,000 U
Styrene	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 UJ	3,000 U
Total xylenes	ug/kg	15 U		16 U	**7900**	8,200 U	20 U	**45** J	3,000 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
cis-1,2-Dichloroethene	ug/kg	15 U		16 U	2900 U	**40,000**	**12 J**	**9 J**	3,000 U
trans-1,2-Dichloroethene	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
Dichlorodifluoromethane	ug/kg	15 UJ		16 U	2900 U	8,200 U	20 UJ	25 UJ	3,000 U
Trichlorofluoromethane	ug/kg	15 UJ		16 U	2900 U	8,200 U	20 UJ	25 UJ	3,000 U
Methyl acetate	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
Methyl tert butyl ether	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
Cyclohexane	ug/kg	15 U		16 UJ	2900 U	8,200 U	20 U	25 U	3,000 U
Methylcyclohexane	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
1,2-Dibromoethane	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 UJ	3,000 U
Isopropylbenzene	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
1,3-Dichlorobenzene	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
1,4-Dichlorobenzene	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U
1,2-Dichlorobenzene	ug/kg	15 U		16 U	2900 U	8,200 U	20 U	25 U	3,000 U

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Table 11 - Phase 1 Site Utility Sediment Data

Sample ID ->	Units	S-1		S-1 DL		S-2		S-4		S-5		S-6		S-7		S-7 DL	
Date Sampled ->								11/23/2004									
1,2-Dibromo-3-chloropropane	ug/kg	15	U			16	U	2900	U	8,200	U	20	U	25	U	3,000	U
1,2,4-Trichlorobenzene	ug/kg	15	UJ			16	UJ	2900	U	8,200	U	20	UJ	25	UJ	3,000	U
SEMIVOLATILES																	
Benzaldehyde	ug/kg	10000	U	51,000	U	4800	U	10000	U	13,000	U	11,000	U	140,000	U		
Phenol	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	U	5,400	U	69,000	U		
Bis(2-chloroethyl) ether	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	U	5,400	U	69,000	U		
2-Chlorophenol	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	U	5,400	U	69,000	U		
2-Methylphenol	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	U	5,400	U	69,000	U		
2,2'-Oxybis(1-Chloropropane)	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	U	5,400	U	69,000	U		
Acetophenone	ug/kg	10000	U	51,000	U	4800	U	10000	U	13,000	U	11,000	U	140,000	U		
4-Methylphenol	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	U	5,400	U	69,000	U		
N-Nitroso-Di-n-propylamine	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	U	5,400	U	69,000	U		
Hexachloroethane	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	U	5,400	U	69,000	U		
Nitrobenzene	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	U	5,400	U	69,000	U		
Isophorone	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	U	5,400	U	69,000	U		
2-Nitrophenol	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	U	5,400	U	69,000	U		
2,4-Dimethylphenol	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	U	5,400	U	69,000	U		
Bis(2-chloroethoxy) methane	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	U	5,400	U	69,000	U		
2,4-Dichlorophenol	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	U	5,400	U	69,000	U		
Naphthalene	ug/kg	**2800**	**J**	**2,900**	**DJ**	**360**	**J**	**5100**	**J**	6,600	U	**2,600**	**J**	69,000	U		
4-Chloroaniline	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	U	5,400	U	69,000	U		
Hexachlorobutadiene	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	U	5,400	U	69,000	U		
Caprolactam	ug/kg	10000	U	51,000	U	4800	U	10000	U	13,000	U	11,000	U	140,000	U		
4-Chloro-3-methylphenol	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	U	5,400	U	69,000	U		
2-Methylnaphthalene	ug/kg	**1400**	**J**	**1,400**	**DJ**	**230**	**J**	**5400**		6,600	U	**200**	**J**	69,000	U		
Hexachlorocyclopentadiene	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	U	5,400	U	69,000	U		
2,4,6-Trichlorophenol	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	U	5,400	U	69,000	U		
2,4,5-Trichlorophenol	ug/kg	12000	U	61,000	U	5800	U	13000	U	16,000	U	13,000	U	170,000	U		
Biphenyl	ug/kg	10000	U	51,000	U	4800	U	10000	U	13,000	U	11,000	U	140,000	U		
2-Chloronaphthalene	ug/kg	5100	U	25,000	U	5800	U	5200	U	6,600	U	5,400	U	69,000	U		
2-Nitroaniline	ug/kg	12000	U	61,000	U	2400	U	13000	U	16,000	U	13,000	U	170,000	U		
Dimethyl phthalate	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	ND	5,400	U	69,000	U		
2,6-Dinitrotoluene	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	ND	5,400	U	69,000	U		
Acenaphthylene	ug/kg	**900**	**J**	**1,100**	**DJ**	**260**	**J**	**510**	**J**	**460**	**J**	**670**	**J**	**2,600**	**J**		
3-Nitroaniline	ug/kg	12000	U	61,000	U	5800	U	13000	U	16,000	ND	13,000	U	170,000	U		
Acenaphthene	ug/kg	**3300**	**J**	**3,600**	**DJ**	**840**	**J**	**620**	**J**	6,600	ND	**260**		69,000	U		
2,4-Dinitrophenol	ug/kg	12000	U	61,000	U	5800	U	13000	U	16,000	ND	13,000	U	170,000	U		
4-Nitrophenol	ug/kg	12000	U	61,000	U	5800	U	13000	U	16,000	ND	13,000	U	170,000	U		
Dibenzofuran	ug/kg	**2800**	**J**	**2,800**	**DJ**	**520**	**J**	**360**	**J**	6,600	ND	**230**		69,000	U		
2,4-Dinitrotoluene	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	ND	5,400	U	69,000	U		
Diethyl phthalate	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	ND	5,400	U	69,000	U		
Fluorene	ug/kg	**4300**	**J**	**4,500**	**DJ**	**890**	**J**	**1300**	**J**	**190 J**	**J**	**530**	**J**	69,000	U		
4-Chlorophenyl phenyl ether	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	ND	5,400	U	69,000	U		
4-Nitroaniline	ug/kg	12000	U	61,000	U	5800	U	13000	U	16,000	ND	13,000	U	170,000	U		
4,6-Dinitro-2-methylphenol	ug/kg	12000	U	61,000	U	5800	U	13000	U	16,000	ND	13,000	U	170,000	U		
N-nitrosodiphenylamine	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	ND	5,400	U	69,000	U		
4-Bromophenyl phenyl ether	ug/kg	5100	U	25,000	U	2400	U	5200	U	6,600	ND	5,400	U	69,000	U		

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Table 11 - Phase 1 Site Utility Sediment Data

Sample ID ->	Units	S-1	S-1 DL	S-2	S-4	S-5	S-6	S-7	S-7 DL
Date Sampled ->					11/23/2004				
Hexachlorobenzene	ug/kg	5100 U	25,000 U	2400 U	5200 U	**190 J** J	5,400 U	69,000 U	
Atrazine	ug/kg	10000 U	25,000 U	4800 U	10000 U	13,000 ND	11,000 U	140,000 U	
Pentachlorophenol	ug/kg	12000 U	25,000 U	5800 U	13000 U	16,000 UJ	13,000 U	170,000 U	
Phenanthrene	ug/kg	**47000**	**47,000 BD**	**14000 B**	**6200 B**	1,800 U	4,400 U	69,000 U	
Anthracene	ug/kg	**7300**	**7,000 DJ**	**1700 J**	**1200 J**	**460 J**	**700 J**	**2,100 J**	
Carbazole	ug/kg	**3800 J**	**3,800 DJ**	**880 J**	**640 J**	**220 J**	**320 J**	69,000 U	
Di-n-butyl phthalate	ug/kg	5100 U	25,000 U	2400 U	**24000 B**	6,600 U	5,400 U	69,000 U	
Fluoranthene	ug/kg	**46600**	**46,000 DJ**	**16000**	**15000**	**3,500 J**	**7,400**	**28,000 J**	
Pyrene	ug/kg	**20000 B**	**20,000 BDJ**	**5500 B**	2600 U	6,600 U	5,400 U	69,000 U	
Butyl benzyl phthalate	ug/kg	5100 U	25,000 U	2400 U	**930 J**	6,600 U	**200 J**	69,000 U	
3,3'-Dichlorobenzidine	ug/kg	5100 U	25,000 U	2400 U	5200 U	6,600 U	5,400 U	69,000 U	
Benzo(a)anthracene	ug/kg	**22000**	**19,000 DJ**	**5400**	**4400 J**	**1,200 J**	**2,200 J**	**8,700 J**	
Chrysene	ug/kg	**22000**	**20,000 DJ**	**5900**	**4400 J**	**1,300 J**	**2,600 J**	**9,900 J**	
Bis(2-ethylhexyl) phthalate	ug/kg	**5100**	25,000 U	2400 U	33000 U	6,600 U	5,400 U	69,000 U	
Di-n-octyl phthalate	ug/kg	**140 J**	25,000 U	2400 U	**3900 J**	**590 J**	**180 J**	69,000 U	
Benzo(b)fluoranthene	ug/kg	**24000 J**	**12,000 DJ**	**5000 J**	**8100 J**	**3,000 J**	**3,500 J**	**15,000 J**	
Benzo(k)fluoranthene	ug/kg	16000 J	**15,000 DJ**	**4400 J**	**10000 J**	**2,900 J**	**2,400 J**	**7,200 J**	
Benzo(a)pyrene	ug/kg	**5300**	**4,900 DJ**	**1400 J**	**900 J**	**460 J**	**820 J**	**2,500 J**	
Indeno(1,2,3-cd)pyrene	ug/kg	**2300 J**	**2,700 DJ**	**680 J**	**480 J**	**250 J**	**460 J**	69,000 U	
Dibenzo(a,h)anthracene	ug/kg	**1800 J**	**2,100 DJ**	**520 J**	**430 J**	**210 J**	**280 J**	69,000 ND	
Benzo(ghi)perylene	ug/kg	5100 U	25,000 U	2400 U	5200 U	6,600 U	5,400 U	69,000 U	
PESTICIDES/AROCLORS									
alpha-BHC	ug/kg	26 U		25 U	110 U	170 U	27 U	180 U	
beta-BHC	ug/kg	26 U		25 U	110 U	170 U	27 U	180 U	
delta-BHC	ug/kg	26 U		25 U	110 U	170 U	27 U	180 U	
gamma-BHC (Lindane)	ug/kg	26 U		25 U	110 U	170 U	27 U	180 U	
Heptachlor	ug/kg	26 U		25 U	110 U	170 U	27 U	180 U	
Aldrin	ug/kg	26 U		25 U	110 U	170 U	27 U	180 U	
Heptachlor epoxide	ug/kg	26 U		25 U	**63 JPN**	170 U	27 U	180 U	
Endosulfan I	ug/kg	26 U		25 U	110 UJ	170 U	27 U	180 U	
Dieldrin	ug/kg	50 U		48 U	210 U	330 U	53 U	340 U	
4,4'-DDE	ug/kg	50 U		48 U	210 U	330 U	53 U	340 U	
Endrin	ug/kg	50 U		48 U	210 U	330 U	53 U	340 U	
Endosulfan II	ug/kg	50 U		48 U	210 U	330 U	53 U	340 U	
4,4'-DDD	ug/kg	50 U		48 U	210 U	330 U	53 U	**73 JP**	
Endosulfan Sulfate	ug/kg	50 U		48 U	210 U	330 U	53 U	340 U	
4,4'-DDT	ug/kg	50 U		48 U	**460 PJ**	330 U	53 U	1800 U	
Methoxychlor	ug/kg	260 U		**100 J**	**170 J**	1700 U	53 U	1800 U	
Endrin ketone	ug/kg	50 U		48 U	210 U	330 U	**54**	340 U	
Endrin aldehyde	ug/kg	50 U		48 U	210 U	330 U	53 U	340 U	
alpha-Chlordane	ug/kg	26 U		25 U	R	170 U	27 U	180 U	
gamma-Chlordane	ug/kg	26 U		25 U	R	170 U	27 U	180 U	
Toxaphene	ug/kg	2,600 U		2500 U	11000 U	17000 U	2700 U	18000 U	
Aroclor 1016	ug/kg	500 U		480 U	2100 U	3300 U	530 U	3400 U	
Aroclor 1221	ug/kg	1000 U		970 U	4200 U	6700 U	1100 U	6900 U	
Aroclor 1232	ug/kg	500 U		480 U	2100 U	3300 U	530 U	3400 U	
Aroclor 1242	ug/kg	500 U		480 U	2100 U	3300 U	530 U	3400 U	

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Sample ID ->	Units	S-1		S-1 DL		S-2		S-4		S-5		S-6		S-7		S-7 DL	
Date Sampled ->								11/23/2004									
Aroclor 1248	ug/kg	500	U			480	U	2100	U	3300	U	530	U	3400	U		
Aroclor 1254	ug/kg	500	U			480	U	2100	U	**8700**		530	U	3400	U		
Aroclor 1260	ug/kg	500	U			480	U	2100	U	3300	U	530	U	3400	U		
INORGANICS																	
Aluminum	mg/kg	6,800				5,500		6060		11,900		4,190		22,100			
Antimony	mg/kg	2.4	BN*J			2.1	BN*J	4	BN*J	2.7 N*	N*J	1.3	BN*J	3.3	BN*J		
Arsenic	mg/kg	13.8	N*J			10.4	N*J	14.2	N*J	17.0 N	NJ	6.8	N*J	10.8	N*J		
Barium	mg/kg	99.1	8			107	*	824	*	333 N*	N*	59.9	*	226	*		
Beryllium	mg/kg	0.8	8			0.66	*	0.6	B*	0.56*	*	1.1	*	0.79	B*		
Cadmium	mg/kg	2.5	N*			1.7	N*	11.8	N*	24.9 N*	N*	1.8	N*	2	N*		
Calcium	mg/kg	99,400				117,000		49900		77,700		168,000		112,000			
Chromium	mg/kg	26.7	N*			15	N*	54.5	N*	167 N	N	37.4	N*	35	N*		
Cobalt	mg/kg	7.6	8			5.5	B*	9	B*	23.0*	*	5.3	B*	**87.1**	*		
Copper	mg/kg	283	N*			104	N*	415	N*	680*	*	290	N*	115	N*		
Iron	mg/kg	49,800				40,400		42000		50,400		13,200		16,300			
Lead	mg/kg	208	8			101	*	420	*	1440		285	*	129	*		
Magnesium	mg/kg	12,200				7,220		7010		10,500		35700		26,900			
Manganese	mg/kg	676	N*J			1070	N*J	271	N*J	456	NJ	208	N*J	246	N*J		
Mercury	mg/kg	0.698	*J			0.309	*J	0.444	*J	0.459	*J	0.042	U*J	0.055	U*J		
Nickel	mg/kg	35.9	*			22.7		63.5	*	81.7		36	*	52.1	*		
Potassium	mg/kg	1300				1,030		814	B	1120		867		783	B		
Selenium	mg/kg	0.72	UN*			0.6	UN*	1.7	UN*	2.1	B*	0.61	UN*	1.1	UN*		
Silver	mg/kg	0.89	BN*J			0.49	BN*J	2.1	BN*J	66.3	NJ	0.16	*J	0.29	BN*J		
Sodium	mg/kg	357	B			498	B	577	B	690		283	B	254	B		
Thallium	mg/kg	0.73	U			0.62	UN*	1.7	UN*	9.1	N*	0.63	UN*	1.1	UN*		
Vanadium	mg/kg	38.8	*			22.2	*	21.3	*	52.3		29.9	*	30.9	*		
Zinc	mg/kg	659	*			583	*	5460	*	3480	*	376	*	445	*		
WET CHEMISTRY ANALYSIS																	
Cyanide - Total	ug/kg	4,000	UJ			4,000	UJ	4,000	UJ	4,000	UJ	4,000	UJ	4,000	UJ		
Leachable pH	S.U.	7.89				7.83		7.03		7.68		8.11		7.16			

Pioneer Midler Avenue LLC
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Sample ID ->	Units	S-9		S-10		S-11		S-11 DL		S-12	
Date Sampled ->		11/23/2004									
VOLATILES											
Chloromethane	ug/kg	14	UJ	110,000	U	17	UJ			12	UJ
Bromomethane	ug/kg	14	U	110,000	U	17	U			12	U
Vinyl chloride	ug/kg	14	UJ	110,000	U	**16**	**J**			12	UJ
Chloroethane	ug/kg	14	U	110,000	U	17	U			12	U
Methylene chloride	ug/kg	14	U	110,000	U	17	U			12	U
Acetone	ug/kg	14	U	110,000	U	17	UJ			12	U
Carbon disulfide	ug/kg	14	U	110,000	U	17	U			12	U
1,1-Dichloroethene	ug/kg	14	U	110,000	U	17	U			12	U
1,1-Dichloroethane	ug/kg	14	U	110,000	U	17	U			12	U
Chloroform	ug/kg	14	U	110,000	U	17	U			12	U
1,2-Dichloroethane	ug/kg	14	UJ	110,000	U	17	U			12	UJ
2-Butanone	ug/kg	14	U	110,000	U	17	U			12	U
1,1,1-Trichloroethane	ug/kg	14	U	110,000	U	17	U			12	U
Carbon tetrachloride	ug/kg	14	U	110,000	U	17	U			12	U
Bromodichloromethane	ug/kg	14	U	110,000	U	17	U			12	U
1,2-Dichloropropane	ug/kg	14	U	110,000	U	17	UJ			12	U
cis-1,3-Dichloropropene	ug/kg	14	U	110,000	U	17	U			12	U
Trichloroethene	ug/kg	14	U	**1,600,000**		17	U			12	U
Dibromochloromethane	ug/kg	14	U	110,000	U	17	U			12	U
1,1,2-Trichloroethane	ug/kg	14	U	110,000	U	17	U			12	U
Benzene	ug/kg	14	U	110,000	U	17	U			12	U
trans-1,3-Dichloropropene	ug/kg	14	U	110,000	U	17	U			12	U
Bromoform	ug/kg	14	U	110,000	U	17	U			12	U
4-Methyl-2-pentanone	ug/kg	14	U	110,000	U	17	U			12	U
2-Hexanone	ug/kg	14	U	110,000	U	17	U			12	U
Tetrachloroethene	ug/kg	14	U	**1,700,000**		17	U			12	U
Toluene	ug/kg	14	U	**140,000**		17	U			12	U
1,1,2,2-Tetrachloroethane	ug/kg	14	U	110,000	U	17	U			12	U
Chlorobenzene	ug/kg	14	U	110,000	U	17	U			12	U
Ethylbenzene	ug/kg	14	U	110,000	U	**3**	**J**			12	U
Styrene	ug/kg	14	U	110,000	U	17	U			12	U
Total xylenes	ug/kg	14	U	**250,000**		17	U			12	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	14	U	110,000	U	17	U			12	U
cis-1,2-Dichloroethene	ug/kg	14	U	110,000	U	**24**				12	U
trans-1,2-Dichloroethene	ug/kg	14	U	110,000	U	17	U			12	U
Dichlorodifluoromethane	ug/kg	14	UJ	110,000	U	17	U			12	UJ
Trichlorofluoromethane	ug/kg	14	UJ	110,000	U	17	U			12	UJ
Methyl acetate	ug/kg	14	U	110,000	U	17	U			12	U
Methyl tert butyl ether	ug/kg	14	U	110,000	U	17	U			12	U
Cyclohexane	ug/kg	14	U	110,000	U	17	UJ			12	U
Methylcyclohexane	ug/kg	14	U	**180,000**		**9**	**J**			12	U
1,2-Dibromoethane	ug/kg	14	U	110,000	U	17	U			12	U
Isopropylbenzene	ug/kg	14	U	110,000	U	**7**	**J**			12	U
1,3-Dichlorobenzene	ug/kg	14	U	110,000	U	17	U			12	U
1,4-Dichlorobenzene	ug/kg	14	U	110,000	U	17	U			12	U
1,2-Dichlorobenzene	ug/kg	14	U	110,000	U	17	U			12	U

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Sample ID ->	Units	S-9		S-10		S-11		S-11 DL		S-12	
Date Sampled ->		11/23/2004									
1,2-Dibromo-3-chloropropane	ug/kg	14	U	110,000	U	17	U			12	U
1,2,4-Trichlorobenzene	ug/kg	14	UJ	110,000	U	17	UJ			12	UJ
SEMIVOLATILES											
Benzaldehyde	ug/kg	3,800	U	6,200	U	5,200	U	52,000	U	4,400	U
Phenol	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
Bis(2-chloroethyl) ether	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
2-Chlorophenol	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
2-Methylphenol	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
2,2'-Oxybis(1-Chloropropane)	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
Acetophenone	ug/kg	3,800	U	6,200	U	5,200	U	52,000	U	4,400	U
4-Methylphenol	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
N-Nitroso-Di-n-propylamine	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
Hexachloroethane	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
Nitrobenzene	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
Isophorone	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
2-Nitrophenol	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
2,4-Dimethylphenol	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
Bis(2-chloroethoxy) methane	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
2,4-Dichlorophenol	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
Naphthalene	ug/kg	**100**	**J**	**500**	**J**	2,600	U	26,000	U	**360**	**J**
4-Chloroaniline	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
Hexachlorobutadiene	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
Caprolactam	ug/kg	3,800	U	6,200	U	5,200	U	52,000	U	4,400	U
4-Chloro-3-methylphenol	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
2-Methylnaphthalene	ug/kg	**74**	**J**	**280**	**J**	**780**	**J**	**770**	**DJ**	**120**	**J**
Hexachlorocyclopentadiene	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
2,4,6-Trichlorophenol	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
2,4,5-Trichlorophenol	ug/kg	4,600	U	7,500	U	6,400	U	64,000	U	5,300	U
Biphenyl	ug/kg	3,800	U	6,200	U	5,200	U	52,000	U	4,400	U
2-Chloronaphthalene	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
2-Nitroaniline	ug/kg	4,600	U	7,500	U	6,400	U	64,000	U	5,300	U
Dimethyl phthalate	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
2,6-Dinitrotoluene	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
Acenaphthylene	ug/kg	**65**	**J**	**170 J**	J	2,600	U	26,000	U	**330**	**J**
3-Nitroaniline	ug/kg	4,600	U	7,500	U	6,400	U	64,000	U	5,300	U
Acenaphthene	ug/kg	**370**	**J**	**260**	**J**	**1,200**	**J**	**1,400**	**DJ**	**210**	**J**
2,4-Dinitrophenol	ug/kg	4,600	U	7,500	U	6,400	U	64,000	U	5,300	U
4-Nitrophenol	ug/kg	4,600	U	7,500	U	6,400	U	64,000	U	5,300	U
Dibenzofuran	ug/kg	**120**	**J**	**140**	**J**	**750**	**J**	**830**	**DJ**	**200**	**J**
2,4-Dinitrotoluene	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
Diethyl phthalate	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
Fluorene	ug/kg	**250**	**J**	**280**	**J**	**2,200**	**J**	**1,800**	**DJ**	**360**	**J**
4-Chlorophenyl phenyl ether	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
4-Nitroaniline	ug/kg	4,600	U	7,500	U	6,400	U	64,000	U	5,300	U
4,6-Dinitro-2-methylphenol	ug/kg	4,600	U	7,500	U	6,400	U	64,000	U	5,300	U
N-nitrosodiphenylamine	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
4-Bromophenyl phenyl ether	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U

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Sample ID ->	Units	S-9		S-10		S-11		S-11 DL		S-12	
Date Sampled ->				11/23/2004							
Hexachlorobenzene	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
Atrazine	ug/kg	3,800	U	6,200	U	5,200	U	52,000	U	4,400	U
Pentachlorophenol	ug/kg	4,600	U	7,500	U	6,400	U	64,000	U	5,300	U
Phenanthrene	ug/kg	**2,200**	**B**	**3,900**	**B**	**18,000**	**B**	**14,000**	**BDJ**	**3,500**	**B**
Anthracene	ug/kg	**520**	**J**	**900**	**J**	**3,000**		**3,000**	**DJ**	**630**	**J**
Carbazole	ug/kg	**260**	**J**	**280**	**J**	**1,300**	**J**	**1,300**	**DJ**	**350**	**J**
Di-n-butyl phthalate	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
Fluoranthene	ug/kg	**5,000**		**16,000**		**17,000**	**J**	**17,000**	**DJ**	**5,300**	
Pyrene	ug/kg	**1,700**	**BJ**	**2,300**	**BJ**	**6,000**	**B**	**7,700**	**BDJ**	**1,300**	**BJ**
Butyl benzyl phthalate	ug/kg	**1,200**	**J**	**1,000**	**J**	2,600	U	26,000	U	2,200	U
3,3'-Dichlorobenzidine	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
Benzo(a)anthracene	ug/kg	**1,400**	**J**	**4,200**		**6,500**	**J**	**6,500**	**DJ**	**1,600**	**J**
Chrysene	ug/kg	**1,500**	**J**	**5,000**		**6,600**	**J**	**7,100**	**DJ**	**1,800**	**J**
Bis(2-ethylhexyl) phthalate	ug/kg	3,000	U	4,800	U	2,600	U	**1,600**	**BDJ**	2,200	U
Di-n-octyl phthalate	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
Benzo(b)fluoranthene	ug/kg	**3,100**	**J**	**5,700**	**J**	**7,400**	**J**	**4,000**	**DJ**	**1,800**	**J**
Benzo(k)fluoranthene	ug/kg	**2,900**	**J**	**3,900**	**J**	**4,900**	**J**	**3,500**	**DJ**	**1,800**	**J**
Benzo(a)pyrene	ug/kg	**700**	**J**	**1,300**	**J**	**1,400**	**J**	**1,400**	**DJ**	**610**	**J**
Indeno(1,2,3-cd)pyrene	ug/kg	**240**	**J**	**470**	**J**	**560**	**J**	**1,200**	**DJ**	**280**	**J**
Dibenzo(a,h)anthracene	ug/kg	**190**	**J**	**360**	**J**	**570**	**J**	**1,200**	**DJ**	**210**	**J**
Benzo(ghi)perylene	ug/kg	1,900	U	3,100	U	2,600	U	26,000	U	2,200	U
PESTICIDES/AROCLORS											
alpha-BHC	ug/kg	98	U	65	U	28	U			45	U
beta-BHC	ug/kg	98	U	65	U	28	U			45	U
delta-BHC	ug/kg	98	U	65	U	28	U			45	U
gamma-BHC (Lindane)	ug/kg	98	U	65	U	28	U			45	U
Heptachlor	ug/kg	98	U	65	U	28	U			45	U
Aldrin	ug/kg	98	U	65	U	28	U			45	U
Heptachlor epoxide	ug/kg	98	U	65	U	28	U			45	U
Endosulfan I	ug/kg	98	U	65	U	28	U			45	U
Dieldrin	ug/kg	190	U	130	U	53	U			88	U
4,4'-DDE	ug/kg	190	U	130	U	53	U			88	U
Endrin	ug/kg	190	U	130	U	53	U			88	U
Endosulfan II	ug/kg	190	U	130	U	53	U			88	U
4,4'-DDD	ug/kg	190	U	130	U	53	U			88	U
Endosulfan Sulfate	ug/kg	190	U	130	U	53	U			88	U
4,4'-DDT	ug/kg	**180**	**J**	130	U	53	U			88	U
Methoxychlor	ug/kg	980	U	650	U	53	U			450	U
Endrin ketone	ug/kg	190	U	130	U	53	U			88	U
Endrin aldehyde	ug/kg	190	U	130	U	53	U			88	U
alpha-Chlordane	ug/kg	98	U	65	U	28	U			45	U
gamma-Chlordane	ug/kg	98	U	65	U	28	U			45	U
Toxaphene	ug/kg	9800	U	6500	U	2800	U			4500	U
Aroclor 1016	ug/kg	1900	U	1300	U	530	U			880	U
Aroclor 1221	ug/kg	3800	U	2600	U	1100	U			1800	U
Aroclor 1232	ug/kg	1900	U	1300	U	530	U			880	U
Aroclor 1242	ug/kg	1900	U	1300	U	530	U			880	U

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Table 11 - Phase 1 Site Utility Sediment Data

Sample ID ->	Units	S-9		S-10		S-11		S-11 DL		S-12	
Date Sampled ->				11/23/2004							
Aroclor 1248	ug/kg	1900	U	1300	U	530	U			880	U
Aroclor 1254	ug/kg	**880**	J	**6300**		530	U			**3500**	
Aroclor 1260	ug/kg	1900	U	1300	U	530	U			880	U
INORGANICS											
Aluminum	mg/kg	4,650	J	4,620		8940				3470	J
Antimony	mg/kg	3.0	BN*J	2.7	BN*J	0.75	UN*J			54.7	N*J
Arsenic	mg/kg	5.9	N*J	8.2	N*J	7.3	N*J			32.7	N*J
Barium	mg/kg	140	*J	490	*	156	*			1000	*J
Beryllium	mg/kg	0.69	*J	0.54	B*	0.99	*			1.2	*J
Cadmium	mg/kg	**77.5**	N*J	18.1	N*	0.16	BN*			6.9	N*J
Calcium	mg/kg	65200	J	112000		210000				59000	J
Chromium	mg/kg	68.2	N*J	296	N*	85.3	N*			153	N*J
Cobalt	mg/kg	10.1	*J	25.5	*	6.8	B*			23.5	*J
Copper	mg/kg	265	N*J	906	N*	28.7	N*			1230.0	N*J
Iron	mg/kg	74,700	J	47,000		18300				220000	J
Lead	mg/kg	331	*J	1100	*	20.9	*			2940	*J
Magnesium	mg/kg	9,740	J	9,040		30000				2690	J
Manganese	mg/kg	627	N*J	392	N*J	477	N*J			977	N*J
Mercury	mg/kg	0.218	*J	0.358	*J	0.033	U*J			3.3	*J
Nickel	mg/kg	42.7	*J	51.4	*	22.8	*			223	*J
Potassium	mg/kg	1,150	J	972		2440				506	BJ
Selenium	mg/kg	0.57	UN*J	0.81	UN*	0.76	UN*			0.59	UN*
Silver	mg/kg	0.4	*J	1.7	N*J	0.1	UN*J			4	N*J
Sodium	mg/kg	2510	J	2340		381	B			691	J
Thallium	mg/kg	0.58	UN*J	0.83	UN*	0.77	U			0.6	UN*
Vanadium	mg/kg	23.8	*J	14.1	*	161	*			24.6	*J
Zinc	mg/kg	332	*J	2800	*	61.7	*			1330	*J
WET CHEMISTRY ANALYSIS											
Cyanide - Total	ug/kg	4,000	UJ	4,000	UJ	4,000	UJ			4,000	UJ
Leachable pH	S.U.	8.47		**10.2**		7.57				8.45	

Notes:
BOLD indicates constituent was detected

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 12 - Phase 1 Site Utility Liquids Data

Parameter	Units	IL-1	IL-1 DL	IL-3	IL-4	IL-6	IL-7	IL-8	IL-10	IL-10 DL	IL-11
Sample Date						11/29/2004					
Chloromethane	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
Bromomethane	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
Vinyl chloride	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
Chloroethane	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
Methylene chloride	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
Acetone	ug/l	10 U	NA	10 U	**360 J**	10 U	10 U	10 U	50 U	200 U	10 U
Carbon disulfide	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
1,1-Dichloroethene	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
1,1-Dichloroethane	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
Chloroform	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
1,2-Dichloroethane	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
MEK(2-Butanone)	ug/l	10 U	NA	10 U	**1400 NJ**	10 U	10 U	10 U	50 U	200 U	10 U
1,1,1-Trichloroethane	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
Carbon tetrachloride	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
Bromodichloromethane	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
1,2-Dichloropropane	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
cis-1,3-Dichloropropene	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
Trichloroethene	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	**2,400**	**2,400** D	10 U
Dibromochloromethane	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
1,1,2-Trichloroethane	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
Benzene	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
trans-1,3-Dichloropropene	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
Bromoform	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
MIBK(4-Methyl-2-pentanone)	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
2-Hexanone	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
Tetrachloroethene	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	**730**	**720 D**	10 U
Toluene	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	**150**	**150 DJ**	10 U
1,1,2,2-Tetrachloroethane	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
Chlorobenzene	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
Ethylbenzene	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	**10 J**	200 U	10 U
Styrene	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
Total Xylenes	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	**120**	200 U	10 U
Dichlorodifluoromethane	ug/l	10 U	NA	10 U	500 UJ	10 U	10 U	10 U	50 U	200 U	10 U
Trichlorofluoromethane	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
1,1,2-Tricloro-1,2,2,-triflouroethane	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
trans-1,2-Dichloroethene	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	**43 J**	200 U	10 U
Methyl tert butyl ether	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
cis-1,2-Dichloroethene	ug/l	10 U	NA	10 U	500 U	10 U	**3 J**	10 U	**22 J**	200 U	10 U
Cyclohexane	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
Methylcyclohexane	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	**14 J**	200 U	10 U
1,2-Dibromoethane	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
Isopropylbenzene	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
1,3-Dichlorobenzene	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
1,4-Dichlorobenzene	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
1,2-Dichlorobenzene	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U

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Table 12 - Phase 1 Site Utility Liquids Data

Parameter	Units	IL-1	IL-1 DL	IL-3	IL-4	IL-6	IL-7	IL-8	IL-10	IL-10 DL	IL-11
Sample Date		11/29/2004									
1,2-Dibromo-3-chloropropane	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
1,2,4-Trichlorobenzene	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
Methyl acetate	ug/l	10 U	NA	10 U	500 U	10 U	10 U	10 U	50 U	200 U	10 U
Semivolatiles											
Benzaldehyde	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	**4 JN**		9 U
Phenol	ug/l	9 U	19 U	9 U	**64 J**	9 U	380 UJ	9 U	**14**		9 U
Bis (2-chloroethyl) ether	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
2-Chlorophenol	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
2-Methylphenol	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	**1 J**		9 U
2,2'- Oxybis (1-Chloropropane)	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
Acetophenone	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	**4 J**		9 U
4-Methylphenol	ug/l	9 U	19 U	9 U	**2200** J	9 U	380 UJ	9 U	**7 J**		9 U
N-Nitroso-Di-n-propylamine	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
Hexachloroethane	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
Nitrobenzene	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
Isophorone	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
2-Nitrophenol	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
2,4-Dimethylphenol	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
Bis(2-chloroethoxy) methane	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
2,4-Dichlorophenol	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
Naphthalene	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	**0.6 J**		9 U
4-Chloroaniline	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
Hexachlorobutadiene	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
Caprolactam	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
4-Chloro-3-methylphenol	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
2-Methylnaphthalene	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
Hexachlorocyclopentadiene	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
2,4,6-Trichlorophenol	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
2,4,5-Trichlorophenol	ug/l	24 U	47 U	24 U	2400 UJ	24 U	950 UJ	24 U	24 U		24 U
Biphenyl	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
2-Chloronaphthalene	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
2-Nitroaniline	ug/l	24 U	47 U	24 U	2400 UJ	24 U	950 UJ	24 U	24 U		24 U
Dimethyl phthalate	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
2,6-Dinitrotoluene	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
Acenaphthylene	ug/l	9 U	19 U	9 U	950 UJ	**6 J**	380 UJ	9 U	9 U		9 U
3-Nitroaniline	ug/l	24 U	47 U	24 U	2400 UJ	24 U	950 UJ	24 U	24 U		24 U
Acenaphthene	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
2,4-Dinitrophenol	ug/l	24 U	47 U	24 U	2400 UJ	24 U	950 UJ	24 U	24 U		24 U
4-Nitrophenol	ug/l	24 U	47 U	24 U	2400 UJ	**7 J**	950 UJ	24 U	24 U		24 U
Dibenzofuran	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
2,4-Dinitrotoluene	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
Diethyl phthalate	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
Fluorene	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
4-Chlorophenyl phenyl ether	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
4-Nitroaniline	ug/l	24 U	47 U	24 U	2400 UJ	24 U	950 UJ	24 U	24 U		24 U

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Table 12 - Phase 1 Site Utility Liquids Data

Parameter	Units	IL-1	IL-1 DL	IL-3	IL-4	IL-6	IL-7	IL-8	IL-10	IL-10 DL	IL-11
Sample Date						11/29/2004					
4,6-Dinitro-2-methylphenol	ug/l	24 U	47 U	24 U	2400 UJ	24 U	950 UJ	24 U	24 U		24 U
N-nitrosodiphenylamine	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
4-Bromophenyl phenyl ether	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
Hexachlorobenzene	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
Atrazine	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
Pentachlorophenol	ug/l	24 U	47 U	24 U	950 UJ	24 U	380 UJ	24 U	24 U		24 U
Phenanthrene	ug/l	9 U	19 U	9 U	**170 J**	**3 J**	**30 J**	9 U	**0.5 J**		9 U
Anthracene	ug/l	9 U	19 U	9 U	950 UJ	**0.6 J**	380 UJ	9 U	**0.6 J**		9 U
Carbazole	ug/l	9 U	19 U	9 U	950 UJ	**0.5 J**	380 UJ	9 U	**0.4 J**		9 U
Di-n-butyl phthalate	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
Fluoranthene	ug/l	9 U	19 U	9 U	**280 J**	**6 J**	**73 J**	9 U	9 U		**0.7 J**
Pyrene	ug/l	9 U	19 U	9 U	**220 J**	**7 J**	**60 J**	9 U	**0.4 J**		**0.9 J**
Butyl benzyl phthalate	ug/l	9 U	19 U	9 U	**78 J**	9 U	380 UJ	9 U	9 U		9 U
3,3'-Dichlorobenzidine	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
Benzo(a)anthracene	ug/l	9 U	19 U	9 U	**100 J**	**3 J**	**26 J**	9 U	9 U		9 U
Chrysene	ug/l	9 U	19 U	9 U	**120 J**	**3 J**	**33 J**	9 U	9 U		**0.5 J**
Bis(2-ethylhexyl) phthalate	ug/l	**66**	**66 BD**	9 U	950 UJ	**19 B**	380 UJ	9 U	9 U		**15 B**
Di-n-octyl phthalate	ug/l	9 U	19 U	9 U	950 UJ	9 U	380 UJ	9 U	9 U		9 U
Benzo(b)fluoranthene	ug/l	9 U	19 U	9 U	**170 J**	**6 J**	**32 J**	9 U	9 U		**0.6 J**
Benzo(k)fluoranthene	ug/l	9 U	19 U	9 U	**110 J**	**5 J**	**24 J**	9 U	9 U		**0.6 J**
Benzo(a)pyrene	ug/l	9 U	19 U	9 U	**93 J**	**3 J**	**30 J**	9 U	9 U		**0.6 J**
Indeno(1,2,3-cd)pyrene	ug/l	9 U	19 U	9 U	**56 J**	**1 J**	**20 J**	9 U	9 U		9 U
Dibenzo(a,h)anthracene	ug/l	9 U	19 U	9 U	950 UJ	**0.4 J**	380 UJ	9 U	9 U		9 U
Benzo(g,h,i)perylene	ug/l	9 U	19 U	9 U	**67 J**	**2 J**	**25 J**	9 U	9 U		9 U
Pesticides / PCBs											
alpha-BHC	ug/l	0.047 U	NA	0.047 U	0.24 U	0.24 U	0.24 UJ	0.047 U	0.047 UJ		0.047 U
beta-BHC	ug/l	0.047 U	NA	0.047 U	0.24 U	0.24 U	0.24 UJ	0.047 U	0.047 UJ		0.047 U
delta-BHC	ug/l	0.047 U	NA	0.047 U	0.24 U	0.24 U	0.24 UJ	0.047 U	0.047 UJ		0.047 U
Lindane (gamma-BHC)	ug/l	0.047 U	NA	0.047 U	0.24 U	0.24 U	0.24 UJ	0.047 U	0.047 UJ		0.047 U
Heptachlor	ug/l	0.047 U	NA	0.047 U	0.24 U	0.24 U	0.24 UJ	0.047 U	0.047 UJ		0.047 U
Aldrin	ug/l	0.047 U	NA	0.047 U	0.24 U	0.24 U	0.24 UJ	0.047 U	0.047 UJ		0.047 U
Heptachlor epoxide	ug/l	0.047 U	NA	0.047 U	0.24 U	0.24 U	0.24 UJ	0.047 U	0.047 UJ		0.047 U
Endosulfan I	ug/l	0.047 U	NA	0.047 U	0.24 U	0.24 U	0.24 UJ	0.047 U	0.047 UJ		0.047 U
Dieldrin	ug/l	0.094 U	NA	0.094 U	**0.13 JPN**	0.47 U	0.47 UJ	0.094 U	0.094 UJ		0.094 U
4,4'-DDE	ug/l	0.094 U	NA	0.094 U	0.47 U	0.47 U	0.47 UJ	0.094 U	0.094 UJ		0.094 U
Endrin	ug/l	0.094 U	NA	0.094 U	**0.2 J**	0.47 U	0.47 UJ	0.094 U	0.094 UJ		0.094 U
Endosulfan II	ug/l	0.094 U	NA	0.094 U	0.47 U	0.47 U	0.47 UJ	0.094 U	0.094 UJ		0.094 U
4,4'-DDD	ug/l	0.094 U	NA	0.094 U	0.47 U	0.47 U	0.47 UJ	0.094 U	0.094 UJ		0.094 U
Endosulfan sulfate	ug/l	0.094 UJ	NA	0.094 UJ	0.47 UJ	0.47 U	0.47 UJ	0.094 UJ	0.094 UJ		0.094 UJ
4,4'-DDT	ug/l	0.094 U	NA	0.094 U	**0.51 PJ**	0.47 UJ	0.47 UJ	0.094 U	0.094 UJ		**0.2 PNJ**
Methoxychlor	ug/l	0.47 U	NA	0.47 U	2.4 U	2.4 U	2.4 UJ	0.47 U	0.47 UJ		0.47 U
Endrin ketone	ug/l	0.094 U	NA	0.094 U	0.47 U	0.47 U	0.47 UJ	0.094 U	0.094 UJ		0.094 U
Endrin aldehyde	ug/l	0.094 U	NA	0.094 U	0.47 U	0.47 U	0.47 UJ	0.094 U	0.094 UJ		0.094 U
alpha-Chlordane	ug/l	0.047 U	NA	0.047 U	**0.12 J**	0.24 U	0.24 UJ	0.047 U	0.047 UJ		0.047 U
gamma-Chlordane	ug/l	0.047 U	NA	0.047 U	0.24 U	0.24 U	0.24 UJ	0.047 U	0.047 UJ		0.047 U

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Parameter	Units	IL-1	IL-1 DL	IL-3	IL-4	IL-6	IL-7	IL-8	IL-10	IL-10 DL	IL-11
Sample Date		11/29/2004									
Toxaphene	ug/l	4.7 U	NA	4.7 U	24 U	24 U	24 UJ	4.7 U	4.7 UJ		4.7 U
Arochlor 1016	ug/l	0.94 U	NA	0.94 U	4.7 U	4.7 U	4.7 UJ	0.94 U	0.94 UJ		0.94 U
Arochlor 1221	ug/l	1.9 U	NA	1.9 U	9.4 U	9.4 U	9.4 UJ	1.9 U	1.9 UJ		1.9 U
Arochlor 1232	ug/l	0.94 U	NA	0.94 U	4.7 U	4.7 U	4.7 UJ	0.94 U	0.94 UJ		0.94 U
Arochlor 1242	ug/l	0.94 U	NA	0.94 U	4.7 U	4.7 U	4.7 UJ	0.94 U	0.94 UJ		0.94 U
Arochlor 1248	ug/l	0.94 U	NA	0.94 U	4.7 U	4.7 U	4.7 UJ	0.94 U	0.94 UJ		0.94 U
Arochlor 1254	ug/l	0.94 U	NA	0.94 U	4.7 U	4.7 U	4.7 UJ	0.94 U	0.94 UJ		0.94 U
Arochlor 1260	ug/l	0.94 U	NA	0.94 U	4.7 U	4.7 U	4.7 UJ	0.94 U	0.94 UJ		0.94 U
Inorganics											
Aluminum	ug/l	18.4 U ENJ	NA	18.4 U ENJ	**907 ENJ**	**187 ENJ**	**1200 ENJ**	**55.6 BENJ**	**348 ENJ**		**108 BENJ**
Antimony	ug/l	5.0 U	NA	5.0	**60.2**	5.0 U	5.0 U	5.0 U	5.0 ND		5.0 U
Arsenic	ug/l	2.6 U	NA	2.6	2.6 U	2.6 U	**5.7 B**	2.6 U	2.6 U		2.6 U
Barium	ug/l	**44.4 B**	NA	**67.9 B**	**3350**	**15 B**	**50.2 B**	**36.3 B**	**38.8 B**		**29.9 B**
Beryllium	ug/l	0.19 U	NA	**0.2 B**	**4.2 B**	0.19 U	0.19 U	**0.37 B**	0.19 U		**0.20 B**
Cadmium	ug/l	0.34 U	NA	0.34 U	**38.7**	0.34 U	**2.1 B B**	0.34 U	0.34 U		0.34 U
Calcium	ug/l	**37700**	NA	**136000**	**1360000.00**	**12200**	**28700**	**101000**	**60400**		**74800**
Chromium	ug/l	0.65 U	NA	0.65 U	**58.4**	0.65 U	**6.6 B**	0.65 U	**33**		0.65 U
Cobalt	ug/l	0.86 U	NA	0.86 U	**76.1**	0.9 U	**2.1 B**	**0.96 B**	**8 B**		0.86 U
Copper	ug/l	**2.6 BE**	NA	**3.5 BE**	**311 E**	**5.6 BE**	**5.5 BE**	**4.4 BE**	**229 E**		**4.5 BE**
Iron	ug/l	**179**	NA	**249**	**996000**	**165**	**5280**	**148**	**555**		**693**
Lead	ug/l	1.3 U NJ	NA	**44 NJ**	**924.0 NJ**	**5.2 NJ**	**90.8 NJ**	**2.0 BNJ**	**13.2 NJ**		**4.9 NJ**
Magnesium	ug/l	**2030 B**	NA	**17700**	**86100**	**1260 B**	**6730**	**21900**	**587 B**		**15600**
Manganese	ug/l	**1.5 B**	NA	**33.2**	**6360**	**12.2 B**	**87**	**9.7 B**	**8.6 B**		**13 B**
Mercury	ug/l	0.087 U	NA	0.087 U	**7.2**	0.087 U	**0.213**	0.087 U	**0.09 B**		0.087 U
Nickel	ug/l	**2.1 B**	NA	**2.3 B**	**336**	**3.5 B**	**19.8 B**	**4.5 B**	**81.6**		**3.3 B**
Potassium	ug/l	**10800**	NA	**4620 B**	**241000 B**	**852 B**	**1340 B**	**1840 B**	**47100**		**1620 B**
Selenium	ug/l	5.0 U N	NA	**6.9 BN**	5.0 U N	5.0 U N	5.0 U N	5.0 U N	5.0 U N		5.0 U N
Silver	ug/l	0.69 U	NA	0.69 U	**1.5 B**	0.69 U	0.69 U	0.69 U	0.69 U		0.69 U
Sodium	ug/l	**33900**	NA	**90700**	**417000**	**547 B**	**4200 B**	**186000**	**142000**		**90700**
Thallium	ug/l	5.1 U	NA	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U		5.1 U
Vanadium	ug/l	0.58 U	NA	0.58 U	**13.3 B**	**1.4 B**	**8.80 B**	**0.87 B**	**9.4 B**		0.58 U
Zinc	ug/l	**2.8 B**	NA	**11.9 B**	**706000**	**38.6**	**450**	**31.8**	**56.6**		**131**
Cyanide	ug/l	40.0 U	NA	40.0 U	40.0 U	40.0 U	40.0 U	40.0 U	**82.7 J**		40.0 U
pH	SU										
Total Hardness	mg/l										
Conductivity	umhos/cm										

Notes: U = undetected, J or E = estimated value, RE = re-extraction, D= diluted sample result
NA = sample not analyzed for identified constituent
4200 **BOLD** font indicates analytical parameter was detected in sample

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Table 13 - Monitoring Well Depths, Screened Intervals, and Gauging Data

Monitoring Well I.D.	Top of Casing Elevation (ft.)	Top of Casing Elevation (ft.)	Top of Casing Elevation (ft.)	Approximate Screened Interval (ft.)	Depth to Water (ft.)	Groundwater Elevation (ft.)	Depth to Water (ft.)	Groundwater Elevation (ft.)	Depth to Water (ft.)	Groundwater Elevation (ft.)	Depth to Water (ft.)	Groundwater Elevation (ft.)	Depth to Water (ft.)	Groundwater Elevation (ft.)	Depth to Water (ft.)	Groundwater Elevation (ft.)	Depth to Water (ft.)	Groundwater Elevation (ft.)	Depth to Water (ft.)	Groundwater Elevation (ft.)
	Historical Survey	May 2006 Survey	July 2007 Survey		12/09/04	12/09/04	01/31/05	01/31/05	04/12/05	04/12/05	05/11/05	05/11/05	07/26/05	07/26/05	10/17/05	10/17/05	05/16/06	05/16/06	08/23/07	08/23/07
MW-1	422.92	422.95	---	4 to 14	3.54	419.38	4.00	418.92	3.40	419.52	3.69	419.23	4.07	418.85	3.3	419.62	2.55	420.40	---	---
MW-2	418.73	418.72	---	4 to 14	4.60	414.13	4.82	413.91	4.40	414.33	4.65	414.08	4.91	413.82	4.6	414.13	4.82	413.90	4.93	413.79
MW-2D	418.74	422.21	---	10 to 20	---	---	4.86	413.88	---	---	4.69	414.05	4.95	413.79	4.64	414.10	8.3	413.91	8.51	413.70
MW-3	417.94	----	---	4 to 14	1.61	416.33	2.15	415.79	---	---	2.12	415.82	2.14	415.80	2.18	415.76	2.66	415.28	---	---
MW-3D	417.95	417.94	---	15 to 25	---	---	2.10	415.85	1.98	415.97	2.02	415.93	2.15	415.80	1.8	416.15	2.63	415.31	---	---
MW-4	416.00	416.06	---	4 to 14	2.65	413.35	2.86	413.14	2.32	413.68	2.60	413.40	3.98	412.02	2.66	413.34	2.58	413.48	---	---
MW-4D	416.22	416.33	---	13 to 18	---	---	3.01	413.21	---	---	2.70	413.52	3.00	413.22	2.81	413.41	2.75	413.58	---	---
MW-5	418.33	---	---	4 to 14	2.62	415.71	3.74	414.59	2.16	416.17	2.60	415.73	---	---	2.12	416.21	---	---	---	---
MW-6	420.22	420.29	---	4 to 14	2.06	418.16	2.78	417.44	1.74	418.48	2.27	417.95	2.92	417.30	1.71	418.51	1.58	418.71	---	---
MW-7	429.16	429.21	---	5 to 15	8.28	420.88	9.40	419.76	7.92	421.24	8.37	420.79	9.15	420.01	8.34	420.82	8.19	421.02	9.67	419.54
MW-8	422.37	422.41	---	4 to 14	2.36	420.01	3.60	418.77	3.11	419.26	3.39	418.98	3.73	418.64	3.07	419.30	1.12	421.29	5.14	417.27
MW-9D	420.64	420.67	---	8 to 18	---	---	6.86	413.78	6.55	414.09	---	---	6.78	413.86	6.4	414.24	6.67	414.00	7.41	413.26
MW-10D	419.75	419.76	---	8 to 18	---	---	6.86	412.89	6.71	413.04	---	---	6.91	412.84	6.65	413.10	6.8	412.96	7.16	412.60
MW-11D	420.97	---	---	6 to 22	---	---	3.25	417.72	2.54	418.43	2.80	418.18	3.12	417.85	2.41	418.56	---	---	---	---
MW-12D	---	424.62	---	8.5 to 18.5	---	---	---	---	---	---	---	---	---	---	---	---	4.59	420.03	---	---
MW-12D-R	---	---	424.54	8.5 to 18.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7.29	417.25
MW-13D	---	420.91	---	8 to 18	---	---	---	---	---	---	---	---	---	---	---	---	6.27	414.64	7.75	413.16
SB-2-1	423.16	---	---	1 to 11	---	---	---	---	3.89	419.27	4.18	418.98	4.55	418.61	3.83	419.33	---	---	---	---
SB-7-1	421.55	---	---	8 to 18	---	---	---	---	2.93	418.62	3.15	418.40	3.51	418.04	2.77	418.78	---	---	---	---
SB-9-1	421.94	---	---	8.5 to 18.5	---	---	---	---	3.48	418.46	3.75	418.19	4.10	417.84	3.04	418.90	---	---	---	---
SB-12-1	419.52	---	---	12 to 22	---	---	---	---	1.41	418.11	1.73	417.79	2.01	417.51	1.29	418.23	---	---	---	---
SB-13-2	418.96	---	---	12 to 22	---	---	---	---	1.38	417.58	1.65	417.31	2.94	416.02	1.18	417.78	---	---	---	---
SB-13-4	421.86	---	---	14 to 24	---	---	---	---	5.38	416.48	5.84	416.02	6.01	415.85	5.46	416.40	---	---	---	---
DAW-1	421.11	421.16	---	32.5 to 37.5	---	---	---	---	---	---	---	---	---	---	3.38	417.73	3.12	418.04	---	---
DAW-2	419.82	422.59	---	46 to 51	---	---	---	---	---	---	---	---	---	---	2.42	417.40	4.76	417.83	---	---
DAW-3	418.32	418.31	---	51.5 to 56.5	---	---	---	---	---	---	---	---	---	---	-1.8*	420.12	-1.17*	419.48	---	---
DAW-4	---	424.45	---	19 to 29	---	---	---	---	---	---	---	---	---	---	-1.8*	420.12	6.28	418.17	---	---

--- Data not available
* = Estimated value measured within a temporary extended riser
Notes: MW-2D and DAW-2 converted to stick-up wells just prior to May 2006 survey

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Parameter	**Units**	**NYSDEC Class GA**		MW-1	MW-2	MW-3	MW-3 Dupe	MW-4	MW-5	MW-6	MW-7	MW-8
Sample Date		**Standard**	**Guidance**	*11/29/2004*								
Chloromethane	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl chloride	ug/l	2		10 U	10 U	55	28	10 U	10 U	10 U	10 U	10 U
Chloroethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	ug/l		50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	ug/l	60		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	ug/l	7		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane	ug/l	0.6		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MEK(2-Butanone)	ug/l		50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon tetrachloride	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	ug/l		50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	ug/l	1		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	ug/l	0.4		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	ug/l	1		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	ug/l	0.4		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	ug/l		50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MIBK(4-Methyl-2-pentanone)	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	ug/l		50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	ug/l	5		10 U	10 U	10 U	**3 J**	10 U	10 U	10 U	10 U	10 U
Toluene	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chlorobenzene	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Styrene	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total Xylenes	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorodifluoromethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichlorofluoromethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Tricloro-1,2,2,-triflouroethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
trans-1,2-Dichloroethene	ug/l	5		10 U	10 U	13	7 J	10 U	10 U	10 U	10 U	10 U
Methyl tert butyl ether	ug/l	10		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	ug/l	5		10 U	10 U	430	180	**2 J**	**3 J**	10 U	**3 J**	10 U
Cyclohexane	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylcyclohexane	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromoethane	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

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Parameter	Units	NYSDEC Class GA Standard	NYSDEC Class GA Guidance	MW-1	MW-2	MW-3	MW-3 Dupe	MW-4	MW-5	MW-6	MW-7	MW-8
Sample Date				11/29/2004								
Isopropylbenzene	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	ug/l	3		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	ug/l	3		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	ug/l	3		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane	ug/l	0.04		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl acetate	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Semivolatiles												
Benzaldehyde	ug/l			10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
Phenol	ug/l	1		10 U	9 U	10 U	10 U	20 U	10 U	**0.9 J**	10 U	9 U
Bis (2-chloroethyl) ether	ug/l	1		10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
2-Chlorophenol	ug/l	1		10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
2-Methylphenol	ug/l	1		10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
2,2'- Oxybis (1-Chloropropane)	ug/l			10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
Acetophenone	ug/l			10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
4-Methylphenol	ug/l	1		10 U	9 U	10 U	**0.4 J**	20 U	10 U	10 U	10 U	9 U
N-Nitroso-Di-n-propylamine	ug/l			10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
Hexachloroethane	ug/l	5		10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
Nitrobenzene	ug/l	0.4		10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
Isophorone	ug/l		50	10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
2-Nitrophenol	ug/l	1		10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
2,4-Dimethylphenol	ug/l	1		10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
Bis(2-chloroethoxy) methane	ug/l	5		10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
2,4-Dichlorophenol		1		10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
Naphthalene	ug/l		10	10 U	9 U	**0.5 J**	10 U	**0.7 J**	10 U	10 U	10 U	9 U
4-Chloroaniline	ug/l	5		10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
Hexachlorobutadiene	ug/l	0.5		10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
Caprolactam	ug/l			10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
4-Chloro-3-methylphenol	ug/l	1		10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
2-Methylnaphthalene	ug/l			10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
Hexachlorocyclopentadiene	ug/l	5		10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
2,4,6-Trichlorophenol	ug/l	1		10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
2,4,5-Trichlorophenol	ug/l	1		24 U	24 U	25 U	25 U	49 U	24 U	24 U	24 U	24 U
Biphenyl	ug/l	5		10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
2-Chloronaphthalene	ug/l		10	10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
2-Nitroaniline	ug/l	5		24 U	24 U	25 U	25 U	49 U	24 U	24 U	24 U	24 U
Dimethyl phthalate	ug/l		50	10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
2,6-Dinitrotoluene	ug/l	5		10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
Acenaphthylene	ug/l			10 U	9 U	10 U	10 U	**1 J**	10 U	10 U	10 U	9 U
3-Nitroaniline	ug/l	5		24 U	24 U	25 U	25 U	49 U	24 U	24 U	24 U	24 U
Acenaphthene	ug/l			10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U

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Parameter	Units	NYSDEC Class GA Standard	NYSDEC Class GA Guidance	MW-1	MW-2	MW-3	MW-3 Dupe	MW-4	MW-5	MW-6	MW-7	MW-8
Sample Date				11/29/2004								
2,4-Dinitrophenol	ug/l	1		24 U	24 U	25 U	25 U	49 U	24 U	24 U	24 U	24 U
4-Nitrophenol	ug/l	1		24 U	24 U	25 U	25 U	49 U	24 U	24 U	24 U	24 U
Dibenzofuran	ug/l			10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
2,4-Dinitrotoluene	ug/l	5		10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
Diethyl phthalate	ug/l		50	10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
Fluorene	ug/l		50	10 U	9 U	10 U	10 U	**0.8 J**	10 U	10 U	10 U	9 U
4-Chlorophenyl phenyl ether	ug/l			10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
4-Nitroaniline	ug/l	5		24 U	24 U	25 U	25 U	49 U	24 U	24 U	24 U	24 U
4,6-Dinitro-2-methylphenol	ug/l	1		24 U	24 U	25 U	25 U	49 U	24 U	24 U	24 U	24 U
N-nitrosodiphenylamine	ug/l		50	10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
4-Bromophenyl phenyl ether	ug/l			10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
Hexachlorobenzene	ug/l	0.04		10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
Atrazine	ug/l	7.5		10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
Pentachlorophenol	ug/l	1		24 U	24 U	25 U	25 U	49 U	24 U	24 U	24 U	24 U
Phenanthrene	ug/l		50	**0.4 J**	**3 J**	**3 J**	**2 J**	**6 J**	**0.6 J**	10 U	**0.7 J**	9 U
Anthracene	ug/l		50	10 U	9 U	10 U	10 U	**1 J**	10 U	10 U	10 U	9 U
Carbazole	ug/l			10 U	9 U	10 U	10 U	**0.8 J**	10 U	10 U	10 U	9 U
Di-n-butyl phthalate	ug/l	50		10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
Fluoranthene	ug/l		50	10 U	**2 J**	**3 J**	**3 J**	**9 J**	10 U	10 U	10 U	9 U
Pyrene	ug/l		50	10 U	**0.6 J**	**2 J**	**1 J**	**8 J**	10 U	10 U	10 U	9 U
Butyl benzyl phthalate	ug/l		50	10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
3,3'-Dichlorobenzidine	ug/l	5		10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
Benzo(a)anthracene	ug/l		0.002	10 U	9 U	0.9 J	0.8 J	4 J	10 U	10 U	10 U	9 U
Chrysene	ug/l		0.002	10 U	9 U	1 J	0.9 J	4 J	10 U	10 U	10 U	9 U
Bis(2-ethylhexyl) phthalate	ug/l	5		10 U	9 U	10 U	10 U	20 U	10 U	10 U	150	15 B
Di-n-octyl phthalate	ug/l		50	10 U	9 U	10 U	10 U	20 U	10 U	10 U	10 U	9 U
Benzo(b)fluoranthene	ug/l		0.002	10 U	9 U	0.9 J	0.8 J	3 J	10 U	10 U	10 U	9 U
Benzo(k)fluoranthene	ug/l		0.002	10 U	9 U	0.8 J	0.7 J	3 J	10 U	10 U	10 U	9 U
Benzo(a)pyrene	ug/l	ND		10 U	9 U	**0.9 J**	**0.7 J**	4 J	10 U	10 U	10 U	9 U
Indeno(1,2,3-cd)pyrene	ug/l		0.002	10 U	9 U	10 U	10 U	2 J	10 U	10 U	10 U	9 U
Dibenzo(a,h)anthracene	ug/l			10 U	9 U	10 U	10 U	**1 J**	10 U	10 U	10 U	9 U
Benzo(g,h,i)perylene	ug/l			10 U	9 U	10 U	10 U	**3 J**	10 U	10 U	10 U	9 U
Pesticides / PCBs												
alpha-BHC	ug/l			0.047 U	0.047 UJ	0.10 U	0.050 U	0.25 U	0.047 U	0.047 U	0.047 UJ	0.048 UJ
beta-BHC	ug/l			0.047 U	0.047 UJ	0.10 U	0.050 U	0.25 U	0.047 U	0.047 U	0.047 UJ	0.048 UJ
delta-BHC	ug/l			0.047 U	0.047 UJ	0.10 U	0.050 U	0.25 U	0.047 U	0.047 U	0.047 UJ	0.048 UJ
Lindane (gamma-BHC)	ug/l			0.047 U	0.047 UJ	0.10 U	0.050 U	0.25 U	0.047 U	0.047 U	0.047 UJ	0.048 UJ
Heptachlor	ug/l	0.04		0.047 U	0.047 UJ	0.10 U	0.050 U	0.25 U	0.047 U	0.047 U	0.047 UJ	0.048 UJ
Aldrin	ug/l	ND		0.047 U	0.047 UJ	0.10 U	0.050 U	0.25 U	0.047 U	0.047 U	0.047 UJ	0.048 UJ
Heptachlor epoxide	ug/l	0.03		0.047 U	0.047 UJ	0.10 U	0.050 U	0.25 U	0.047 U	0.047 U	0.047 UJ	0.048 UJ
Endosulfan I	ug/l			0.047 U	0.047 U	0.10 U	0.050 U	0.25 U	0.047 U	0.047 U	0.047 UJ	0.048 UJ

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Parameter	Units	NYSDEC Class GA Standard	NYSDEC Class GA Guidance	MW-1	MW-2	MW-3	MW-3 Dupe	MW-4	MW-5	MW-6	MW-7	MW-8
Sample Date				11/29/2004								
Dieldrin	ug/l	0.004		0.094 U	0.094 U	0.20 U	0.10 U	0.50 U	0.094 U	0.094 U	0.094 UJ	0.095 UJ
4,4'-DDE	ug/l	0.2		0.094 U	0.094 U	0.20 U	0.10 U	0.50 U	0.094 U	0.094 U	0.094 UJ	0.095 UJ
Endrin	ug/l	ND		0.094 U	0.094 U	0.20 U	0.10 U	0.50 U	0.094 U	0.094 U	0.094 UJ	0.095 UJ
Endosulfan II	ug/l			0.094 U	0.094 U	0.20 U	0.10 U	0.50 U	0.094 U	0.094 U	0.094 UJ	0.095 UJ
4,4'-DDD	ug/l	0.3		0.094 U	0.094 U	0.20 U	0.10 U	0.50 U	0.094 U	0.094 U	0.094 UJ	0.095 UJ
Endosulfan sulfate	ug/l			0.094 UJ	0.094 UJ	0.20 UJ	0.10 UJ	0.50 UJ	0.094 UJ	0.094 UJ	0.094 UJ	0.095 UJ
4,4'-DDT	ug/l	0.2		0.094 U	0.094 U	0.20 U	0.10 U	0.50 U	0.094 U	0.094 U	0.094 UJ	0.095 UJ
Methoxychlor	ug/l	35		0.047 U	0.047 U	1.0 U	0.50 U	2.5 U	0.047 U	0.047 U	0.047 UJ	0.48 UJ
Endrin ketone	ug/l			0.094 U	0.094 U	0.20 U	0.10 U	0.50 U	0.094 U	0.094 U	0.094 UJ	0.095 UJ
Endrin aldehyde	ug/l	5		0.094 U	0.094 U	0.20 U	0.10 U	0.50 U	0.094 U	0.094 U	0.094 UJ	0.095 UJ
alpha-Chlordane	ug/l	0.05		0.047 U	0.047 U	0.10 U	0.050 U	0.25 U	0.047 U	0.047 U	0.047 UJ	0.048 UJ
gamma-Chlordane	ug/l	0.05		0.047 U	0.047 U	0.10 U	0.050 U	0.25 U	0.047 U	0.047 U	0.047 UJ	0.048 UJ
Toxaphene	ug/l	0.06		4.7 U	4.7 U	10 U	5.0 U	25 U	4.7 U	4.7 U	4.7 UJ	4.8 UJ
Arochlor 1016	ug/l	0.09		0.94 U	0.94 U	2.0 U	1.0 U	5.0 U	0.94 U	0.94 U	0.94 UJ	0.95 UJ
Arochlor 1221	ug/l	0.09		1.9 U	1.9 U	4.0 U	2.0 U	10 U	1.9 U	1.9 U	1.9 UJ	1.9 UJ
Arochlor 1232	ug/l	0.09		0.94 U	0.94 U	2.0 U	1.0 U	5.0 U	0.94 U	0.94 U	0.94 UJ	0.95 UJ
Arochlor 1242	ug/l	0.09		0.94 U	0.94 U	2.0 U	1.0 U	5.0 U	0.94 U	0.94 U	0.94 UJ	0.95 UJ
Arochlor 1248	ug/l	0.09		0.94 U	0.94 U	2.0 U	1.0 U	5.0 U	0.94 U	0.94 U	0.94 UJ	0.95 UJ
Arochlor 1254	ug/l	0.09		0.94 U	0.94 U	2.0 U	1.0 U	5.0 U	0.94 U	0.94 U	0.94 UJ	0.95 UJ
Arochlor 1260	ug/l	0.09		0.94 U	0.94 U	2.0 U	1.0 U	5.0 U	0.94 U	0.94 U	0.94 UJ	0.95 UJ
Inorganics												
Aluminum	ug/l			93.9 BENJ	133 BENJ	2160 ENJ	1560 NEJ	218 ENJ	301 ENJ	544 ENJ	277 ENJ	388 ENJ
Antimony	ug/l	3		5.0 U	5.0 U	5.0 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Arsenic	ug/l	25		2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
Barium	ug/l	1000		40.9 B	34.8 B	96.6 B	102 B	139 B	57.2 B	109 BJ	156 B	153 B
Beryllium	ug/l		3	0.30 B	0.26 B	0.91 B	0.94 B	0.59 B	0.65 B	0.39 BJ	0.87 B	0.92 B
Cadmium	ug/l	5		0.34 U	0.34 U	0.37 B	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Calcium	ug/l			158000	164000	349000	386000	451000	347000	178000	457000	531000
Chromium	ug/l	50		0.65 U	0.65 U	3.1 B	1.9 B	0.65 U	0.65 U	0.65 U	0.65 ND	0.69 B
Cobalt	ug/l			0.86 U	0.86 U	2.8 B	3.1 B	1.0 B	0.86 U	0.86 U	1.3 B	5.1 B
Copper	ug/l	200		1.3 U E	1.3 U E	109 EN	102 E	1.3 U E	1.3 U E	1.3 U E	1.3 U E	3.5 BE
Iron	ug/l	300		4040	294	7540	5120	12000	847	6400	2500	854
Lead	ug/l	25		1.3 U NJ	1.3 U NJ	44.0 NJ	40.8 NJ	1.3 U NJ	1.3 BNJ	3.0 BNJ	1.3 U NJ	1.3 U NJ
Magnesium	ug/l		35000	11500	13300	44900	45800	14000	37300	24500	46900	47100
Manganese	ug/l	300		158	15.1	229	290	476	112	192	463	449
Mercury				0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.087 U	0.180 B
Nickel	ug/l	100		2.9 B	2.3 B	9.3 B	8.2 B	4.2 B	3.2 B	2.8 B	4.8 B	13.9 B
Potassium	ug/l			4660 B	3430 B	4570 B	2900 B	8420	5380 B	13100 B	3840 B	3120 B
Selenium	ug/l	10		5.0 U N	5.0 U N	5.0 U N	5 UN	5.0 U N	5.0 U N	5.0 U N	5.0 U N	5.0 U N
Silver	ug/l	50		0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
Sodium	ug/l	20000		92800	40300	415000	338000	89300	143000	307000	383000	340000

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Table 14 - Phase 1 Groundwater Data

Parameter	Units	NYSDEC Class GA		MW-1	MW-2	MW-3	MW-3 Dupe	MW-4	MW-5	MW-6	MW-7	MW-8
Sample Date		Standard	Guidance	*11/29/2004*								
Thallium	ug/l		0.5	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	[illegible]
Vanadium	ug/l			0.58 U	0.58 U	7.1 B	6.1 B	0.75 B	0.80 B	1.5 B	0.58 U	1.2 B
Zinc	ug/l		2000	7.1 B	2.6 B	63.4	61.4	17.5 B	9.0 B	13.7 B	17.0 B	59.8
Cyanide				40.0 U	40.0 U	40.0 U	40.0 U	40.0 U	40.0 U	40.0 U	40.0 U	40.0 U
pH	SU											
Total Hardness	mg/l											
Conductivity	umhos/cm											

Notes: **1000** - indicates detected value for organic - indicates value exceeds Class GA Standard or Guidance level.
ND = not detected, U = undetected, J or E = estimated value, RE = re-extraction

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 15 - Phase 2 Groundwater Data for Clay Unit Monitoring Wells

Parameter	Units	NYSDEC Class GA		MW-2D	MW-3D	MW-3D DL	MW-4D	MW-9D	MW-10D	MW-10D DL	MW-11D	MW-11D DL
Date Sampled		Standard	Guidance					1/31/2005				
Chloromethane	ug/l			10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
Bromomethane	ug/l			10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
Vinyl chloride	ug/l	2		10 U	170	800 U	10 U	6 J	32 J	32 DJ	830	830 D
Chloroethane	ug/l	5		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
Methylene chloride	ug/l	5		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
Acetone	ug/l		50	10 U	20 U	800 U	10 U	10 U	**8 J**	80 U	10 U	500 U
Carbon disulfide	ug/l	60		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
1,1-Dichloroethene	ug/l	5		10 U	10 J	800 U	10 U	10 U	10 U	80 U	26	500 U
1,1-Dichloroethane	ug/l	5		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
Chloroform	ug/l	7		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
1,2-Dichloroethane	ug/l	0.6		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
MEK(2-Butanone)	ug/l		50	**15**	20 U	800 U	**13**	10 U	10 U	80 U	10 U	500 U
1,1,1-Trichloroethane	ug/l	5		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
Carbon tetrachloride	ug/l	5		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
Bromodichloromethane	ug/l		50	10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
1,2-Dichloropropane	ug/l	1		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
cis-1,3-Dichloropropene	ug/l	0.4		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
Trichloroethene	ug/l	5		10 U	8 J	800 U	10 U	10 U	10 U	80 U	2,200	2,200 D
Dibromochloromethane	ug/l	5		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
1,1,2-Trichloroethane	ug/l	5		10 U	20 U	800 U	10 U	10 U	10 U	80 U	**2 J**	500 U
Benzene	ug/l	1		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
trans-1,3-Dichloropropene	ug/l	0.4		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
Bromoform	ug/l		50	10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
MIBK(4-Methyl-2-pentanone)	ug/l			10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
2-Hexanone	ug/l		50	10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
Tetrachloroethene	ug/l	5		10 U	8,800	8,800 D	10 U	**3 J**	**4 J**	80 U	6,800	6,800 D
Toluene	ug/l	5		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
1,1,2,2-Tetrachloroethane	ug/l	5		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
Chlorobenzene	ug/l	5		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
Ethylbenzene	ug/l	5		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
Styrene	ug/l	5		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
Total Xylenes	ug/l	5		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U

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Table 15 - Phase 2 Groundwater Data for Clay Unit Monitoring Wells

Parameter	Units	NYSDEC Class GA		MW-2D	MW-3D	MW-3D DL	MW-4D	MW-9D	MW-10D	MW-10D DL	MW-11D	MW-11D DL
Date Sampled		Standard	Guidance					1/31/2005				
Dichlorodifluoromethane	ug/l	5		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
Trichlorofluoromethane	ug/l	5		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
1,1,2-Tricloro-1,2,2,-triflouroethane	ug/l	5		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
trans-1,2-Dichloroethene	ug/l	5		10 U	71	800 U	10 U	10 U	26	46 DJ	130	150 DJ
Methyl tert butyl ether	ug/l	10		10 UJ	20 U	800 U	10 UJ	10 UJ	10 UJ	80 U	10 UJ	500 U
cis-1,2-Dichloroethene	ug/l	5		10 U	3,700	3,700 D	10 U	9 J	700	700 D	6,700	6,700 D
Cyclohexane	ug/l			10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
Methylcyclohexane	ug/l			10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
1,2-Dibromoethane	ug/l			10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
Isopropylbenzene	ug/l	5		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
1,3-Dichlorobenzene	ug/l	3		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
1,4-Dichlorobenzene	ug/l	3		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
1,2-Dichlorobenzene	ug/l	3		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
1,2-Dibromo-3-chloropropane	ug/l	0.04		10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U
1,2,4-Trichlorobenzene	ug/l	5		10 UJ	20 UJ	800 U	10 UJ	10 UJ	10 UJ	80 U	10 UJ	500 U
Methyl acetate	ug/l			10 U	20 U	800 U	10 U	10 U	10 U	80 U	10 U	500 U

Notes: **1,000** - indicates detected value for organics. - indicates value exceeds Class GA Standard or Guidance level.

U = undetected, J or E = estimated value, RE = re-extraction, D = result on diluted samples

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 16 - Phase 2 Groundwater Data for Temporary Interior Monitoring Wells

Parameter	Units	NYSDEC Class GA Standard	NYSDEC Class GA Guidance	SB 2-1 03/21/05	SB 3-1 03/21/05	SB 7-1 03/21/05	SB 9-1 03/21/05	SB 12-1 03/21/05	SB 12-1 DL 03/21/05	SB 13-2 03/22/05	SB 13-2 DL 03/22/05
Volatiles											
Chloromethane	ug/l			10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
Bromomethane	ug/l			10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
Vinyl chloride	ug/l	2		10 U	10 U	10 U	10 U	820	820 D	3300	3,300 U
Chloroethane	ug/l	5		10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	200 U	10 U	250 U
Methylene chloride	ug/l	5		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
Acetone	ug/l		50	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
Carbon disulfide	ug/l	60		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
1,1-Dichloroethene	ug/l	5		10 U	10 U	10 U	10 U	7 J	200 U	70	250 U
1,1-Dichloroethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
Chloroform	ug/l	7		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
1,2-Dichloroethane	ug/l	0.6		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
MEK(2-Butanone)	ug/l		50	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
1,1,1-Trichloroethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
Carbon tetrachloride	ug/l	5		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
Bromodichloromethane	ug/l		50	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
1,2-Dichloropropane	ug/l	1		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
cis-1,3-Dichloropropene	ug/l	0.4		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
Trichloroethene	ug/l	5		10 U	10 U	10 U	10 U	22	200 U	280	280 D
Dibromochloromethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
1,1,2-Trichloroethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
Benzene	ug/l	1		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
trans-1,3-Dichloropropene	ug/l	0.4		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
Bromoform	ug/l		50	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
MIBK(4-Methyl-2-pentanone)	ug/l			10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
2-Hexanone	ug/l		50	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
Tetrachloroethene	ug/l	5		10 U	10 U	10 U	10 U	14	200 U	340	340 D
Toluene	ug/l	5		10 U	10 U	10 U	10 U	10 U	200 U	**4 J**	250 U
1,1,2,2-Tetrachloroethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
Chlorobenzene	ug/l	5		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
Ethylbenzene	ug/l	5		10 U	10 U	10 U	10 U	10 U	200 U	**2 J**	250 U
Styrene	ug/l	5		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
Total Xylenes	ug/l	5		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U

Pioneer Midler Avenue LLC
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Table 16 - Phase 2 Groundwater Data for Temporary Interior Monitoring Wells

Parameter	Units	NYSDEC Class GA		SB 2-1	SB 3-1	SB 7-1	SB 9-1	SB 12-1	SB 12-1 DL	SB 13-2	SB 13-2 DL
		Standard	Guidance	03/21/05	03/21/05	03/21/05	03/21/05	03/21/05	03/21/05	03/22/05	03/22/05
Dichlorodifluoromethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
Trichlorofluoromethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
1,1,2-Tricloro-1,2,2,-triflouroethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
trans-1,2-Dichloroethene	ug/l	5		10 U	10 U	10 U	10 U	25	200 U	190	200 D
Methyl tert butyl ether	ug/l	10		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
cis-1,2-Dichloroethene	ug/l	5		10 U	10 U	10 U	**3 J**	2,100	**2,100 D**	24,000	14,000 D
Cyclohexane	ug/l			10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
Methylcyclohexane	ug/l			10 U	10 U	10 U	10 U	10 U	200 U	**3 J**	250 U
1,2-Dibromoethane	ug/l			10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
Isopropylbenzene	ug/l	5		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
1,3-Dichlorobenzene	ug/l	3		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
1,4-Dichlorobenzene	ug/l	3		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
1,2-Dichlorobenzene	ug/l	3		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
1,2-Dibromo-3-chloropropane	ug/l	0.04		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
1,2,4-Trichlorobenzene	ug/l	5		10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U
Methyl acetate	ug/l			10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U

Notes:
Indicates value exceeds Class GA Standard or Guidance level. -
U = undetected, J or E = estimated value, RE = re-extraction, D = result on diluted samples
BOLD font indicates detected value for organics.

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Table 16 - Phase 2 Groundwater Data for Temporary Interior Monitoring Wells

Parameter	Units	NYSDEC Class GA		SB 13-2 DL2		SB 13-4		SB 13-4 DL	
		Standard	Guidance	03/22/05		03/22/05		03/22/05	
Volatiles									
Chloromethane	ug/l			2,000	U	10	U	200	U
Bromomethane	ug/l			2,000	U	10	U	200	U
Vinyl chloride	ug/l	2		3,900	D	1,500		1,500	D
Chloroethane	ug/l	5		2,000	U	10	U	200	U
Methylene chloride	ug/l	5		2,000	U	10	U	200	U
Acetone	ug/l		50	2,000	U	10	U	200	U
Carbon disulfide	ug/l	60		2,000	U	10	U	200	U
1,1-Dichloroethene	ug/l	5		2,000	U	10	U	200	U
1,1-Dichloroethane	ug/l	5		2,000	U	10	U	200	U
Chloroform	ug/l	7		2,000	U	10	U	200	U
1,2-Dichloroethane	ug/l	0.6		2,000	U	10	U	200	U
MEK(2-Butanone)	ug/l		50	2,000	U	10	U	200	U
1,1,1-Trichloroethane	ug/l	5		2,000	U	10	U	200	U
Carbon tetrachloride	ug/l	5		2,000	U	10	U	200	U
Bromodichloromethane	ug/l		50	2,000	U	10	U	200	U
1,2-Dichloropropane	ug/l	1		2,000	U	10	U	200	U
cis-1,3-Dichloropropene	ug/l	0.4		2,000	U	10	U	200	U
Trichloroethene	ug/l	5		2,000	U	6	J	200	U
Dibromochloromethane	ug/l	5		2,000	U	10	U	200	U
1,1,2-Trichloroethane	ug/l	5		2,000	U	10	U	200	U
Benzene	ug/l	1		2,000	U	10	U	200	U
trans-1,3-Dichloropropene	ug/l	0.4		2,000	U	10	U	200	U
Bromoform	ug/l		50	2,000	U	10	U	200	U
MIBK(4-Methyl-2-pentanone)	ug/l			2,000	U	10	U	200	U
2-Hexanone	ug/l		50	2,000	U	10	U	200	U
Tetrachloroethene	ug/l	5		2,000	U	10	U	200	U
Toluene	ug/l	5		2,000	U	10	U	200	U
1,1,2,2-Tetrachloroethane	ug/l	5		2,000	U	10	U	200	U
Chlorobenzene	ug/l	5		2,000	U	10	U	200	U
Ethylbenzene	ug/l	5		2,000	U	10	U	200	U
Styrene	ug/l	5		2,000	U	10	U	200	U
Total Xylenes	ug/l	5		2,000	U	10	U	200	U

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Table 16 - Phase 2 Groundwater Data for Temporary Interior Monitoring Wells

Parameter	Units	NYSDEC Class GA		SB 13-2 DL2		SB 13-4		SB 13-4 DL	
		Standard	Guidance	03/22/05		03/22/05		03/22/05	
Dichlorodifluoromethane	ug/l	5		2,000	U	10	U	200	U
Trichlorofluoromethane	ug/l	5		2,000	U	10	U	200	U
1,1,2-Tricloro-1,2,2,-triflouroethane	ug/l	5		2,000	U	10	U	200	U
trans-1,2-Dichloroethene	ug/l	5		2,000	U	16		200	U
Methyl tert butyl ether	ug/l	10		2,000	U	10	U	200	U
cis-1,2-Dichloroethene	ug/l	5		24,000	D	1,000	J	1,000	BD
Cyclohexane	ug/l			2,000	U	10	U	200	U
Methylcyclohexane	ug/l			2,000	U	10	U	200	U
1,2-Dibromoethane	ug/l			2,000	U	10	U	200	U
Isopropylbenzene	ug/l	5		2,000	U	10	U	200	U
1,3-Dichlorobenzene	ug/l	3		2,000	U	10	U	200	U
1,4-Dichlorobenzene	ug/l	3		2,000	U	10	U	200	U
1,2-Dichlorobenzene	ug/l	3		2,000	U	10	U	200	U
1,2-Dibromo-3-chloropropane	ug/l	0.04		2,000	U	10	U	200	U
1,2,4-Trichlorobenzene	ug/l	5		2,000	U	10	U	200	U
Methyl acetate	ug/l			2,000	U	10	U	200	U

Notes:
- indicates value exceeds Class GA Standard or Guidance level -

U = undetected, J or E = estimated value, RE = re-extraction, D = result on diluted samples

BOLD font indicates detected value for organics.

Pioneer Midler Avenue LLC
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Table 17 - Phase 3 Groundwater Data for Temporary Sand Unit Wells to Till

Parameter	Units	NYSDEC Class GA Standard	NYSDEC Class GA Guidance	DW-1 (32'-32.2') 07/27/05	DW-1 (35.8'-37') 07/27/05	DW-2 (44.5') 07/25/05	DW-3 (56.2'-57.2') 07/26/05	DW-4 (27.5'-28') 07/28/05	DW-4 (31'-32') 07/28/05	DW-4 (39.5'-43.1') 07/28/05
VOLATILES										
Chloromethane	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl chloride	ug/l	2		10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U
Acetone	ug/l		50	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	ug/l	60		5 U	5 U	10 U	10 U	5 U	5 U	5 U
1,1-Dichloroethene	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U
1,1-Dichloroethane	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U
Chloroform	ug/l	7		5 U	5 U	10 U	10 U	5 U	5 U	5 U
1,2-Dichloroethane	ug/l	0.6		5 U	5 U	10 U	10 U	5 U	5 U	5 U
MEK(2-Butanone)	ug/l		50	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U
Carbon tetrachloride	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U
Bromodichloromethane	ug/l		50	5 U	5 U	10 U	10 U	5 U	5 U	5 U
1,2-Dichloropropane	ug/l	1		5 U	5 U	10 U	10 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	ug/l	0.4		5 U	5 U	10 U	10 U	5 U	5 U	5 U
Trichloroethene	ug/l	5		5 U	5 U	4.6 J	10 U	5 U	5 U	5 U
Dibromochloromethane	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U
1,1,2-Trichloroethane	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U
Benzene	ug/l	1		5 U	5 U	10 U	10 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	ug/l	0.4		5 U	5 U	10 U	10 U	5 U	5 U	5 U
Bromoform	ug/l		50	5 U	5 U	10 U	10 U	5 U	5 U	5 U
MIBK(4-Methyl-2-pentanone)	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	ug/l		50	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	ug/l	5		5 U	5 U	11	10 U	5 U	5 U	5 U
Toluene	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U
Chlorobenzene	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U
Ethylbenzene	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U
Styrene	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U
Total Xylenes	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U
Dichlorodifluoromethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichlorofluoromethane	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U
1,1,2-Tricloro-1,2,2,-triflouroethane	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U
trans-1,2-Dichloroethene	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U
Methyl tert butyl ether	ug/l	10		5 U	5 U	10 U	10 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	ug/l	5		5 U	5 U	39	10 U	5 U	5 U	5 U
Cyclohexane	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylcyclohexane	ug/l			5 U	5 U	10 U	10 U	5 U	5 U	5 U
1,2-Dibromoethane	ug/l			5 U	5 U	10 U	10 U	5 U	5 U	5 U
Isopropylbenzene	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U
1,3-Dichlorobenzene	ug/l	3		5 U	5 U	10 U	10 U	5 U	5 U	5 U
1,4-Dichlorobenzene	ug/l	3		5 U	5 U	10 U	10 U	5 U	5 U	5 U
1,2-Dichlorobenzene	ug/l	3		5 U	5 U	10 U	10 U	5 U	5 U	5 U
1,2-Dibromo-3-chloropropane	ug/l	0.04		10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U
Methyl acetate	ug/l			5 U	5 U	10 U	10 U	5 U	5 U	5 U
CHLORIDE	mg/L	250		352**	342**	650*	310*	25.2**	30.2**	201**

Notes: - indicates detected value for organics exceeds Standard or Guidance value.
U = undetected, J or E = estimated value, RE = re-extraction, D = result on diluted samples
* = as performed by test method SM18 4500Cl
** = as performed by test method E325.3

Pioneer Midler Avenue LLC
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Table 18 - Phase 3 Groundwater Data for Permanent Sand Unit Wells to Till

Parameter	Units	NYSDEC Class GA		DAW-1	DAW-2	DAW-3
		Standard	Guidance	08/30/05	08/30/05	08/30/05
VOLATILES						
Chloromethane	ug/l			10 U	10 U	10 U
Bromomethane	ug/l			10 U	10 U	10 U
Vinyl chloride	ug/l	2		10 U	10 U	10 U
Chloroethane	ug/l	5		10 U	10 U	10 U
Methylene chloride	ug/l	5		10 U	10 U	10 U
Acetone	ug/l		50	10 U	10 U	10 U
Carbon disulfide	ug/l	60		10 U	10 U	10 U
1,1-Dichloroethene	ug/l	5		10 U	10 U	10 U
1,1-Dichloroethane	ug/l	5		10 U	10 U	10 U
Chloroform	ug/l	7		10 U	10 U	10 U
1,2-Dichloroethane	ug/l	0.6		10 U	10 U	10 U
MEK(2-Butanone)	ug/l		50	10 U	10 U	10 U
1,1,1-Trichloroethane	ug/l	5		10 U	10 U	10 U
Carbon tetrachloride	ug/l	5		10 U	10 U	10 U
Bromodichloromethane	ug/l		50	10 U	10 U	10 U
1,2-Dichloropropane	ug/l	1		10 U	10 U	10 U
cis-1,3-Dichloropropene	ug/l	0.4		10 U	10 U	10 U
Trichloroethene	ug/l	5		10 U	3 J	10 U
Dibromochloromethane	ug/l	5		10 U	10 U	10 U
1,1,2-Trichloroethane	ug/l	5		10 U	10 U	10 U
Benzene	ug/l	1		10 U	10 U	10 U
trans-1,3-Dichloropropene	ug/l	0.4		10 U	10 U	10 U
Bromoform	ug/l		50	10 U	10 U	10 U
MIBK(4-Methyl-2-pentanone)	ug/l			10 U	10 U	10 U
2-Hexanone	ug/l		50	10 U	10 U	10 U
Tetrachloroethene	ug/l	5		10 U	**10**	10 U
Toluene	ug/l	5		10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	ug/l	5		10 U	10 U	10 U
Chlorobenzene	ug/l	5		10 U	10 U	10 U
Ethylbenzene	ug/l	5		10 U	10 U	10 U
Styrene	ug/l	5		10 U	10 U	10 U
Total Xylenes	ug/l	5		10 U	10 U	10 U
Dichlorodifluoromethane	ug/l	5		10 U	10 U	10 U
Trichlorofluoromethane	ug/l	5		10 U	10 U	10 U
1,1,2-Tricloro-1,2,2,-triflouroethane	ug/l	5		10 U	10 U	10 U
trans-1,2-Dichloroethene	ug/l	5		10 U	10 U	10 U
Methyl tert butyl ether	ug/l	10		10 U	10 U	10 U
cis-1,2-Dichloroethene	ug/l	5		10 U	**24**	10 U
Cyclohexane	ug/l			10 U	10 U	10 U
Methylcyclohexane	ug/l			10 U	10 U	10 U
1,2-Dibromoethane	ug/l			10 U	10 U	10 U
Isopropylbenzene	ug/l	5		10 U	10 U	10 U
1,3-Dichlorobenzene	ug/l	3		10 U	10 U	10 U
1,4-Dichlorobenzene	ug/l	3		10 U	10 U	10 U
1,2-Dichlorobenzene	ug/l	3		10 U	10 U	10 U
1,2-Dibromo-3-chloropropane	ug/l	0.04		10 U	10 U	10 U
1,2,4-Trichlorobenzene	ug/l	5		10 U	10 U	10 U
Methyl acetate	ug/l			10 U	10 U	10 U
CHLORIDE	mg/L	250		290*	640*	230*

Notes: **BOLD** - indicates detected value for organics exceeds Standard or Guidance value.
U = undetected, J or E = estimated value
* = as performed by test method SM18 4500Cl

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Table 19 - Data for Post-IRM Conditions - B3 Area

Sample ID ->	Midler	VB3 - 1	VB3 - 1	VB3 - 1 DL	VB3 - 2	VB3 - 3	VB3 - 4 DL	VB3 - 5	VB3 - 6	VB3 - 7	VB3 - 7	VB3 - 8	VB3 - 9
Depth - >	SSCO	5.9 - 9.9	5.9 - 9.9	5.9 - 9.9	16.1 - 20.1	18.1 - 22.1	8 - 12	7 - 11	7 - 11	7 - 9	9 - 11.6	7.3 - 11.3	8.75 - 12.75
Date Sampled ->		03/08/07	08/03/07	08/03/07	05/07/07	03/08/07	03/08/07	05/07/07	05/07/07	06/06/07	06/06/07	05/07/07	03/07/07
Chloromethane		18 UJ	200 U	4900 U	1,500 U	12 UJ	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 UJ
Vinyl chloride	800	65 J	200 U	4900 U	1,500 U	12 UJ	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	6 J
Bromomethane		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
Chloroethane		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
1,1-Dichloroethene		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
Carbon disulfide		6 J	200 U	4900 U	1,500 U	2 J	2,400 U	19 J	3,500 U	2,800 U	2,400 U	3,100 U	7 J
Acetone		580	5700 EJ	4700 J	2,000	130 B	5,600 D	12,000 BEJ	14,000	38,000 J	15,000	28,000	2,900 BE
Methylene chloride		18 UJ	100 U	120 U	1,500 U	12 UJ	2,400 U	100 U	3,500 U	2,800 U	2,400 U	3,100 U	20 UJ
1,1-Dichloroethane		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
2-Butanone		70	1200 U	4900 U	820 J	31	1,700 DJ	2,600 EJ	3,500	7,200 J	3,200	8,300	2,200 J
Chloroform		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
1,1,1-Trichloroethane		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
Carbon tetrachloride		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
Benzene		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
1,2-Dichloroethane		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
Trichloroethene	2,800	140	850	700 J	760 J	4 J	2,400 U	18 J	3,500 U	1,200 J	2,400 U	3,100 U	150
1,2-Dichloropropane		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
Bromodichloromethane		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
cis-1,3-Dichloropropene		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
4-Methyl-2-pentanone		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	8 J
Toluene		18 U	16 U	4900 U	1,500 U	12 U	2,400 U	13 J	3,500 U	2,800 U	2,400 U	3,100 U	48
trans-1,3-Dichloropropene		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
1,1,2-Trichloroethane		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
Tetrachloroethene	5,600	150	43000 EJ	57000	4,400	9 J	2,400 U	130	1,100 J	11,000	860 J	10,000	280
2-Hexanone		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20
Dibromochloromethane		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
Chlorobenzene		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
Ethylbenzene		18 U	13 J	4900 J	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
Styrene		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
Bromoform		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
1,1,2,2-Tetrachloroethane		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
Total Xylenes		18 U	80 J	4900 J	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	130
cis-1,2-Dichloroethene		170	660	380 J	240 J	5 J	4,700 D	26 J	3,500 U	760 J	2,400 U	3,100 U	1,800 J
trans-1,2-Dichloroethene	1,200	44	11 J	4900 J	1,500 U	12 U	650 JD	98 U	3,500 U	2,800 U	2,400 U	3,100 U	14 J
Dichlorodifluoromethane		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
Trichlorofluoromethane		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
1,1,2-Trichloro-1,2,2-trifluoroethane		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
Methyl-t-butyl ether (MTBE)		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
1,2-Dibromoethane		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
Isopropylbenzene		18 U	8.3 J	4900 J	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
1,3-Dichlorobenzene		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
1,4-Dichlorobenzene		18 U	13 J	4900 J	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
1,2-Dichlorobenzene		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
1,2-Dibromo-3-chloropropane		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
1,2,4-Trichlorobenzene		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
Methyl acetate		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
Cyclohexane		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U
Methylcyclohexane		18 U	200 U	4900 U	1,500 U	12 U	2,400 U	98 U	3,500 U	2,800 U	2,400 U	3,100 U	20 U

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Table 19 - Data for Post-IRM Conditions - B3 Area

Sample ID ->	Midler	VB3 - 10	VB3 - 11	VB3 - 12	VB3 - 13	VB3 - 14	VB3 - 15	VB3 - 16 DL	VB3 - 17	VB3 - 18	VB3 - 19	VB3 - 20
Depth - >	SSCO	14.5 - 18.5	10.5 - 14.5	14.8 - 18.8	7.25 - 11.25	15.1 - 19.1	17.1 - 21.1	14.4 - 18.4	14.9 - 18.9	14.9 - 18.9	15.6 - 19.6	16.9 - 20.9
Date Sampled ->		05/21/07	05/07/07	06/06/07	03/08/07	06/06/07	05/08/07	03/09/07	05/07/07	05/08/07	06/06/07	05/08/07
Chloromethane		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Vinyl chloride	800	1,900 U	33 U	2,200 U	96 U	240 J	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Bromomethane		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	290 DJ	2,200 U	1,700 U	2,200 U	2,000 U
Chloroethane		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
1,1-Dichloroethene		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Carbon disulfide		1,900 U	11 J	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Acetone		10,000 U	3200 J	15,000 J	5600	8700 J	7,600	870 DJ	7,600	5,500	17,000 J	11,000
Methylene chloride		35 U	34 B	2,200 U	140 U	2300 U	1,700 U	240 DJ	2,200 U	1,700 U	2,200 U	2,000 U
1,1-Dichloroethane		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
2-Butanone		2,200	660	4,100 J	2000 E	2500 J	3,000	420 DJ	2,200	2,400	4,700 J	4,400
Chloroform		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
1,1,1-Trichloroethane		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Carbon tetrachloride		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Benzene		1,900 U	33 U	2,200 U	17 J	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
1,2-Dichloroethane		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Trichloroethene	2,800	1,900 U	33 U	6,700	220	3400	1,700 U	1,800 U	2,200 U	720 J	1,600 J	2,000 U
1,2-Dichloropropane		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Bromodichloromethane		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
cis-1,3-Dichloropropene		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
4-Methyl-2-pentanone		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Toluene		1,900 U	33 U	2,200 U	48 J	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
trans-1,3-Dichloropropene		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
1,1,2-Trichloroethane		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Tetrachloroethene	5,600	4,100	160	31,000	320	19000	2,600	2,000 D	17,000	7,400	5,700	4,900
2-Hexanone		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Dibromochloromethane		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Chlorobenzene		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Ethylbenzene		1,900 U	33 U	2,200 U	130	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Styrene		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Bromoform		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
1,1,2,2-Tetrachloroethane		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Total Xylenes		1,900 U	33 U	2,200 U	100	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
cis-1,2-Dichloroethene		1,900 U	33 U	5,700	3100	1800 J	1,700 U	1,800 U	2,200 U	890 J	2,300	2,000 U
trans-1,2-Dichloroethene	1,200	1,900 U	33 U	2,200 U	31 J	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	1,900 J	2,000 U
Dichlorodifluoromethane		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Trichlorofluoromethane		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
1,1,2-Trichloro-1,2,2-trifluoroethane		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Methyl-t-butyl ether (MTBE)		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
1,2-Dibromoethane		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Isopropylbenzene		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
1,3-Dichlorobenzene		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
1,4-Dichlorobenzene		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
1,2-Dichlorobenzene		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
1,2-Dibromo-3-chloropropane		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
1,2,4-Trichlorobenzene		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Methyl acetate		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Cyclohexane		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U
Methylcyclohexane		1,900 U	33 U	2,200 U	96 U	2300 U	1,700 U	1,800 U	2,200 U	1,700 U	2,200 U	2,000 U

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Table 19 - Data for Post-IRM
Conditions - B3 Area

Sample ID ->	Midler	VB3 - 21	VB3 - 22	VB3 - 23	VB3 - 24	VB3 - 25	VB3 - 25 DL	VB3 - 25	VB3 - 25 DL	VB3 - 26 DL
Depth - >	SSCO	16.9 - 20.9	16 - 20	16.6 - 20.6	16.9 - 20.9	15.8 - 19.8	15.8 - 19.8	15.8 - 19.8	15.8 - 19.8	15.4 - 19.4
Date Sampled ->		05/08/07	05/08/07	05/21/07	05/08/07	08/03/07	08/03/07	08/28/07	08/28/07	03/07/07
Chloromethane		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
Vinyl chloride	800	71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
Bromomethane		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
Chloroethane		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
1,1-Dichloroethene		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
Carbon disulfide		14 J	2,200 U	2,600 U	2,200 U	22 JJ	1,800 U	170 U	2,000 U	12 DJ
Acetone		13,000 BEJ	13,000	23,000 B	7,200	2,300 J	2,300 J	5,600 BEJ	5,900 J	1,200 BD
Methylene chloride		66 U	2,200 U	79 U	2,200 U	77 UJ	26 U	44 U	48 U	62 BDJ
1,1-Dichloroethane		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
2-Butanone		3,200 EJ	4,400	7,400	3,000	750 J	1,800 JB	2,400	2,000 JB	360 D
Chloroform		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
1,1,1-Trichloroethane		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
Carbon tetrachloride		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
Benzene		71 U	2,200 U	2,600 U	2,200 U	3 UJ	1,800 U	5.6 J	2,000 U	90 U
1,2-Dichloroethane		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
Trichloroethene	2,800	71 U	2,200 U	2,900	770 J	3,000 J	3,200	590 U	740 J	360 D
1,2-Dichloropropane		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
Bromodichloromethane		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
cis-1,3-Dichloropropene		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
4-Methyl-2-pentanone		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
Toluene		71 U	2,200 U	62 J	2,200 U	15 UJ	1,800 U	14 U	2,000 U	90 U
trans-1,3-Dichloropropene		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
1,1,2-Trichloroethane		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
Tetrachloroethene	5,600	40 J	1,600 J	3,700	8,000	21,000 EJ	31,000	6,100 EJ	8,200 B	90 U
2-Hexanone		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	26 J	2,000 U	90 U
Dibromochloromethane		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
Chlorobenzene		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
Ethylbenzene		71 U	2,200 U	2,600 U	2,200 U	4 UJ	1,800 U	170 U	2,000 U	90 U
Styrene		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
Bromoform		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
1,1,2,2-Tetrachloroethane		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
Total Xylenes		71 U	2,200 U	190 J	2,200 U	49 J	35 J	35 J	47 J	90 U
cis-1,2-Dichloroethene		71 U	2,200 U	3,300	430 J	270 J	210 J	290	210 J	380 D
trans-1,2-Dichloroethene	1,200	71 U	2,200 U	2,600 U	2,200 U	2 JMJ	1,800 U	170 U	2,000 U	110 D
Dichlorodifluoromethane		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
Trichlorofluoromethane		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
1,1,2-Trichloro-1,2,2-trifluoroethane		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
Methyl-t-butyl ether (MTBE)		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
1,2-Dibromoethane		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
Isopropylbenzene		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
1,3-Dichlorobenzene		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
1,4-Dichlorobenzene		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
1,2-Dichlorobenzene		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
1,2-Dibromo-3-chloropropane		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
1,2,4-Trichlorobenzene		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
Methyl acetate		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
Cyclohexane		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U
Methylcyclohexane		71 U	2,200 U	2,600 U	2,200 U	150 UJ	1,800 U	170 U	2,000 U	90 U

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Table 19 - Data for Post-IRM
Conditions - MW-3D Area

Sample ID ->	Midler	V3D - 1 DL	V3D - 2 DL	V3D - 3	V3D - 4	V3D - 5
Depth - >	SSCO	15.1 - 19.1	10.5 - 14.5	14.3 - 18.3	10.75 - 14.75	14.4 - 18.4
Date Sampled ->		7/2/2007	3/5/2007	06/07/07	05/08/07	06/07/07
Chloromethane		170 U	81 U	2,200 U	80 U	2,200 U
Vinyl chloride	800	170 U	640 D	2,200 U	9 J	2,200 U
Bromomethane		170 U	81 U	2,200 U	80 U	2,200 U
Chloroethane		170 U	81 U	2,200 U	80 U	2,200 U
1,1-Dichloroethene		170 U	81 U	2,200 U	80 U	2,200 U
Carbon disulfide		170 U	13 DJ	2,200 U	15 J	2,200 U
Acetone		2,800 B	170 BD	9,400 J	8,200 BEJ	13,000 J
Methylene chloride		120 U	140 BD	420 U	25 J	410 U
1,1-Dichloroethane		170 U	81 U	2,200 U	80 U	2,200 U
2-Butanone		860	33 DJ	2,000 J	3,100 EJ	4,000 J
Chloroform		170 U	81 U	2,200 U	80 U	2,200 U
1,1,1-Trichloroethane		170 U	81 U	2,200 U	80 U	2,200 U
Carbon tetrachloride		170 U	81 U	2,200 U	80 U	2,200 U
Benzene		2.9 J	81 U	2,200 U	80 U	2,200 U
1,2-Dichloroethane		170 U	81 U	2,200 U	80 U	2,200 U
Trichloroethene	2,800	55 J	14 DJ	2,200 U	80 U	2,200 U
1,2-Dichloropropane		170 U	81 U	2,200 U	80 U	2,200 U
Bromodichloromethane		170 U	81 U	2,200 U	80 U	2,200 U
cis-1,3-Dichloropropene		170 U	81 U	2,200 U	80 U	2,200 U
4-Methyl-2-pentanone		170 U	81 U	2,200 U	16 J	2,200 U
Toluene		18 J	81 U	2,200 U	46 J	2,200 U
trans-1,3-Dichloropropene		170 U	81 U	2,200 U	80 U	2,200 U
1,1,2-Trichloroethane		170 U	81 U	2,200 U	80 U	2,200 U
Tetrachloroethene	5,600	2,200	81 U	6,100	14 J	5,900
2-Hexanone		20 J	81 U	2,200 U	28 J	2,200 U
Dibromochloromethane		170 U	81 U	2,200 U	80 U	2,200 U
Chlorobenzene		170 U	81 U	2,200 U	80 U	2,200 U
Ethylbenzene		170 U	81 U	2,200 U	80 U	2,200 U
Styrene		170 U	81 U	2,200 U	80 U	2,200 U
Bromoform		170 U	81 U	2,200 U	80 U	2,200 U
1,1,2,2-Tetrachloroethane		170 U	81 U	2,200 U	80 U	2,200 U
Total Xylenes		37 J	81 U	2,200 U	77 J	2,200 U
cis-1,2-Dichloroethene		170 U	190 D	2,200 U	470	2,200 U
trans-1,2-Dichloroethene	1,200	170 U	28 DJ	2,200 U	36 J	2,200 U
Dichlorodifluoromethane		170 U	81 U	2,200 U	80 U	2,200 U
Trichlorofluoromethane		170 U	81 U	2,200 U	80 U	2,200 U
1,1,2-Trichloro-1,2,2-trifluoroethane		170 U	81 U	2,200 U	80 U	2,200 U
Methyl-t-butyl ether (MTBE)		170 U	81 U	2,200 U	80 U	2,200 U
1,2-Dibromoethane		170 U	81 U	2,200 U	80 U	2,200 U
Isopropylbenzene		170 U	81 U	2,200 U	80 U	2,200 U
1,3-Dichlorobenzene		170 U	81 U	2,200 U	80 U	2,200 U
1,4-Dichlorobenzene		170 U	81 U	2,200 U	80 U	2,200 U
1,2-Dichlorobenzene		170 U	81 U	2,200 U	80 U	2,200 U
1,2-Dibromo-3-chloropropane		170 U	81 U	2,200 U	80 U	2,200 U
1,2,4-Trichlorobenzene		170 U	81 U	2,200 U	80 U	2,200 U
Methyl acetate		170 U	81 U	2,200 U	80 U	2,200 U
Cyclohexane		170 U	81 U	2,200 U	80 U	2,200 U
Methylcyclohexane		170 U	81 U	2,200 U	80 U	2,200 U

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Table 19 - Data for Post-IRM
Conditions - B-1 Area

Sample ID ->	Midler	VB1 - 1	VB1 - 2	VB1 - 3	VB1 - 3 DL	VB1 - 3 DL	VB1 - 4 DL	VB1 - 5	VB1 - 6	VB1 - 7	VB1 - 8 DL	VB1 - 9	VB1 - 10	VB1 - 10 DL	VB1 - 11	VB1 - 11 DL	VB1 - 12
Depth - >	SSCO	16.0 - 20.0	12.9 - 16.9	5.5 - 9.5	5.5 - 9.5	5.5 - 9.5	16.8 - 20.8	16.0 - 20.0	3.9 - 7.9	15.8 - 19.8	15.4 - 19.4	11.6 - 15.6	12.7 - 16.7	12.7 - 16.7	16.4 - 20.4	16.4 - 20.4	15.9 - 19.9
Date Sampled ->		03/16/07	03/16/07	08/03/07	08/03/07	09/04/07	03/16/07	03/16/07	05/10/07	06/07/07	08/20/07	06/07/07	08/03/07	08/03/07	08/03/07	08/03/07	08/10/07
Chloromethane		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
Vinyl chloride	800	90 U	9 J	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
Bromomethane		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
Chloroethane		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
1,1-Dichloroethene		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
Carbon disulfide		28 J	4 J	200 U	4,900 U	2,800 U	120 U	5 J	17 J	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	14 J
Acetone		1,300 U	41 U	5,700 EJ	4,700 J	7,400	84 BJD	140 B	14,000 BEJ	36,000 J	15,000 U	10,000 J	4,100 EJ	3,700	22,000 EJ	16,000	3,700 BEJ
Methylene chloride		200 U	42 U	100 U	120 U	300 U	260 BD	28 U	130	920 U	85 U	840 U	90 U	40 U	79 U	2,200 U	26 U
1,1-Dichloroethane		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
2-Butanone		580	18 U	1,200	4,900 U	2,800 U	28 DJ	50	3,000 EJ	12,000 J	5,600	2,400 J	1,200 J	2,100 U	8,100 EJ	5,100	2,300
Chloroform		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
1,1,1-Trichloroethane		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
Carbon tetrachloride		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
Benzene		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	2 J	2,100 U	7 J	2,200 U	11 J
1,2-Dichloroethane		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
Trichloroethene	2,800	100	4 J	850	700 J	7,200	450 D	35	12 J	1,800 J	130 J	1,800 U	32 J	2,100 U	73 J	2,200 U	130 J
1,2-Dichloropropane		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
Bromodichloromethane		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
cis-1,3-Dichloropropene		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
4-Methyl-2-pentanone		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	20 J	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
Toluene		90 U	18 U	16 U	4,900 U	2,800 U	120 U	23 U	20 J	2,100 U	2,100 U	1,800 U	9 U	2,100 U	42 U	2,200 U	47 U
trans-1,3-Dichloropropene		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
1,1,2-Trichloroethane		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
Tetrachloroethene	5,600	67 J	18 U	43,000 EJ	57,000	16,000	170 D	7 J	240	6,100	6,500	5,000 U	4,200 EJ	3,300	4,000 EJ	4,900	1,800
2-Hexanone		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	19 J	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	41 J
Dibromochloromethane		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
Chlorobenzene		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
Ethylbenzene		90 U	18 U	13 J	4,900 J	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
Styrene		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
Bromoform		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
1,1,2,2-Tetrachloroethane		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
Total Xylenes		90 U	18 U	80 J	4,900 J	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	16 J	2,100 U	65 J	59 J	80 J
cis-1,2-Dichloroethene		450	88	660	380 J	770	1,100 D	200	13 J	2,200	2,100 U	1,800 U	12 J	2,100 U	41 J	2,200 U	6,600 EJ
trans-1,2-Dichloroethene	1,200	21 J	14 J	11 J	4,900 J	2,800 U	23 DJ	27	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	100 J
Dichlorodifluoromethane		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
Trichlorofluoromethane		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
1,1,2-Trichloro-1,2,2-trifluoroethane		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
Methyl-t-butyl ether (MTBE)		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
1,2-Dibromoethane		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
Isopropylbenzene		90 U	18 U	8 J	4,900 J	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
1,3-Dichlorobenzene		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
1,4-Dichlorobenzene		90 U	18 U	13 J	4,900 J	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
1,2-Dichlorobenzene		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
1,2-Dibromo-3-chloropropane		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
1,2,4-Trichlorobenzene		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
Methyl acetate		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	460 J	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
Cyclohexane		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	100 U	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U
Methylcyclohexane		90 U	18 U	200 U	4,900 U	2,800 U	120 U	23 U	21 J	2,100 U	2,100 U	1,800 U	170 U	2,100 U	180 U	2,200 U	160 U

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Table 19 - Data for Post-IRM Conditions - B-1 Area

Sample ID ->	Midler	VB1 - 13	VB1 - 14	VB1 - 14 DL	VB1 - 14 DL2	VB1 - 14	VB1 - 15	VB1 - 16	VB1 - 17 DL	VB1 - 18	VB1 - 19	VB1 - 20
Depth - >	SSCO	16.1 - 20.1	18.1 - 22.1	18.1 - 22.1	18.1 - 22.1	18.1 - 22.1	10.2 - 14.2	8.8 - 12.8	15.5 - 19.5	15.9 - 19.9	8.8 - 12.8	13 - 17
Date Sampled ->		05/10/07	09/13/07	09/13/07	09/13/07	09/26/07	06/11/07	07/16/07	09/04/07	05/10/07	05/10/07	06/11/07
Chloromethane		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
Vinyl chloride	800	2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	12 J	2,200 U
Bromomethane		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
Chloroethane		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
1,1-Dichloroethene		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
Carbon disulfide		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	17 J	2,200 U
Acetone		5,200	5,200 EBJ	12,000	12,000	1,100 B	13,000 J	9,000 EJ	15,000	1,900 J	17,000 BEJ	19,000 J
Methylene chloride		2,100 U	99 U	240 U	690 U	20 JB	380 U	49 U	240 U	2,000 U	110	2,200 U
1,1-Dichloroethane		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
2-Butanone		2,300	2,000	4,400	9,400 U	410	2,400 J	2,000	5,200	750 J	4,100 EJ	5,000 J
Chloroform		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
1,1,1-Trichloroethane		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
Carbon tetrachloride		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
Benzene		2,100 U	3 J	1,900 U	9,400 U	77 U	2,300 U	3 J	2,100 U	2,000 U	17 J	2,200 U
1,2-Dichloroethane		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
Trichloroethene	2,800	2,100 U	260	1,200 J	1,200 J	77 U	2,300 U	36 J	930 J	2,800	210	2,200 U
1,2-Dichloropropane		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
Bromodichloromethane		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
cis-1,3-Dichloropropene		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
4-Methyl-2-pentanone		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	54 J	2,200 U
Toluene		2,100 U	18 U	84 J	9,400 JB	1.6 JB	2,300 U	6 J	45 J	2,000 U	48 J	2,200 U
trans-1,3-Dichloropropene		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
1,1,2-Trichloroethane		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
Tetrachloroethene	5,600	450 J	10,000 EJ	100,000 EJ	100,000	150	2,600	750	17,000	640 J	580	1,400 J
2-Hexanone		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	38 J	2,200 U
Dibromochloromethane		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
Chlorobenzene		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
Ethylbenzene		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
Styrene		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
Bromoform		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
1,1,2,2-Tetrachloroethane		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
Total Xylenes		2,100 U	29 J	300 J	240 J	77 U	2,300 U	10 J	120 J	2,000 U	38 J	2,200 U
cis-1,2-Dichloroethene		8,600	54 J	110 J	9,400 U	77 U	2,300 U	780	870 J	23,000	740	1,100 J
trans-1,2-Dichloroethene	1,200	2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	5 J	2,100 U	310 J	16 J	2,200 U
Dichlorodifluoromethane		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
Trichlorofluoromethane		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
1,1,2-Trichloro-1,2,2-trifluoroethane		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
Methyl-t-butyl ether (MTBE)		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
1,2-Dibromoethane		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
Isopropylbenzene		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
1,3-Dichlorobenzene		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
1,4-Dichlorobenzene		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
1,2-Dichlorobenzene		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
1,2-Dibromo-3-chloropropane		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
1,2,4-Trichlorobenzene		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
Methyl acetate		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
Cyclohexane		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U
Methylcyclohexane		2,100 U	160 U	1,900 U	9,400 U	77 U	2,300 U	110 U	2,100 U	2,000 U	110 U	2,200 U

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Table 19 - Data for Post-IRM Conditions - B-5 Area

Sample ID ->	Units	Bottom North	Bottom North DL	Bottom South	Bottom South DL	East Wall	North Wall	Slab North	Slab North DL	Slab South	West Wall	West Wall DL
Depth - >		12 feet	12 feet	14 feet	14 feet	6-10 feet	6 - 8 feet	6 - 8 feet	6-8 feet	8 feet	6-10 feet	6-10 feet
Date Sampled ->		7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006
PID		0.7	0.7	4.5	4.5	13.2	0.3	7.1	7.1	3.8	9.7	9.7
VOLATILES	ug/kg											
Chloromethane	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
Bromomethane	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
Vinyl chloride	ug/kg	240	120 D	190	78 D	18	13 J	160	72 DJ	7 J	450 EJ	1,900 D
Chloroethane	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
Methylene chloride	ug/kg	13 U	56 U	12 U	48 U	8 U	12 U	13 U	63 U	12 U	9 U	1,800 U
Acetone	ug/kg	6 J	81 U	17 U	75 U	35	27	7 J	86 U	9 J	77	1,800 U
Carbon disulfide	ug/kg	18 U	81 U	3 J	75 U	2 J	16 U	2 J	86 U	16 U	3 J	1,800 U
1,1-Dichloroethene	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	3 J	86 U	16 U	3 J	1,800 U
1,1-Dichloroethane	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
Chloroform	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
1,2-Dichloroethane	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
2-Butanone	ug/kg	18 U	81 U	17 U	75 U	8 J	16 U	17 U	86 U	16 U	15 U	1,800 U
1,1,1-Trichloroethane	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
Carbon tetrachloride	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
Bromodichloromethane	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
1,2-Dichloropropane	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
cis-1,3-Dichloropropene	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
Trichloroethene	ug/kg	18	81 U	12 J	12 DJ	13 U	16 U	17 U	86 U	16 U	5 J	350 DJ
Dibromochloromethane	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
1,1,2-Trichloroethane	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
Benzene	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
trans-1,3-Dichloropropene	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
Bromoform	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
4-Methyl-2-pentanone	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
2-Hexanone	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
Tetrachloroethene	ug/kg	18	81 U	7 J	15 DJ	13 U	16 U	17 U	86 U	16 U	2 J	330 DJ
Toluene	ug/kg	18	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
1,1,2,2-Tetrachloroethane	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
Chlorobenzene	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
Ethylbenzene	ug/kg	18	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
Styrene	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
Total xylenes	ug/kg	18	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
cis-1,2-Dichloroethene	ug/kg	390 EJ	360 D	850 EJ	850 D	25	24	1,100 EJ	1,200 D	140	1,300 EJ	22,000 D
trans-1,2-Dichloroethene	ug/kg	19	13 DJ	8 J	75 U	6 J	16 U	7 J	86 U	16 U	140	2,600 D
Dichlorodifluoromethane	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	2 J	1,800 U
Trichlorofluoromethane	ug/kg	6 J	17 U	5 U	12 U	5 U	5 U	6 U	15 U	5 U	5 U	1,800 U
Methyl acetate	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
Methyl tert butyl ether	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
Cyclohexane	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
Methylcyclohexane	ug/kg	18 U	81 U	17 U	75 U	2 J	16 U	17 U	86 U	16 U	15 U	1,800 U
1,2-Dibromoethane	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
Isopropylbenzene	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
1,3-Dichlorobenzene	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
1,4-Dichlorobenzene	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
1,2-Dichlorobenzene	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
1,2-Dibromo-3-chloropropane	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U
1,2,4-Trichlorobenzene	ug/kg	18 U	81 U	17 U	75 U	13 U	16 U	17 U	86 U	16 U	15 U	1,800 U

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Table 20 - Summary Groundwater VOCs Data

Parameter	Units	NYSDEC GA		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-2D	MW-3D	MW-3D DL	MW-4D	MW-9D	MW-10D	MW-10D DL
Sample Date		Std	Guid	11/29/04	11/29/04	11/29/04	11/29/04	11/29/04	11/29/04	11/29/04	11/29/04	01/31/05	01/31/05	01/31/05	01/31/05	01/31/05	01/31/05	01/31/05
Chloromethane	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
Bromomethane	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
Vinyl chloride	ug/l	2		10 U	10 U	55	10 U	10 U	10 U	10 U	10 U	10 U	170	800 U	10 U	8 J	10 U	32 DJ
Chloroethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
Methylene chloride	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
Acetone	ug/l		50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	8 J	80 U
Carbon disulfide	ug/l	60		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
1,1-Dichloroethene	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 J	800 U	10 U	10 U	10 U	80 U
1,1-Dichloroethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
Chloroform	ug/l	7		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
1,2-Dichloroethane	ug/l	0.6		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
MEK(2-Butanone)	ug/l		50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	15	20 U	800 U	13	10 U	10 U	80 U
1,1,1-Trichloroethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
Carbon tetrachloride	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
Bromodichloromethane	ug/l		50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
1,2-Dichloropropane	ug/l	1		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
cis-1,3-Dichloropropene	ug/l	0.4		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
Trichloroethene	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	8 J	800 U	10 U	10 U	10 U	80 U
Dibromochloromethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
1,1,2-Trichloroethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
Benzene	ug/l	1		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
trans-1,3-Dichloropropene	ug/l	0.4		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
Bromoform	ug/l		50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
MIBK(4-Methyl-2-pentanone)	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
2-Hexanone	ug/l		50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
Tetrachloroethene	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	7,200 E	8,800 D	10 U	3 J	4 J	80 U
Toluene	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
1,1,2,2-Tetrachloroethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
Chlorobenzene	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
Ethylbenzene	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
Styrene	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
Total Xylenes	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
Dichlorodifluoromethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
Trichlorofluoromethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
1,1,2-Tricloro-1,2,2,-triflouroethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
trans-1,2-Dichloroethene	ug/l	5		10 U	10 U	13	10 U	10 U	10 U	10 U	10 U	10 U	71	800 U	10 U	10 U	26	46 DJ
Methyl tert butyl ether	ug/l	10		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
cis-1,2-Dichloroethene	ug/l	5		10 U	10 U	410	2 J	3 J	10 U	3 J	10 U	10 U	3,000 E	3,700 D	10 U	9 J	860 E	700 D
Cyclohexane	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
Methylcyclohexane	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
1,2-Dibromoethane	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
Isopropylbenzene	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
1,3-Dichlorobenzene	ug/l	3		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
1,4-Dichlorobenzene	ug/l	3		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
1,2-Dichlorobenzene	ug/l	3		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
1,2-Dibromo-3-chloropropane	ug/l	0.04		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
1,2,4-Trichlorobenzene	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U
Methyl acetate	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	800 U	10 U	10 U	10 U	80 U

Notes: [shaded] - indicates value exceeds Class GA Standard or Guidance level.
ND = not detected, U = undetected, J or E = estimated value, RE = re-extraction

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 20 - Summary Groundwater VOCs Data

Parameter	Units	NYSDEC GA		MW-11D	MW-11D DL	SB 2-1	SB 3-1	SB 7-1	SB 9-1	SB 12-1	SB 12-1 DL	SB 13-2	SB 13-2 DL	SB 13-2 DL2	SB 13-4	SB 13-4 DL	DAW-1	DAW-2	DAW-3
Sample Date		Std	Guid	01/31/05	01/31/05	03/21/05	03/21/05	03/21/05	03/21/05	03/21/05	03/21/05	03/22/05	03/22/05	03/22/05	03/22/05	03/22/05	08/30/05	08/30/05	08/30/05
Chloromethane	ug/l			10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
Bromomethane	ug/l			10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
Vinyl chloride	ug/l	2		610 E	830 D	10 U	10 U	10 U	10 U	810 E	820 D	2,400 E	3,300 D	3,900 D	1,500 E	1,500 D	10 U	10 U	10 U
Chloroethane	ug/l	5		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
Methylene chloride	ug/l	5		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
Acetone	ug/l		50	10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
Carbon disulfide	ug/l	60		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
1,1-Dichloroethene	ug/l	5		26 J	500 U	10 U	10 U	10 U	10 U	7 J	200 U	47 D	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
1,1-Dichloroethane	ug/l	5		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
Chloroform	ug/l	7		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
1,2-Dichloroethane	ug/l	0.6		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
MEK(2-Butanone)	ug/l		50	10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
1,1,1-Trichloroethane	ug/l	5		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
Carbon tetrachloride	ug/l	5		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
Bromodichloromethane	ug/l		50	10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
1,2-Dichloropropane	ug/l	1		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	ug/l	0.4		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
Trichloroethene	ug/l	5		2,400 E	2,200 E	10 U	10 U	10 U	10 U	22	200 U	300 E	280 D	2,000 U	8 J	200 U	10 U	3 J	10 U
Dibromochloromethane	ug/l	5		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
1,1,2-Trichloroethane	ug/l	5		2 J	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
Benzene	ug/l	1		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	ug/l	0.4		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
Bromoform	ug/l		50	10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
MIBK(4-Methyl-2-pentanone)	ug/l			10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
2-Hexanone	ug/l		50	10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
Tetrachloroethene	ug/l	5		5,000 E	6,600 D	10 U	10 U	10 U	10 U	14	200 U	340 E	340 D	2,000 U	10 U	200 U	10 U	10	10 U
Toluene	ug/l	5		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	4 J	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	ug/l	5		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
Chlorobenzene	ug/l	5		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
Ethylbenzene	ug/l	5		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	2 J	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
Styrene	ug/l	5		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
Total Xylenes	ug/l	5		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
Dichlorodifluoromethane	ug/l	5		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
Trichlorofluoromethane	ug/l	5		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
1,1,2-Tricloro-1,2,2,-triflouroethane	ug/l	5		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
trans-1,2-Dichloroethene	ug/l	5		130	50 DJ	10 U	10 U	10 U	10 U	25	200 U	190 E	200 DJ	2,000 U	16	200 U	10 U	10 U	10 U
Methyl tert butyl ether	ug/l	10		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	ug/l	5		2,600 E	6,700 D	10 U	10 U	10 U	3 J	1,400 E	2,100 D	2,800 E	14,000 BDE	24,000 D	890 E	1,000 BD	10 U	24	10 U
Cyclohexane	ug/l			10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
Methylcyclohexane	ug/l			10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	3 J	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
1,2-Dibromoethane	ug/l			10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
Isopropylbenzene	ug/l	5		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
1,3-Dichlorobenzene	ug/l	3		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
1,4-Dichlorobenzene	ug/l	3		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
1,2-Dichlorobenzene	ug/l	3		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane	ug/l	0.04		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	ug/l	5		10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U
Methyl acetate	ug/l			10 U	500 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	250 U	2,000 U	10 U	200 U	10 U	10 U	10 U

Notes: - indicates value exceeds Class GA Standard or Guidance level.
ND = not detected, U = undetected, J or E = estimated value, RE = re-extraction

Pioneer Midler Avenue LLC
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Table 20 - Summary Groundwater VOCs Data

Parameter Sample Date	Units	NYSDEC GA Std	NYSDEC GA Guid	DW-1 07/27/05	DW-1 07/27/05	DW-2 07/25/05	DW-3 07/26/05	DW-4 07/28/05	DW-4 07/28/05	DW-4 07/28/05	DAW-1 05/03/06	DAW-2 05/03/06	DAW-3 05/03/06	DAW-4 05/03/06	MW-1 05/03/06	MW-2 05/02/06	MW-2D 5/2/2006	MW-3 5/3/2006	MW-3 DL 5/3/2006	MW-3D 5/3/2006
Chloromethane	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Bromomethane	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Vinyl chloride	ug/l	2		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	1,100 J	1,100 D	800 J
Chloroethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Methylene chloride	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Acetone	ug/l		50	10 U	10 U	7.9 J	6.2 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Carbon disulfide	ug/l	60		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
1,1-Dichloroethene	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	14
1,1-Dichloroethane	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Chloroform	ug/l	7		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
1,2-Dichloroethane	ug/l	0.6		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
MEK(2-Butanone)	ug/l		50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
1,1,1-Trichloroethane	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Carbon tetrachloride	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Bromodichloromethane	ug/l		50	5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
1,2-Dichloropropane	ug/l	1		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	ug/l	0.4		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Trichloroethene	ug/l	5		5 U	5 U	4.6 J	10 U	5 U	5 U	5 U	10 U	2 J	10 U	10 U	10 U	10 U	50 U	10 U	10 U	1,700 J
Dibromochloromethane	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
1,1,2-Trichloroethane	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Benzene	ug/l	1		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	ug/l	0.4		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Bromoform	ug/l		50	5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
MIBK(4-Methyl-2-pentanone)	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
2-Hexanone	ug/l		50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Tetrachloroethene	ug/l	5		5 U	5 U	11	10 U	5 U	5 U	5 U	10 U	5 J	10 U	10 U	10 U	10 U	50 U	10 U	18 BDJ	38,000
Toluene	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	37
1,1,2,2-Tetrachloroethane	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Chlorobenzene	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Ethylbenzene	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	2 J
Styrene	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Total Xylenes	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	19
Dichlorodifluoromethane	ug/l	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Trichlorofluoromethane	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
1,1,2-Tricloro-1,2,2,-trifllouroethane	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
trans-1,2-Dichloroethene	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	34	33 DJ	30
Methyl tert butyl ether	ug/l	10		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	ug/l	5		5 U	5 U	36	10 U	5 U	5 U	5 U	10 U	49	10 U	10 U	10 U	10 U	50 U	440	440 D	1,300
Cyclohexane	ug/l			10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Methylcyclohexane	ug/l			5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	7 J
1,2-Dibromoethane	ug/l			5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Isopropylbenzene	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
1,3-Dichlorobenzene	ug/l	3		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
1,4-Dichlorobenzene	ug/l	3		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
1,2-Dichlorobenzene	ug/l	3		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane	ug/l	0.04		10 U	10 U	1.1 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	ug/l	5		5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Methyl acetate	ug/l			5 U	5 U	10 U	10 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U

Notes: [shaded] - indicates value exceeds Class GA Standard or Guidance level.
ND = not detected, U = undetected, J or E = estimated value, RE = re-extraction

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 20 - Summary Groundwater VOCs Data

Parameter / Sample Date	Units	NYSDEC GA Std	NYSDEC GA Guid	MW-3D DL 5/3/2006	MW-4 5/2/2006	MW-4D 5/2/2006	MW-6 5/3/2006	MW-7 5/3/2006	MW-8 5/3/2006	MW-9D 5/3/2006	MW-10D 05/02/06	MW-10D DL 05/02/06	MW-12D 05/03/06	MW-12D DL 05/03/06	MW-13D 05/03/06	MW-13D DL 05/03/06	MW-13D RE 05/03/06	MW-13D 04/11/07
Chloromethane	ug/l			2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
Bromomethane	ug/l			2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
Vinyl chloride	ug/l	2		800 D	2 J	10 U	10 U	10 U	10 U	6 J	60 J	58 D	120 J	140 DJ	900 J	900 D	720 J	2,000
Chloroethane	ug/l	5		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
Methylene chloride	ug/l	5		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	32 BJ
Acetone	ug/l		50	2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	5,000
Carbon disulfide	ug/l	60		2,000 U	10 U	1 J	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
1,1-Dichloroethene	ug/l	5		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	2 J	500 U	2 J	100 U	50 U	40 U
1,1-Dichloroethane	ug/l	5		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
Chloroform	ug/l	7		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
1,2-Dichloroethane	ug/l	0.6		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
MEK(2-Butanone)	ug/l		50	2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	1,300
1,1,1-Trichloroethane	ug/l	5		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
Carbon tetrachloride	ug/l	5		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
Bromodichloromethane	ug/l		50	2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
1,2-Dichloropropane	ug/l	1		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
cis-1,3-Dichloropropene	ug/l	0.4		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
Trichloroethene	ug/l	5		1,700 DJ	10 U	10 U	10 U	10 U	10 U	20 U	2 J	40 U	200	200 DJ	8 J	100 U	50 U	40 U
Dibromochloromethane	ug/l	5		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
1,1,2-Trichloroethane	ug/l	5		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
Benzene	ug/l	1		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	37 J
trans-1,3-Dichloropropene	ug/l	0.4		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
Bromoform	ug/l		50	2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
MIBK(4-Methyl-2-pentanone)	ug/l			2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	170 J
2-Hexanone	ug/l		50	2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	200 U
Tetrachloroethene	ug/l	5		38,000 BD	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	5900	5900 BD	24	38 BDJ	50 U	40 U
Toluene	ug/l	5		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40
1,1,2,2-Tetrachloroethane	ug/l	5		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
Chlorobenzene	ug/l	5		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
Ethylbenzene	ug/l	5		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
Styrene	ug/l	5		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
Total Xylenes	ug/l	5		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	120 U
Dichlorodifluoromethane	ug/l	5		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
Trichlorofluoromethane	ug/l	5		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
1,1,2-Tricloro-1,2,2,-triflouroethane	ug/l	5		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
trans-1,2-Dichloroethene	ug/l	5		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	25	22 DJ	24	500 U	13	13 DJ	13 J	95
Methyl tert butyl ether	ug/l	10		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
cis-1,2-Dichloroethene	ug/l	5		1,800 DJ	10 U	10 U	10 U	5 J	10 U	9 J	420	420 D	180	170 DJ	750	750 D	630	980
Cyclohexane	ug/l			2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
Methylcyclohexane	ug/l			2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
1,2-Dibromoethane	ug/l			2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
Isopropylbenzene	ug/l	5		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
1,3-Dichlorobenzene	ug/l	3		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
1,4-Dichlorobenzene	ug/l	3		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
1,2-Dichlorobenzene	ug/l	3		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
1,2-Dibromo-3-chloropropane	ug/l	0.04		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
1,2,4-Trichlorobenzene	ug/l	5		2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U
Methyl acetate	ug/l			2,000 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	40 U	10 U	500 U	10 U	100 U	50 U	40 U

Notes: [shaded] - indicates value exceeds Class GA Standard or Guidance level.
ND = not detected, U = undetected, J or E = estimated value, RE = re-extraction

Pioneer Midler Avenue LLC
Remedial Investigation Report
Table 20 - Summary Groundwater VOCs Data

Parameter	Units	NYSDEC GA		MW-13D	MW-13D DL	MW-2	MW-2D	MW-7	MW-8	MW-9D	MW-10D	MW-12D	MW-13D	MW-13D DL
Sample Date		Std	Guid	07/20/07	07/20/07	08/23/07	08/23/07	08/23/07	08/23/07	08/23/07	08/23/07	08/23/07	08/23/07	08/23/07
Chloromethane	ug/l			50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
Bromomethane	ug/l			50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
Vinyl chloride	ug/l	2		9,500 E	7,200	10 U	10 U	10 U	10 U	6 J	78	500 U	10,000 E	16,000 D
Chloroethane	ug/l	5		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
Methylene chloride	ug/l	5		2.6 JB	800 U	10 U	10 U	10 U	10 U	10 U	2 J	500 U	14 J	1,000 U
Acetone	ug/l		50	24 J	130 J	10 U	10 U	10 U	10 U	10 U	20 U	2,100	22 J	1,000 U
Carbon disulfide	ug/l	60		14 J	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
1,1-Dichloroethene	ug/l	5		5.3 J	110 J	10 U	10 U	10 U	10 U	10 U	28	500 U	100 U	1,000 U
1,1-Dichloroethane	ug/l	5		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
Chloroform	ug/l	7		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
1,2-Dichloroethane	ug/l	0.6		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
MEK(2-Butanone)	ug/l		50	50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	920	100 U	1,000 U
1,1,1-Trichloroethane	ug/l	5		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
Carbon tetrachloride	ug/l	5		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
Bromodichloromethane	ug/l		50	50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
1,2-Dichloropropane	ug/l	1		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
cis-1,3-Dichloropropene	ug/l	0.4		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
Trichloroethene	ug/l	5		91	98 J	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
Dibromochloromethane	ug/l	5		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
1,1,2-Trichloroethane	ug/l	5		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
Benzene	ug/l	1		160	15 J	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
trans-1,3-Dichloropropene	ug/l	0.4		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
Bromoform	ug/l		50	50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
MIBK(4-Methyl-2-pentanone)	ug/l			23 J	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	44 J	1,000 U
2-Hexanone	ug/l		50	50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
Tetrachloroethene	ug/l	5		160	160 J	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
Toluene	ug/l	5		18 J	16 J	10 U	10 U	10 U	10 U	10 U	20 U	500 U	17 J	1,000 U
1,1,2,2-Tetrachloroethane	ug/l	5		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
Chlorobenzene	ug/l	5		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
Ethylbenzene	ug/l	5		0.86 J	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
Styrene	ug/l	5		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
Total Xylenes	ug/l	5		4.8 J	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
Dichlorodifluoromethane	ug/l	5		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
Trichlorofluoromethane	ug/l	5		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
1,1,2-Tricloro-1,2,2,-triflouroethane	ug/l	5		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
trans-1,2-Dichloroethene	ug/l	5		50	93 J	10 U	10 U	10 U	10 U	10 U	25	500 U	93 J	1,000 U
Methyl tert butyl ether	ug/l	10		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
cis-1,2-Dichloroethene	ug/l	5		3,400 E	3,200	1 J	2 J	3 J	10 U	6 J	220	61 J	1,600	1,700 D
Cyclohexane	ug/l			50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
Methylcyclohexane	ug/l			50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
1,2-Dibromoethane	ug/l			50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
Isopropylbenzene	ug/l	5		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
1,3-Dichlorobenzene	ug/l	3		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
1,4-Dichlorobenzene	ug/l	3		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
1,2-Dichlorobenzene	ug/l	3		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
1,2-Dibromo-3-chloropropane	ug/l	0.04		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
1,2,4-Trichlorobenzene	ug/l	5		50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U
Methyl acetate	ug/l			50 U	800 U	10 U	10 U	10 U	10 U	10 U	20 U	500 U	100 U	1,000 U

Notes: - indicates value exceeds Class GA Standard or Guidance level.
ND = not detected, U = undetected, J or E = estimated value, RE = re-extraction

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Table 21 - Soil Vapor Sampling Data

Analyte	SV-22	SV-23	SV-24	SV-25	SV-26	SV-27	SV-28	SV-29	SV-30	Trip Blank	Ambient
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	91	87	96	120	130	81	74	9.8	8.0	ND	0.75
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	2.3	1.8	3.2	1.7	ND	5.9	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	29	29	31	41	42	27	24	3.9	4.7	ND	0.1 J
1,3-butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2,4-trimethylpentane	16	39	10	14	2 J	11	ND	ND	ND	ND	ND
4-ethyltoluene	37	36	25	46	49	35	29	3.4	5.3	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Allyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	240 E	230 E	170 E	32	60	27	53	7.1	10	ND	0.62
Benzyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	0.70	ND	ND	82	13	13	ND	4.7	24	ND	ND
Carbon tetrachloride	ND	ND	ND	0.1 J	0.96	0.1 J	ND	0.1 J	1.1	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	0.67	1.2	ND	ND
Chloroform	0.99	ND	1.3	0.1 J	ND	0.74	ND	ND	1.6	ND	ND
Chloromethane	ND	ND	3.4	ND	ND	0.82	ND	ND	ND	ND	1.1
cis-1,2-Dichloroethene	ND	ND	ND	ND	0.89	0.1 J	ND	ND	3.1	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	25	ND	10	50	42	20	ND	ND	190 E	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	11	14	11	20	23	3 J	12	6.7	7.9	ND	ND

Pioneer Midler Avenue LLC
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Table 21 - Soil Vapor Sampling Data

Analyte	SV-22	SV-23	SV-24	SV-25	SV-26	SV-27	SV-28	SV-29	SV-30	Trip Blank	Ambient
Freon 11	5.9	ND	38	3.8	11	1.8	ND	1.8	2.5	ND	1.7
Freon 113	0.1 J	ND	0.1 J	ND	ND	ND	ND	ND	0.1 J	ND	ND
Freon 114	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Freon 12	3.2	ND	8.6	ND	5.0	2.8	ND	2.6	3.0	ND	ND
Heptane	25	57	10	13	2 J	3 J	420 E	35	150 E	ND	ND
Hexachloro-1,3-butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexane	94 E	220 E	10	16	12	21	1400 E	440 E	1200 E	ND	0.54
Isopropyl alcohol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	35	41	34	61	69	36	37	17	25	ND	0.2 J
Methyl Butyl Ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Ethyl Ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Isobutyl Ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	ND	ND	0.1 J	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	5.5	ND	6.6	3.6	6.0	4.0	ND	7.6	17	ND	0.53
o-Xylene	23	27	20	40	43	24	24	6.8	8.8	ND	0.1 J
Propylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	ND	13	ND	23	27	3 J	13	5.2	9.7	ND	ND
Tetrachloroethylene	19	3.0	2.7	2.5	3.7	2.2	2.8	ND	ND	ND	ND
Tetrahydrofuran	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	33	41	34	61	66	34	37	15	32	ND	1.7
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	2.6	3.0	2.7	2.0	3.4	2.0	ND	2.5	11	ND	ND
Vinyl acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Bromide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	0.1 J

ND = non-detect

All samples collected on 04/20/06. All data in $\mu g/m^3$

Pioneer Midler Avenue, LLC
Remedial Investigation Report
Table 22 - MNA Indicators Data

October 2007 MNA Indicator Sampling				
Parameter	Result	Units	Interpretation	USEPA Site Criteria Score
Field Parameters				
Oxidation/Reduction Potential (ORP)	-324	mV	Concentration <-100 mg/L indicate reductive pathway is likely	2
Dissolved Oxygen	0	mg/L	Concentration <0.5 mg/L indicates reductive pathways are not repressed	3
Laboratory Analytical Parameters				
Dissolved Inorganic Carbon	110	mg/L	Levels > background indicate microbial metabolism of organic carbon	NL
Dissolved Organic Carbon	41	mg/L	Detections of DOC (or TOC) > 20 mg/L indicates that a non-depleted substrate (electron donor) is abundant	2
Vinyl Chloride	8.9 (SiREM)	mg/L	Indicates presence of reductive dechlorination of higher isomers	2
	21 (TA)	mg/L		
cis-1,2-dichloroethene	0.56	mg/L	Indicates presence of reductive dechlorination of higher isomers	2
Dehalococcoides Enumeration	2 X 10^8 (gene copies)	per liter	Values > 10^7/L indicate high concentration of Dehalococcoides (Dhc)	NL
Vinyl Chloride Reductase (vcrA)	6 X 10^7 (gene copies)	per liter	Indicates that 93% of total Dhc are vcrA gene copies	NL
Iron (total)	1.15	mg/l		
Ferric Iron	1.2	mg/L	Ferric Iron (Fe III) is an electron acceptor that competes with dehalorespiration	
Ferrous Iron	ND at 0.050	mg/L	Ferrous Iron (Fe II) >1 mg/L indicates reduced conditions and that anaerobic degradation of organic carbon is likely	0
Nitrite/Nitrate	ND at 0.050 (both)	mg/L	Absence of nitrate indicates is prerequisite for iron or sulfate reduction to occur	2
Sulfate	ND at 25	mg/L	Indicates sulfate is being reduced to sulfide and reductive dechlorination is likely to be efficient	3
Sulfide	0.8	mg/L		
Methane	13 (SiREM)	mg/L	Indicates strong reducing conditions are present and likely efficient dechlorination	3
	6 (TA)	mg/L		
Ethene	4.6	mg/L	Indicates strong presence of reductive dechlorination end products	3
Ethane	0.27	mg/L		
			Total USEPA Screening Score	22

NL = parameter not included in USEPA Site Screening Score
TA = Test America Laboratories

Pioneer Midler Avenue LLC
RI Report
Table 23 - Comparative Summary of Remedial Alternatives for Soil

Technology	Land Use (Site Redevelopment Track)	Technology Comparison Criteria (see Section 8.1 for descriptions of these criteria)								
		Overall Protection of Public Health and the Environment	Compliance with SCGs	Longterm Effectiveness and Permanence	Reduction of Toxicity, Mobility, or Volume	Short-term Effectiveness	Implementability	Cost	Community Acceptance	Land Use
Excavation and Off-Site Disposal (see Section 8.5.1 for description)	Restricted Use (Track 4)	Could successfully address CVOC impacts if combined with a groundwater remedy and I and EC*	Could achieve SSCOs for CVOCs	Soil removal constitutes a permanent remedy for site soil impacts	Impacted soils would be removed from the site - mobility reduced	Would be effective at removing CVOCs in the short term	Very difficult - deep excavation into soft ground below water table	Very high due to implementability issues	Would be acceptable to community	Could provide protection consistent with intended future use of property
	Unrestricted Use (Track 1)	Could successfully impacts if combined with a groundwater remedy and I and EC*	Could achieve Unrestricted Use Soil Cleanup Objectives for all parameters	Soil removal constitutes a permanent remedy for site soil impacts	Impacted soils would be removed from the site - mobility reduced	Would be effective in the short term	Very difficult - deep excavation into soft ground below water table	Very high due to implementability issues	Would be acceptable to community	With gw remedy, could be effective-Track 1 use is not intended use
In-Situ Thermal Treatment (see Section 8.5.2 for description)	Restricted Use (Track 4)	Could successfully address CVOC impacts if combined with a groundwater remedy and I and EC*	Could achieve SSCOs for CVOCs	CVOCs would be permanently removed	CVOCs would be permanently destroyed	Would be effective for CVOC impacts in the short term	Very difficult - Few technology providers, extremely resource and energy intensive	Very high due to implementability issues	Would be acceptable to community	Could provide protection consistent with intended future use of property
	Unrestricted Use (Track 1)	Could only address volatile parameters- additional actions may be required for SVOCs/metals	Could achieve Unrestricted Use Soil Cleanup Objectives for volatile organic compounds	CVOCs would be permanently removed - other parameters not affected	CVOCs would be permanently destroyed - other parameters not affected	Short-term effectiveness for VOC parameters - other parameters not affected	Very difficult - Few technology providers, extremely resource and energy intensive	Very high due to implementability issues	Would be acceptable to community	With gw remedy, could be effective-Track 1 is not intended use
Institutional and/or Engineering Controls (I and EC) (see Section 8.5.3 for description)	Restricted Use (Track 4)	Could successfully address identified exposure scenarios if combined with a groundwater remedy	Would not affect ability to achieve SSCOs - addresses exposure scenarios	These controls are effective at mitigating exposure scenarios over the long term	Would not provide reductions - addresses exposure scenarios only	Would provide effective, short-term protection for identified exposure scenarios	Relatively straightforward to implement and enforce	Moderate, long term	Would be acceptable to community	Could provide protection consistent with intended future use of property
	Unrestricted Use (Track 1)	Not an appropriate remedy for Track 1 Redevelopment	Would not achieve Unrestricted Use Soil Cleanup Objectives	These controls are not consistent with Track 1 redevelopments	Would not provide reductions - not consistent with Track 1	These controls are not consistent with Track 1 redevelopments	Easy to implement - not consistent with Track 1 redevelopments	Moderate, long term	May not be acceptable to community	These controls are not consistent with Track 1 redevelopments
No Action (see Section 8.7 for description)	Restricted Use (Track 4)	This technology would not achieve required protection for this redevelopment track	Would not achieve SSCOs	Would not provide any long-term or permanent benefits	Would not provide any reductions	Would not provide short-term effectiveness	Easy to implement - no actions	Low, no actions	Would likely not be acceptable to community	Not appropriate given intended use of property
	Unrestricted Use (Track 1)	This technology would not achieve required protection for this redevelopment track	Would not achieve Unrestricted Use Soil Cleanup Objectives	Would not provide any long-term or permanent benefits	Would not provide any reductions	Would not provide short-term effectiveness	Easy to implement - no actions	Low, no actions	Would likely not be acceptable to community	Not appropriate for unrestricted use of property

Note: * I and EC = Institutional and Engineering Controls

Pioneer Midler Avenue LLC
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Table 24 - Comparative Summary of Remedial Alternatives for Groundwater

Technology	Land Use (Site Redevelopment Track)	Technology Comparison Criteria (see Section 8.1 for descriptions of these criteria)								
		Overall Protection of Public Health and the Environment	Compliance with SCGs	Longterm Effectiveness and Permanence	Reduction of Toxicity, Mobility, or Volume	Short-term Effectiveness	Implementability	Cost	Community Acceptance	Land Use
In-Situ or Ex-Situ Groundwater Treatment (see Section 8.6.1 for description)	Restricted Use (Track 4)	Could successfully address CVOC impacts if combined with a soil remedy and/or I and EC*	Could eventually achieve Class GA Groundwater Standards for CVOCs	Once gw standards are achieved, the condition would be expected to be permanent	Technology would provide reduction of toxicity and volume	These technologies constitute a relatively long-term (a decade or more) remedy	Ex-situ technologies difficult to implement due to access and space requirements. In-situ (passive) technologies are generally simpler to implement.	High costs due to implementability issues and length of treatment period	Would be acceptable to community	Would provide protection consistent with intended future use of property
	Unrestricted Use (Track 1)	Could successfully address CVOC impacts if combined with a soil remedy and/or I and EC*	Could eventually achieve Class GA Groundwater Standards for CVOCs	Once gw standards are achieved, the condition would be expected to be permanent	Technology would provide reduction of toxicity and volume	These technologies constitute a relatively long-term (a decade or more) remedy		High costs due to implementability issues and length of treatment period	Would be acceptable to community	With soil remedy, could be effective, however, Track 1 is not intended use
Monitored Natural Attenuation (see Section 8.6.2 for description)	Restricted Use (Track 4)	Could successfully address CVOC groundwater impacts if combined with I and EC*	Could eventually achieve Class GA Groundwater Standards for CVOCs	Once gw standards are achieved, the condition would be expected to be permanent	Technology would provide reduction of toxicity and volume	This technology constitutes a long-term (several decades or more) remedy	Easy to implement and assess effectiveness	Moderate, though long term	Would be acceptable to community	Would be effective, with institutional controls to limit use of gw during remediation
	Unrestricted Use (Track 1)	Could successfully address CVOC groundwater impacts if combined with I and EC*	Could eventually achieve Class GA Standards for CVOCs, Track 1 use (not intended) would require I and/or EC	Once gw standards are achieved, the condition would be expected to be permanent	Technology would provide reduction of toxicity and volume	This technology constitutes a long-term (several decades or more) remedy	Easy to implement and assess effectiveness	Moderate, though long term	Would be acceptable to community	With institutional controls to limit use of gw during remediation, could be effective-Track 1 use is not intended use
Institutional and/or Engineering Controls (I and EC) (see Section 8.6.3 for description)	Restricted Use (Track 4)	Could successfully address identified exposure scenarios for gw	Would not directly affect impacted gw - addresses exposure scenarios	These controls are effective at mitigating gw exposure scenarios over the long term	ECs can reduce mobility -otherwise, addresses exposure scenarios only	Effective mainly for mitigating identified exposure scenarios	Straightforward to implement and enforce	Capital and O&M could vary from low to high	Would be acceptable to community	Would provide protection consistent with intended future use of property
	Unrestricted Use (Track 1)	Could successfully address identified exposure scenarios for gw-may not be consistent with Track 1 redevelopment	Would not directly affect impacted gw - addresses exposure scenarios-may not be consistent with Track 1 redevelopment	Effective at mitigating gw exposure scenarios over the long term-may not be consistent with Track 1 redevelopment	ECs can reduce mobility -otherwise, addresses exposure scenarios only-not consistent with Track 1 redevelopment	Effective mainly for mitigating identified exposure scenarios-may not be consistent with Track 1 redevelopment	Straightforward to implement and enforce	Capital and O&M could vary from low to high	May be acceptable to community	Could provide protection for gw exposure scenarios - may not be consistent with Track 1 redvelopment
No Action (see Section 8.7 for description)	Restricted Use (Track 4)	This technology would not achieve required protection for this redevelopment track	Would not provide a framework to determine if natural attenuation is occuring	Would not provide any long-term or permanent benefits	Would not provide any reductions or the ability to monitor the site	Would not be effective in the short-term	Easy to implement - no actions	Low, no actions	Would likely not be acceptable to community	Not appropriate given intended use of property
	Unrestricted Use (Track 1)	This technology would not achieve required protection for this redevelopment track	Would not be consistent with a Track 1 redevelopment	Would not provide any long-term or permanent benefits	Would not provide any reductions or the ability to monitor the site	Would not be effective in the short-term	Easy to implement - no actions	Low, no actions	Would likely not be acceptable to community	Not appropriate for unrestricted use of property

Note: * I and EC = Institutional and/or Engineering Controls

APPENDIX B

HISTORIC AND SUPPLEMENTAL INVESTIGATIONS
(BOUND WITH VOLUME 1 OF 5)

HYDRAULIC CONDUCTIVITY TEST DATA

GeoLogic JULY 2006 GROUNDWATER AND CONTAMINANT FLOW REPORT

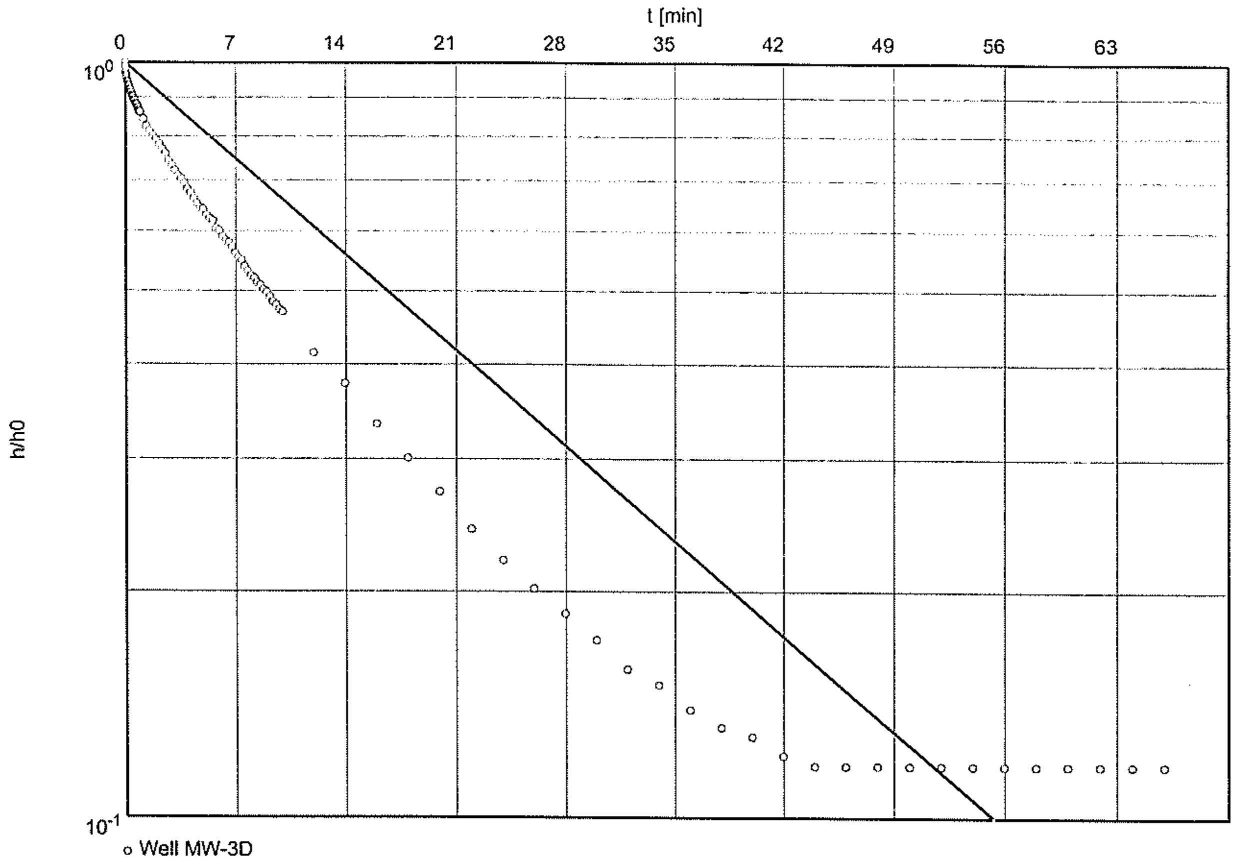
JULY 2004 PRELIMINARY SITE INVESTIGATION REPORT

INDEPENDENT GEOCHEMISTRY AND MICROBIOLOGY INVESTIGATIONS

HYDRAULIC CONDUCTIVITY TEST DATA

C&S Engineers 499 Col. Eileen Collins Blvd. Syracuse, NY 13212 ph.(315) 455-2000	slug/bail test analysis BOUWER-RICE's method	Date: 10/26/2005	Page 1
		Project: Pioneer Midler Avenue LLC	
		Evaluated by: WNR	

Slug Test No. 1	Test conducted on: 10/17/2005
Well MW-3D	



Hydraulic conductivity [ft/min]: 3.96×10^{-5} = 2.01×10^{-5} cm/s

C&S Engineers 499 Col. Eileen Collins Blvd. Syracuse, NY 13212 ph.(315) 455-2000	slug/bail test analysis BOUWER-RICE's method	Date: 10/26/2005	Page 2
		Project: Pioneer Midler Avenue LLC	
		Evaluated by: WNR	

Slug Test No. 1	Test conducted on: 10/17/2005
Well MW-3D	Well MW-3D

Static water level: 2.18 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]	
1	0.00	4.91	2.73	
2	0.01	4.88	2.70	
3	0.02	4.86	2.68	
4	0.03	4.83	2.65	
5	0.04	4.83	2.65	
6	0.05	4.81	2.63	
7	0.06	4.80	2.62	
8	0.07	4.80	2.62	
9	0.08	4.80	2.62	
10	0.09	4.80	2.62	
11	0.10	4.78	2.60	
12	0.11	4.78	2.60	
13	0.12	4.76	2.58	
14	0.13	4.76	2.58	
15	0.14	4.76	2.58	
16	0.15	4.76	2.58	
17	0.16	4.75	2.57	
18	0.17	4.75	2.57	
19	0.18	4.75	2.57	
20	0.19	4.73	2.55	
21	0.20	4.73	2.55	
22	0.21	4.73	2.55	
23	0.22	4.73	2.55	
24	0.23	4.73	2.55	
25	0.24	4.72	2.54	
26	0.25	4.72	2.54	
27	0.26	4.72	2.54	
28	0.27	4.72	2.54	
29	0.28	4.70	2.52	
30	0.29	4.70	2.52	
31	0.30	4.70	2.52	
32	0.31	4.70	2.52	
33	0.33	4.69	2.51	
34	0.35	4.69	2.51	
35	0.36	4.67	2.49	
36	0.38	4.67	2.49	
37	0.40	4.67	2.49	
38	0.41	4.65	2.47	
39	0.43	4.65	2.47	
40	0.45	4.65	2.47	
41	0.46	4.64	2.46	
42	0.48	4.64	2.46	
43	0.50	4.64	2.46	
44	0.51	4.64	2.46	
45	0.53	4.62	2.44	
46	0.55	4.62	2.44	
47	0.56	4.62	2.44	
48	0.58	4.61	2.43	
49	0.60	4.61	2.43	
50	0.61	4.61	2.43	

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		Project: Pioneer Midler Avenue LLC	
		Evaluated by: WNR	

Slug Test No. 1	Test conducted on: 10/17/2005
Well MW-3D	Well MW-3D

Static water level: 2.18 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]	
51	0.63	4.61	2.43	
52	0.65	4.59	2.41	
53	0.66	4.59	2.41	
54	0.68	4.59	2.41	
55	0.70	4.59	2.41	
56	0.71	4.58	2.40	
57	0.73	4.58	2.40	
58	0.75	4.58	2.40	
59	0.76	4.58	2.40	
60	0.78	4.56	2.38	
61	0.80	4.56	2.38	
62	0.81	4.56	2.38	
63	0.83	4.56	2.38	
64	0.85	4.54	2.36	
65	0.86	4.54	2.36	
66	0.88	4.54	2.36	
67	0.90	4.54	2.36	
68	0.91	4.53	2.35	
69	0.93	4.53	2.35	
70	0.95	4.53	2.35	
71	0.96	4.53	2.35	
72	1.16	4.48	2.30	
73	1.36	4.43	2.25	
74	1.56	4.40	2.22	
75	1.76	4.37	2.19	
76	1.96	4.34	2.16	
77	2.16	4.31	2.13	
78	2.36	4.28	2.10	
79	2.56	4.25	2.07	
80	2.76	4.21	2.03	
81	2.96	4.18	2.00	
82	3.16	4.15	1.97	
83	3.36	4.12	1.94	
84	3.56	4.10	1.92	
85	3.76	4.07	1.89	
86	3.96	4.04	1.86	
87	4.16	4.02	1.84	
88	4.36	3.99	1.81	
89	4.56	3.96	1.78	
90	4.76	3.94	1.76	
91	4.96	3.93	1.75	
92	5.16	3.90	1.72	
93	5.36	3.88	1.70	
94	5.56	3.87	1.69	
95	5.76	3.83	1.65	
96	5.96	3.82	1.64	
97	6.16	3.79	1.61	
98	6.36	3.77	1.59	
99	6.56	3.76	1.58	
100	6.76	3.74	1.56	

C&S Engineers
499 Col. Eileen Collins Blvd.
Syracuse, NY 13212
ph.(315) 455-2000

slug/bail test analysis
BOUWER-RICE's method

Date: 10/26/2005

Project: Pioneer Midler Avenue LLC

Evaluated by: WNR

Slug Test No. 1

Test conducted on: 10/17/2005

Well MW-3D

Well MW-3D

Static water level: 2.18 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]	
101	6.96	3.71	1.53	
102	7.16	3.69	1.51	
103	7.36	3.68	1.50	
104	7.56	3.65	1.47	
105	7.76	3.63	1.45	
106	7.96	3.61	1.43	
107	8.16	3.60	1.42	
108	8.36	3.58	1.40	
109	8.56	3.57	1.39	
110	8.76	3.55	1.37	
111	8.96	3.54	1.36	
112	9.16	3.52	1.34	
113	9.36	3.50	1.32	
114	9.56	3.49	1.31	
115	9.76	3.47	1.29	
116	9.96	3.46	1.28	
117	11.96	3.31	1.13	
118	13.96	3.21	1.03	
119	15.96	3.09	0.91	
120	17.96	3.00	0.82	
121	19.96	2.92	0.74	
122	21.96	2.84	0.66	
123	23.96	2.78	0.60	
124	25.96	2.73	0.55	
125	27.96	2.69	0.51	
126	29.96	2.65	0.47	
127	31.96	2.61	0.43	
128	33.96	2.59	0.41	
129	35.96	2.56	0.38	
130	37.96	2.54	0.36	
131	39.96	2.53	0.35	
132	41.96	2.51	0.33	
133	43.96	2.50	0.32	
134	45.96	2.50	0.32	
135	47.96	2.50	0.32	
136	49.96	2.50	0.32	
137	51.96	2.50	0.32	
138	53.96	2.50	0.32	
139	55.96	2.50	0.32	
140	57.96	2.50	0.32	
141	59.96	2.50	0.32	
142	61.96	2.50	0.32	
143	63.96	2.50	0.32	
144	65.96	2.50	0.32	

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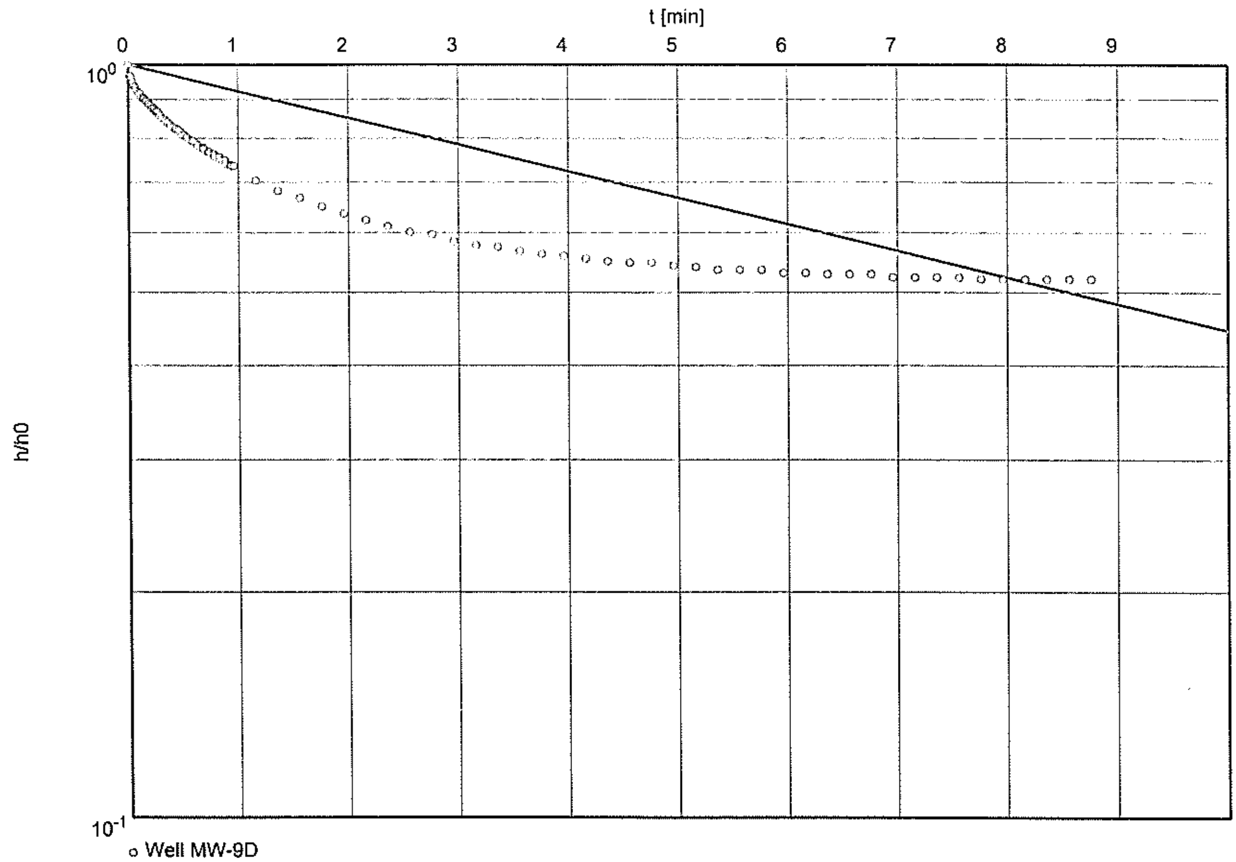
		Evaluated by: WNR	

Slug Test No. 3	Test conducted on: 10/17/2005
MW-9D	



Hydraulic conductivity [ft/min]: 6.45×10^{-5} $= 3.28 \times 10^{-5}$ cm/sec.

C&S Engineers 499 Col. Eileen Collins Blvd. Syracuse, NY 13212 ph.(315) 455-2000	slug/bail test analysis BOUWER-RICE's method	Date: 10/26/2005	Page 2
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Slug Test No. 3	Test conducted on: 10/17/2005
MW-9D	Well MW-9D

Static water level: 6.40 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
1	0.00	10.51	4.11
2	0.01	10.35	3.95
3	0.02	10.37	3.97
4	0.03	10.35	3.95
5	0.04	10.29	3.89
6	0.05	10.25	3.85
7	0.06	10.24	3.84
8	0.07	10.22	3.82
9	0.08	10.19	3.79
10	0.09	10.18	3.78
11	0.10	10.16	3.76
12	0.11	10.16	3.76
13	0.12	10.13	3.73
14	0.13	10.11	3.71
15	0.14	10.11	3.71
16	0.15	10.10	3.70
17	0.16	10.08	3.68
18	0.17	10.07	3.67
19	0.18	10.05	3.65
20	0.19	10.05	3.65
21	0.20	10.03	3.63
22	0.21	10.02	3.62
23	0.22	10.00	3.60
24	0.23	10.00	3.60
25	0.24	9.99	3.59
26	0.25	9.97	3.57
27	0.26	9.96	3.56
28	0.27	9.96	3.56
29	0.28	9.94	3.54
30	0.29	9.92	3.52
31	0.31	9.89	3.49
32	0.33	9.88	3.48
33	0.34	9.86	3.46
34	0.36	9.85	3.45
35	0.38	9.83	3.43
36	0.39	9.81	3.41
37	0.41	9.80	3.40
38	0.43	9.78	3.38
39	0.44	9.78	3.38
40	0.46	9.77	3.37
41	0.48	9.75	3.35
42	0.49	9.72	3.32
43	0.51	9.72	3.32
44	0.53	9.70	3.30
45	0.54	9.69	3.29
46	0.56	9.67	3.27
47	0.58	9.66	3.26
48	0.59	9.66	3.26
49	0.61	9.64	3.24
50	0.63	9.62	3.22

C&S Engineers
499 Col. Eileen Collins Blvd.
Syracuse, NY 13212
ph.(315) 455-2000

slug/bail test analysis
BOUWER-RICE's method

Date: 10/26/2005 |

Project: Pioneer Midler Avenue LLC

Evaluated by: WNR

Slug Test No. 3 | Test conducted on: 10/17/2005

MW-9D | Well MW-9D

Static water level: 6.40 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]	
51	0.64	9.61	3.21	
52	0.66	9.59	3.19	
53	0.68	9.59	3.19	
54	0.69	9.58	3.18	
55	0.71	9.56	3.16	
56	0.73	9.55	3.15	
57	0.74	9.55	3.15	
58	0.76	9.53	3.13	
59	0.78	9.53	3.13	
60	0.79	9.51	3.11	
61	0.81	9.50	3.10	
62	0.83	9.50	3.10	
63	0.84	9.48	3.08	
64	0.86	9.47	3.07	
65	0.88	9.47	3.07	
66	0.89	9.45	3.05	
67	0.91	9.43	3.03	
68	0.93	9.43	3.03	
69	0.94	9.42	3.02	
70	0.96	9.42	3.02	
71	1.16	9.29	2.89	
72	1.36	9.20	2.80	
73	1.56	9.14	2.74	
74	1.76	9.07	2.67	
75	1.96	9.01	2.61	
76	2.16	8.96	2.56	
77	2.36	8.91	2.51	
78	2.56	8.87	2.47	
79	2.76	8.85	2.45	
80	2.96	8.80	2.40	
81	3.16	8.77	2.37	
82	3.36	8.76	2.36	
83	3.56	8.73	2.33	
84	3.76	8.71	2.31	
85	3.96	8.70	2.30	
86	4.16	8.68	2.28	
87	4.36	8.66	2.26	
88	4.56	8.65	2.25	
89	4.76	8.65	2.25	
90	4.96	8.63	2.23	
91	5.16	8.62	2.22	
92	5.36	8.60	2.20	
93	5.56	8.60	2.20	
94	5.76	8.60	2.20	
95	5.96	8.58	2.18	
96	6.16	8.58	2.18	
97	6.36	8.57	2.17	
98	6.56	8.57	2.17	
99	6.76	8.57	2.17	
100	6.96	8.55	2.15	

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Slug Test No. 3

Test conducted on: 10/17/2005

MW-9D

Well MW-9D

Static water level: 6.40 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]	
101	7.16	8.55	2.15	
102	7.36	8.55	2.15	
103	7.56	8.55	2.15	
104	7.76	8.54	2.14	
105	7.96	8.54	2.14	
106	8.16	8.54	2.14	
107	8.36	8.54	2.14	
108	8.56	8.54	2.14	
109	8.76	8.54	2.14	

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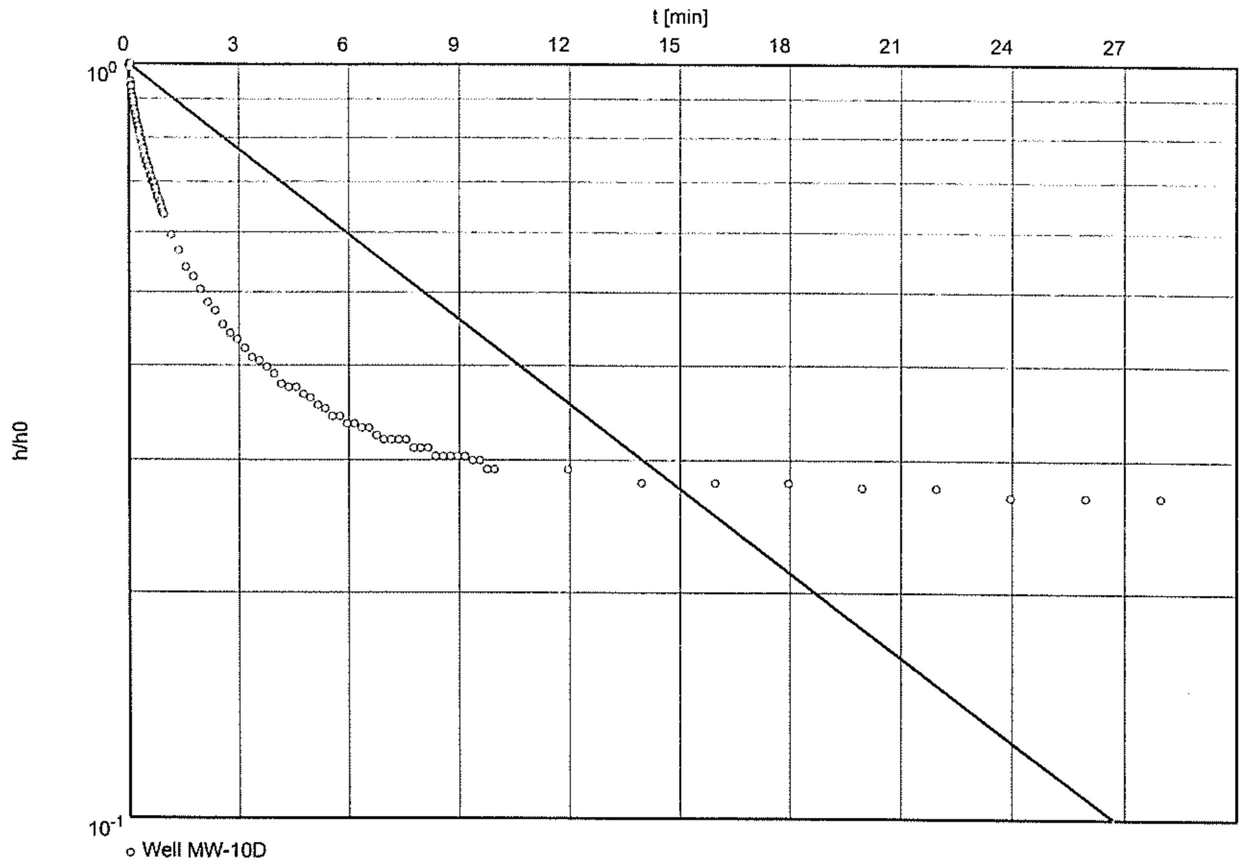
Slug Test No. 4	Test conducted on: 10/17/2005
MW-10D	



Hydraulic conductivity [ft/min]: 7.37×10^{-5} $= 3.74 \times 10^{-5}$ cm/sec.

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Slug Test No. 4	Test conducted on: 10/17/2005
MW-10D	Well MW-10D

Static water level: 6.65 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]	
1	0.00	9.19	2.54	
2	0.01	9.17	2.52	
3	0.02	9.17	2.52	
4	0.03	9.16	2.51	
5	0.04	9.19	2.54	
6	0.05	9.06	2.41	
7	0.06	9.03	2.38	
8	0.07	9.02	2.37	
9	0.08	8.98	2.33	
10	0.09	8.97	2.32	
11	0.10	8.95	2.30	
12	0.11	8.94	2.29	
13	0.12	8.92	2.27	
14	0.13	8.91	2.26	
15	0.14	8.89	2.24	
16	0.15	8.87	2.22	
17	0.16	8.86	2.21	
18	0.17	8.84	2.19	
19	0.18	8.83	2.18	
20	0.19	8.83	2.18	
21	0.20	8.81	2.16	
22	0.21	8.79	2.14	
23	0.22	8.78	2.13	
24	0.23	8.78	2.13	
25	0.24	8.76	2.11	
26	0.25	8.75	2.10	
27	0.26	8.75	2.10	
28	0.27	8.73	2.08	
29	0.28	8.72	2.07	
30	0.29	8.72	2.07	
31	0.30	8.70	2.05	
32	0.31	8.68	2.03	
33	0.33	8.67	2.02	
34	0.35	8.65	2.00	
35	0.36	8.64	1.99	
36	0.38	8.62	1.97	
37	0.40	8.61	1.96	
38	0.41	8.59	1.94	
39	0.43	8.57	1.92	
40	0.45	8.56	1.91	
41	0.46	8.54	1.89	
42	0.48	8.54	1.89	
43	0.50	8.53	1.88	
44	0.51	8.51	1.86	
45	0.53	8.51	1.86	
46	0.55	8.50	1.85	
47	0.56	8.48	1.83	
48	0.58	8.46	1.81	
49	0.60	8.46	1.81	
50	0.61	8.45	1.80	

C&S Engineers 499 Col. Eileen Collins Blvd. Syracuse, NY 13212 ph.(315) 455-2000	slug/bail test analysis BOUWER-RICE's method	Date: 10/26/2005	Page 3
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		Evaluated by: WNR	

Slug Test No. 4	Test conducted on: 10/17/2005
MW-10D	Well MW-10D

Static water level: 6.65 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
51	0.63	8.43	1.78
52	0.65	8.43	1.78
53	0.66	8.42	1.77
54	0.68	8.42	1.77
55	0.70	8.40	1.75
56	0.71	8.39	1.74
57	0.73	8.39	1.74
58	0.75	8.37	1.72
59	0.76	8.35	1.70
60	0.78	8.35	1.70
61	0.80	8.34	1.69
62	0.81	8.34	1.69
63	0.83	8.32	1.67
64	0.85	8.32	1.67
65	0.86	8.31	1.66
66	0.88	8.29	1.64
67	0.90	8.29	1.64
68	0.91	8.27	1.62
69	0.93	8.27	1.62
70	0.95	8.26	1.61
71	0.96	8.26	1.61
72	1.16	8.16	1.51
73	1.36	8.09	1.44
74	1.56	8.02	1.37
75	1.76	7.98	1.33
76	1.96	7.93	1.28
77	2.16	7.88	1.23
78	2.36	7.85	1.20
79	2.56	7.80	1.15
80	2.76	7.77	1.12
81	2.96	7.75	1.10
82	3.16	7.72	1.07
83	3.36	7.69	1.04
84	3.56	7.68	1.03
85	3.76	7.66	1.01
86	3.96	7.64	0.99
87	4.16	7.61	0.96
88	4.36	7.60	0.95
89	4.56	7.60	0.95
90	4.76	7.58	0.93
91	4.96	7.57	0.92
92	5.16	7.55	0.90
93	5.36	7.54	0.89
94	5.56	7.52	0.87
95	5.76	7.52	0.87
96	5.96	7.50	0.85
97	6.16	7.50	0.85
98	6.36	7.49	0.84
99	6.56	7.49	0.84
100	6.76	7.47	0.82

C&S Engineers 499 Col. Eileen Collins Blvd. Syracuse, NY 13212 ph.(315) 455-2000	slug/bail test analysis BOUWER-RICE's method	Date: 10/26/2005	Page 4
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Slug Test No. 4	Test conducted on: 10/17/2005
MW-10D	Well MW-10D

Static water level: 6.65 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
101	6.96	7.46	0.81
102	7.16	7.46	0.81
103	7.36	7.46	0.81
104	7.56	7.46	0.81
105	7.76	7.44	0.79
106	7.96	7.44	0.79
107	8.16	7.44	0.79
108	8.36	7.42	0.77
109	8.56	7.42	0.77
110	8.76	7.42	0.77
111	8.96	7.42	0.77
112	9.16	7.42	0.77
113	9.36	7.41	0.76
114	9.56	7.41	0.76
115	9.76	7.39	0.74
116	9.96	7.39	0.74
117	11.96	7.39	0.74
118	13.96	7.36	0.71
119	15.96	7.36	0.71
120	17.96	7.36	0.71
121	19.96	7.35	0.70
122	21.96	7.35	0.70
123	23.96	7.33	0.68
124	25.96	7.33	0.68
125	27.96	7.33	0.68

C&S Engineers 499 Col. Eileen Collins Blvd. Syracuse, NY 13212 ph.(315) 455-2000	slug/bail test analysis BOUWER-RICE's method	Date: 10/26/2005	Page 1
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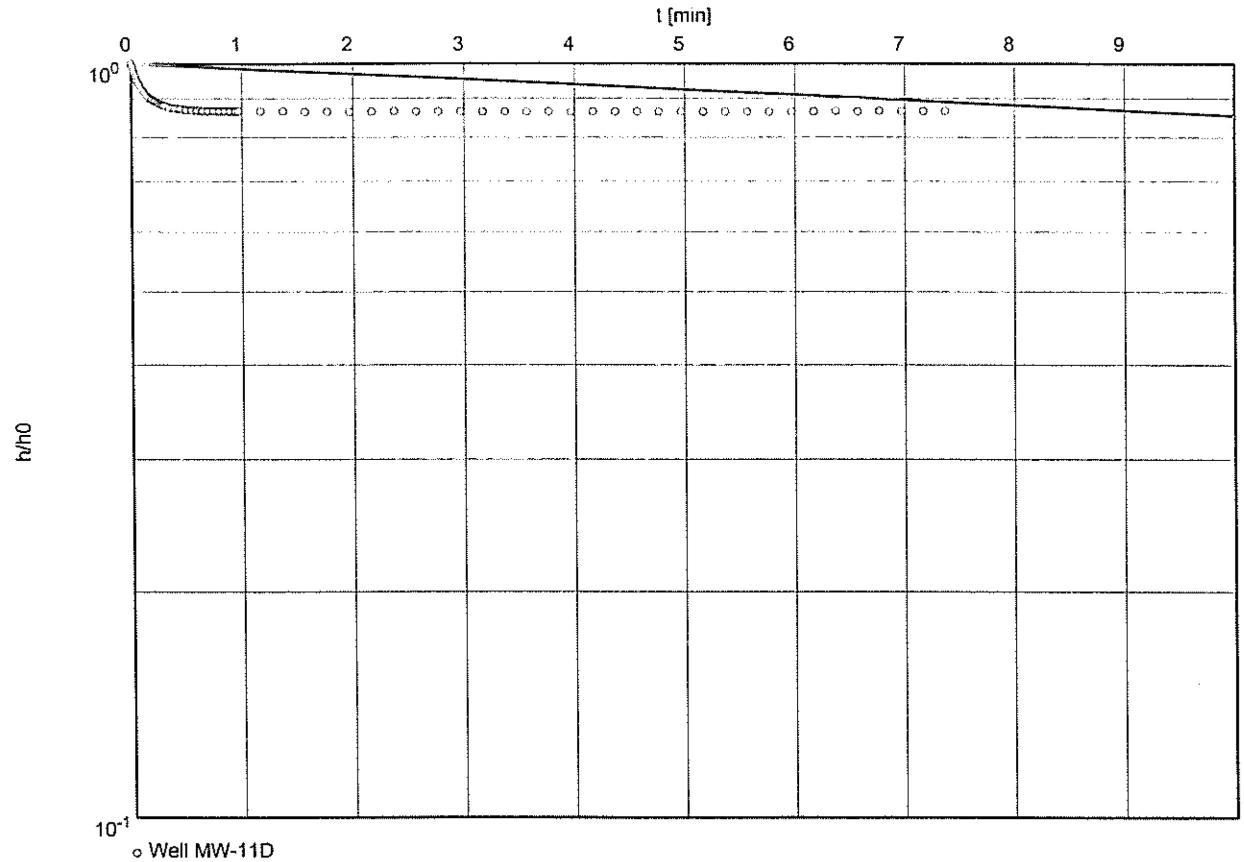
Slug Test No. 2	Test conducted on: 10/17/2005
MW-11D	



Hydraulic conductivity [ft/min]: 9.41×10^{-6} $= 4.78 \times 10^{-6}$ cm/sec.

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Slug Test No. 2 — Test conducted on: 10/17/2005

MW-11D — Well MW-11D

Static water level: 2.41 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]	
1	0.00	15.40	12.99	
2	0.01	15.29	12.88	
3	0.02	15.11	12.70	
4	0.03	14.99	12.58	
5	0.04	14.88	12.47	
6	0.05	14.76	12.35	
7	0.06	14.69	12.28	
8	0.07	14.61	12.20	
9	0.08	14.53	12.12	
10	0.09	14.46	12.05	
11	0.10	14.40	11.99	
12	0.11	14.35	11.94	
13	0.12	14.31	11.90	
14	0.13	14.26	11.85	
15	0.14	14.21	11.80	
16	0.15	14.17	11.76	
17	0.16	14.13	11.72	
18	0.17	14.10	11.69	
19	0.18	14.07	11.66	
20	0.19	14.04	11.63	
21	0.20	14.02	11.61	
22	0.21	13.99	11.58	
23	0.22	13.98	11.57	
24	0.23	13.96	11.55	
25	0.24	13.93	11.52	
26	0.25	13.91	11.50	
27	0.26	13.90	11.49	
28	0.27	13.88	11.47	
29	0.28	13.87	11.46	
30	0.29	13.85	11.44	
31	0.30	13.84	11.43	
32	0.32	13.82	11.41	
33	0.34	13.80	11.39	
34	0.35	13.77	11.36	
35	0.37	13.77	11.36	
36	0.39	13.76	11.35	
37	0.40	13.74	11.33	
38	0.42	13.74	11.33	
39	0.44	13.73	11.32	
40	0.45	13.73	11.32	
41	0.47	13.71	11.30	
42	0.49	13.71	11.30	
43	0.50	13.69	11.28	
44	0.52	13.69	11.28	
45	0.54	13.69	11.28	
46	0.55	13.68	11.27	
47	0.57	13.68	11.27	
48	0.59	13.68	11.27	
49	0.60	13.68	11.27	
50	0.62	13.68	11.27	

C&S Engineers 499 Col. Eileen Collins Blvd. Syracuse, NY 13212 ph.(315) 455-2000	slug/bail test analysis BOUWER-RICE's method	Date: 10/26/2005	Page 3
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		Evaluated by: WNR	

Slug Test No. 2	Test conducted on: 10/17/2005
MW-11D	Well MW-11D

Static water level: 2.41 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
51	0.64	13.66	11.25
52	0.65	13.66	11.25
53	0.67	13.66	11.25
54	0.69	13.66	11.25
55	0.70	13.66	11.25
56	0.72	13.66	11.25
57	0.74	13.66	11.25
58	0.75	13.66	11.25
59	0.77	13.66	11.25
60	0.79	13.66	11.25
61	0.80	13.65	11.24
62	0.82	13.65	11.24
63	0.84	13.65	11.24
64	0.85	13.65	11.24
65	0.87	13.65	11.24
66	0.89	13.65	11.24
67	0.90	13.65	11.24
68	0.92	13.65	11.24
69	0.94	13.65	11.24
70	0.95	13.65	11.24
71	0.97	13.65	11.24
72	1.17	13.65	11.24
73	1.37	13.65	11.24
74	1.57	13.63	11.22
75	1.77	13.63	11.22
76	1.97	13.63	11.22
77	2.17	13.63	11.22
78	2.37	13.65	11.24
79	2.57	13.63	11.22
80	2.77	13.63	11.22
81	2.97	13.63	11.22
82	3.17	13.63	11.22
83	3.37	13.63	11.22
84	3.57	13.63	11.22
85	3.77	13.63	11.22
86	3.97	13.63	11.22
87	4.17	13.63	11.22
88	4.37	13.63	11.22
89	4.57	13.63	11.22
90	4.77	13.63	11.22
91	4.97	13.63	11.22
92	5.17	13.63	11.22
93	5.37	13.63	11.22
94	5.57	13.63	11.22
95	5.77	13.63	11.22
96	5.97	13.63	11.22
97	6.17	13.63	11.22
98	6.37	13.65	11.24
99	6.57	13.63	11.22
100	6.77	13.65	11.24

C&S Engineers 499 Col. Eileen Collins Blvd. Syracuse, NY 13212 ph.(315) 455-2000	slug/bail test analysis BOUWER-RICE's method	Date: 10/26/2005	Page 4
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Slug Test No. 2

Test conducted on: 10/17/2005

MW-11D

Well MW-11D

Static water level: 2.41 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]	
101	6.97	13.65	11.24	
102	7.17	13.65	11.24	
103	7.37	13.65	11.24	

GeoLogic JULY 2006 GROUNDWATER AND CONTAMINANT FLOW REPORT

GeoLogic

GeoLogic NY, Inc. P.O. Box 350 • 37 Copeland Ave. • Homer, NY 13077 • 607.749.5000 • Fax: 607.749.5063

July 3, 2006

Mr. Steve Vinci
C & S Engineers, Inc.
499 Colonel Eileen Collins Blvd.
Syracuse, NY 13212

Reference: Site Hydrogeology
Midler Avenue Brownfield Clean-Up
NYSDEC Brownfield Site # C734103
Midler Avenue
Syracuse, NY

Dear Mr. Vinci:

This report summarizes our analysis of the site-specific hydrogeologic characteristics of the Midler Avenue site. Our analysis is based on data obtained by C & S personnel and GeoLogic personnel; and addresses direction of groundwater flow in the upper peat/marl unit and the lower sand unit, hydraulic conductivity of the peat/marl unit, estimated rate of groundwater flow in the peat/marl unit and probable rates of contaminant migration in the peat/marl unit.

The unconsolidated deposits at the site can generally be described as a sequence of surficial fill, peat/marl, clay, sand and glacial till (C & S, Remedial Investigation Data Report, November 2005). The peat/marl unit and the deeper sand unit are the primary water bearing units at the site. The presence of the peat/marl unit is consistent with the mapping by Winkler (1989). Winkler describes the surficial soils as peat and marl formed in post-glacial wetlands.

Fifteen groundwater monitoring wells have been installed in the peat/marl unit. Groundwater elevations from depth to water measurements made on May 16, 2006 are presented on Drawing No. 1. The depth to water in the peat/marl unit is less than 5 feet across most of the site. Groundwater contours as interpolated from the May 16, 2006 data are also presented on Drawing No. 1. The data demonstrates a general north to south direction of groundwater flow. This is consistent with the local topography in the vicinity of the site. The average horizontal hydraulic gradient based on the data is 0.0122.

Artesian conditions (water level rising above the ground surface) have been observed in DAW-3. DAW-3 is screened in the deep sand unit. The presence of artesian conditions at DAW-3 indicates that the clay unit is acting as an aquitard limiting the movement of groundwater between the peat/marl unit and deeper sand unit.

Four groundwater monitoring wells have been completed at the top of the till unit in the deep sand unit. Groundwater elevations in the deep wells as indicated by May 16, 2006 water level measurements are presented on Drawing No. 2 along with the interpolated groundwater contours. The elevations suggest radial flow towards a "trough" in the center of the site with groundwater discharging to the east. An average horizontal hydraulic gradient of between 0.001 and 0.005 is suggested by the May 16, 2006 data from the deep wells.

In-situ hydraulic conductivity tests (slug tests) were conducted in wells MW-3D, MW-9D, MW-10D and MW-12D on April 13 and 27, 2006. NYSDEC personnel were on site on April 13, 2006 for the tests conducted in MW-3D, MW-9D and MW-10D. These four wells are completed in the peat/marl unit. Each test was conducted using different length slugs (2.5 feet and 5 feet at MW-3D, MW-9D and MW-10D and, 2.5 feet, 5 feet and 7 feet at MW-12D). The change in water level versus time was recorded after the slug was inserted (falling head test) and after the slug was withdrawn (rising head test). Water levels were allowed to return to within at least 95% of the initial water level between tests.

The slug test data was analyzed using an Excel spreadsheet program developed by the United States Geologic Survey (USGS). Spreadsheet analysis follows the Bouwer and Rice methodology. The results of the data analyses are attached. It should be noted that the program requires the selection of an "aquifer material". The choices offered by the program are limited. The classification of "silt, loess" was judged to be the closest to the peat/marl unit; therefore, it was selected. Because the selected aquifer material and the actual material are not the same, the comments on some of the results that K (hydraulic conductivity) is greater than the likely maximum for "silt, loess" should be ignored.

The results of the analyses are summarized on the attached table. The results from the tests in each individual well are consistent between tests (the data from the 5 ft. falling head test in MW-9D are very erratic and, therefore, not included). The average results from wells MW-3D, MW-9D and MW-10D are also similar.

The average hydraulic conductivity for the peat/marl unit using all of the results from wells MW-3D, MW-9D and MW-10D is 3.98×10^{-1} Feet/Day or 1.4×10^{-4} Cm/Sec.

The hydraulic conductivity indicated by the data from MW-12D is one to two orders of magnitude higher than the other wells and is consistent with a fine to medium sand. A review of the stratigraphy indicates the fill is 4 to 6 feet thick in the area of MW-12D. The filter pack at MW-12D extends up to a depth of about 6.5 feet. Given that the depth of the fill unit in the area of MW-12D and the depth to the top of the filter sand are similar, it is our opinion that the hydraulic conductivity test results from MW-12D are reflective of a connection between the fill unit and filter pack and are not indicative of the hydraulic conductivity in the peat/marl unit. Therefore, the results from MW-12D are not included in the peat/marl unit average.

Using the average hydraulic conductivity (K = 3.98×10^{-1} Feet/Day), the average horizontal hydraulic gradient (i = 0.0122) and an assumed porosity (n = 40%), an average linear velocity for groundwater flow in the peat/marl unit can be estimated:

$$\text{avg. linear velocity } (v) = (K/n) \times i$$

$$= (3.98 \times 10^{-1} \text{ Feet/Day}/0.40) \times 0.0122$$

$$v = 1.2 \times 10^{-2} \text{ Feet/Day}$$

$$v = 4.4 \text{ Feet/Year}$$

The contaminants of concern at the site are tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2 dichloroethene and vinyl chloride. The migration of environmental contaminants can vary from the rate of groundwater flow as a result of the site geology and the contaminant physical and chemical properties. In an effort to gauge whether or not the contaminants of concern would be expected to move slower than the estimated rate of groundwater flow, the retardation factor for each of the contaminants was estimated using the USEPA On-Line Tools Site Assessment.

The USEPA calculation requires an estimate of the porosity of the geologic unit and an estimate of the fraction of organic carbon present in the unit. The porosity used in the calculation was again 40%. The value used for fraction organic carbon was 8%. This value represents the mean percentage (minus the highest and lowest value) as reported for 12 samples from the site (C & S letter report, dated December 9, 2005). Print outs of the Retardation Factor calculations are attached and summarized below:

PCE, R = 140

TCE, R = 42

Dichloroethene (undifferentiated isomers)
R = 41

Vinyl Chloride, R = 10

Applying the retardation factors to the average linear velocity calculated above results in the following projected rates of migration for the contaminants of concern:

Groundwater, v = 4.4 Feet/Year

PCE, v = 3.1×10^{-2} Feet/Year

TCE, v = 1.0×10^{-1} Feet/Year

Dichloroethene (undifferentiated isomers)
v = 1.0×10^{-1} Feet/Year

Vinyl Chloride, v = 4.4×10^{-1} Feet/Year

Thus, it is anticipated that the average rate of migration for the contaminants of concern would be between 140 times slower (PCE) and 10 times slower (vinyl chloride) than the rate of groundwater flow.

A comparison of the contaminant distribution at the site and the predicted rates of contaminate migration calculated above indicate the actual migration rates are higher than predicted. This is due to several factors. The theoretical calculations are based on average hydraulic conductivities, hydraulic gradients, and organic content. In reality, the subsurface conditions at the site are heterogeneous, varying both vertically and horizontally, with zones where the rates of migration are either higher or lower than predicted. In addition, other processes such as diffusion and biological activity influence the rate of migration. The theoretical rates of migration coupled with the actual contaminant distribution (the highest concentrations are centered around the suspected source areas) are indicative of a relatively low flow environment.

We trust we have addressed the issues required for the IRM. Please feel free to call should you have any questions or require any additional information.

Sincerely;

GeoLogic NY, Inc.

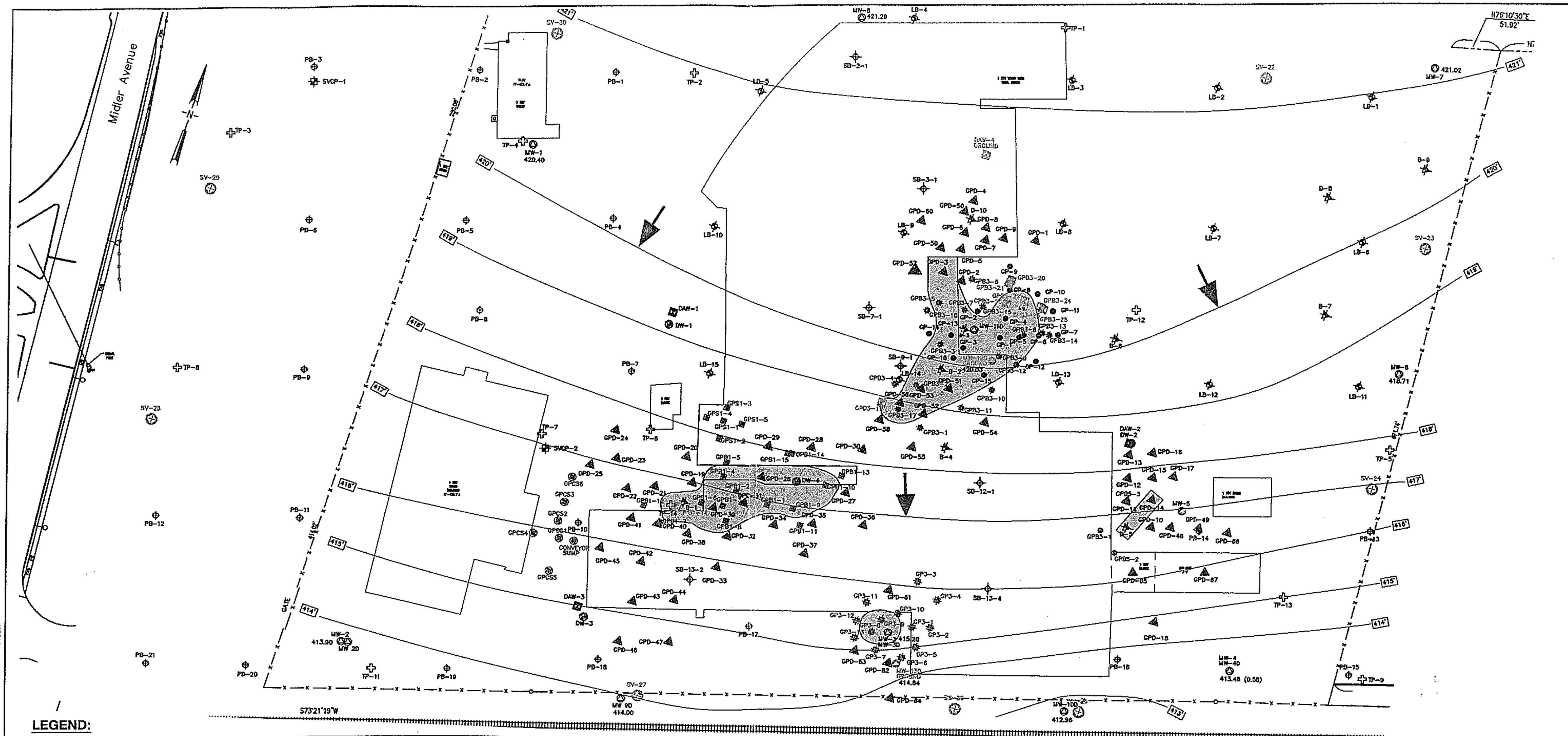
Forrest Earl

Forrest Earl
Principal Hydrogeologist/Vice President

Reference: Winkler, Steven, 1989, The Hydrogeology of Onondaga County, New York, Department of Geology, Syracuse University, Syracuse, NY

Enc.: (Drawing Nos. 1 & 2, Summary of Hydraulic Conductivity, Slug Analyses, Retardation Factor Calculations)

cc: File 205006B\Report\Hydro Report



LEGEND:

MW-10 MW-10D		PERMANENT MONITORING WELL
TP-14		TEST PITS
B-5		B SERIES COMPLETED NOV. 2004
GPD-44		GPD SERIES COMPLETED SEPT. 2005
GP-12		GP SERIES COMPLETED MARCH 2005
SB-13-4		INTERIOR SOIL BORING COMPLETED AS TEMPERARY MONITORING WELLS MARCH 2005
DW-1		DW SERIES COMPLETED JULY 2005
DAW-1		DAW SERIES COMPLETED AUG. 2005
PB-18		PB SERIES COMPLETED NOV. 2004
LB-1		LB SERIES COMPLETED NOV. 2004
SVGP-1		SVOC SAMPLES COMPLETED SEPT. 2005
		APPROXIMATE LIMIT OF PROPOSED THERMAL TREATMENT AREA
		CONVEYOR SUMP INVESTIGATION COMPLETED MARCH 2006
		MW3/3D INVESTIGATION COMPLETED MARCH 2006
		IRM DESIGN B-5 SOURCE AREA COMPLETED MARCH 2006
		IRM DESIGN B-3 SOURCE AREA COMPLETED MARCH 2006
		IRM DESIGN B-1 SOURCE AREA COMPLETED MARCH 2006
MW-10 MW-10D		MW SERIES COMPLETED APRIL 2006
DAW-1		DAW SERIES COMPLETED APRIL 2006
GPB3-18		GPB SERIES COMPLETED APRIL 2006
GPD-44		GPD SERIES COMPLETED APRIL 2006
SV		SOIL VAPOR SAMPLING LOCATIONS COMPLETED APRIL 2006

50' 25' 0 50'

GeoLogic

GeoLogic NY, Inc.

GROUNDWATER ELEVATIONS
PEAT/MARL UNIT
MAY 16, 2006

DR. BY: FCE/SR	SCALE: AS SHOWN	PROJ. NO: 205006B
REVD BY: FCE	DATE: MAY 2006	DRWG. NO: 1

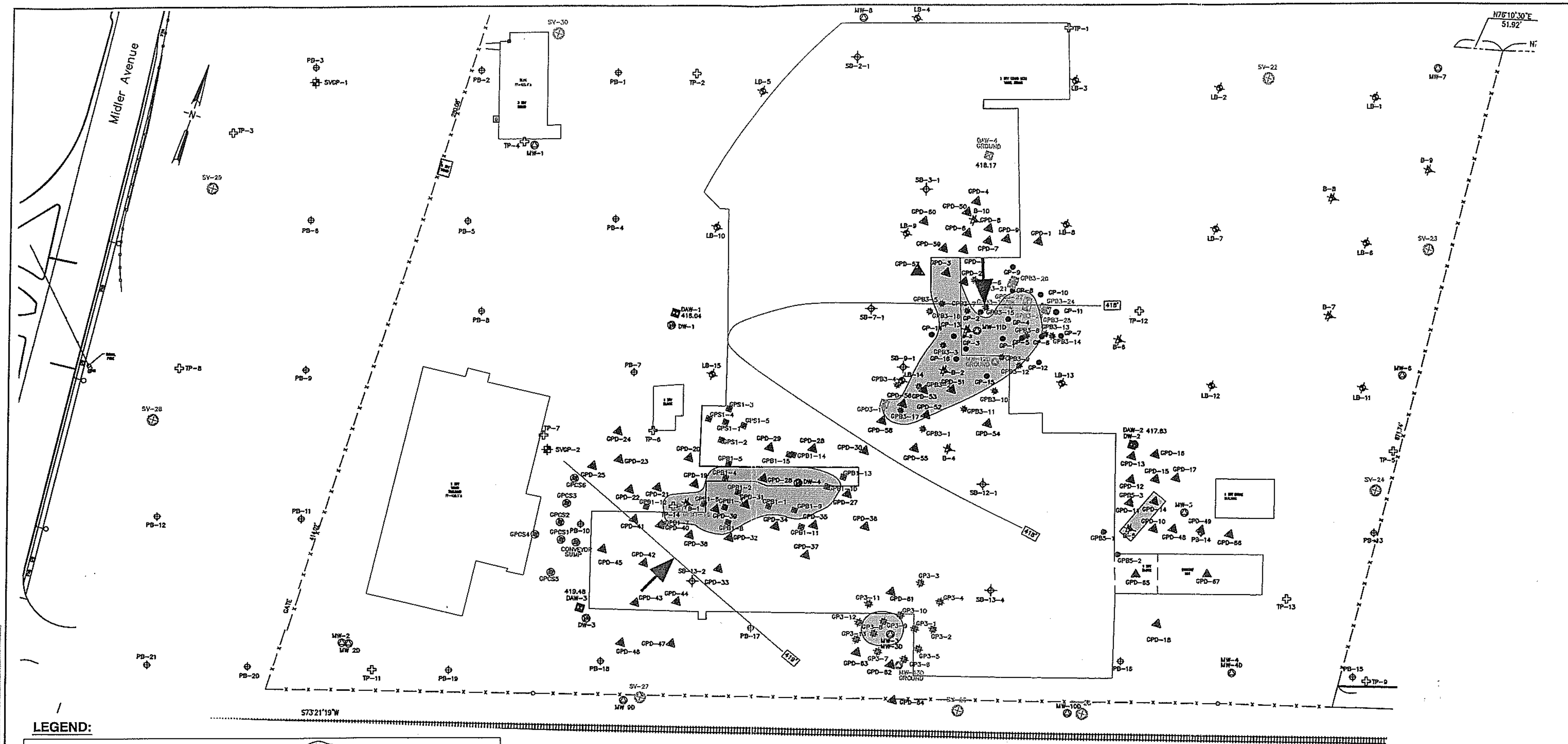
C&S ENGINEERS, INC.

499 Col. Eileen Collins Blvd.
Syracuse, New York 13212
Phone: 315-455-2000
Fax: 315-455-9667
Toll Free: 1-877 CS SOLVE
WWW.CSCOS.COM

DATE:	APRIL 2006
SCALE:	AS SHOWN
FILE NO.	C81.002.001

Pioneer Midler Avenue LLC
Interim Remedial Measure
Proposed Thermal Treatment Areas

Figure IRM-2



LEGEND:

- MW-10 / MW-10D — PERMANENT MONITORING WELL
- TP-14 — TEST PITS
- B-5 — B SERIES COMPLETED NOV. 2004
- GPD-44 — GPD SERIES COMPLETED SEPT. 2005
- GP-12 — GP SERIES COMPLETED MARCH 2005
- SB-13-4 — INTERIOR SOIL BORING COMPLETED AS TEMPERARY MONITORING WELLS MARCH 2005
- DW-1 — DW SERIES COMPLETED JULY 2005
- DAW-1 — DAW SERIES COMPLETED AUG. 2005
- PB-18 — PB SERIES COMPLETED NOV. 2004
- LB-1 — LB SERIES COMPLETED NOV. 2004
- SVGP-1 — SVOC SAMPLES COMPLETED SEPT. 2005
- APPROXIMATE LIMIT OF PROPOSED THERMAL TREATMENT AREA
- CONVEYOR SUMP INVESTIGATION COMPLETED MARCH 2006
- MW3/3D INVESTIGATION COMPLETED MARCH 2006
- IRM DESIGN B-5 SOURCE AREA COMPLETED MARCH 2006
- IRM DESIGN B-3 SOURCE AREA COMPLETED MARCH 2006
- IRM DESIGN B-1 SOURCE AREA COMPLETED MARCH 2006
- MW-10 / MW-10D — MW SERIES COMPLETED APRIL 2006
- DAW-1 — DAW SERIES COMPLETED APRIL 2006
- GPB3-18 — GPB SERIES COMPLETED APRIL 2006
- GPD-44 — GPD SERIES COMPLETED APRIL 2006
- SV — SOIL VAPOR SAMPLING LOCATIONS COMPLETED APRIL 2006

GeoLogic

GeoLogic NY, Inc.

GROUNDWATER ELEVATIONS
SAND UNIT
MAY 16, 2006

DR. BY: FCE/SR	SCALE: AS SHOWN	PROJ. NO: 205006B
REVD BY: FCE	DATE: MAY 2006	DRWG. NO: 2

C&S ENGINEERS, INC.
499 Col. Eileen Collins Blvd. Syracuse, New York 13212
Phone: 315-455-2000
Fax: 315-455-9667
Toll Free: 1-877 CS SOLVE
WWW.CSCOS.COM

DATE:	APRIL 2006
SCALE:	AS SHOWN
FILE NO.	C81.002.001

NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW

Pioneer Midler Avenue LLC
Interim Remedial Measure
Proposed Thermal Treatment Areas

Figure IRM-2

Summary of In-Situ Hydraulic Conductivity Testing
Midler City
NYSDEC Brown Field Site # C734103
Midler Avenue
Syracuse, NY
April 2006

Test	MW-3D	MW-9D	MW-10D	MW-12D	Average w/ MW-12D	Average w/o MW-12D
	Feet/Day	Feet/Day	Feet/Day	Feet/Day		
5 Ft. Slug Falling Head	1.60E-01		5.50E-01	1.40E+01		
5 Ft. Slug Rising Head	9.40E-02	5.80E-01	3.50E-01	1.40E+01		
2.5 Ft. Slug Falling Head	1.00E-01	8.80E-01	2.90E-01			
2.5 Ft. Slug Rising Head	1.10E-01	6.90E-01	2.50E-01			
7 Ft. Slug Falling Head				1.10E+01		
7 Ft. Slug Rising Head				1.40E+01		
K = Feet/Day Average	**1.16E-01**	**7.17E-01**	**3.60E-01**	**1.33E+01**	3.61E+00	**3.98E-01**
K = Cm/Sec Average	**4.09E-05**	**2.53E-04**	**1.27E-04**	**4.67E-03**	1.27E-03	**1.40E-04**
Screened Unit	Marl	Marl	Marl	?Marl? - data is consistent with fine to medium sand and indicates communication between well screen filter pack and overlying fill unit		

WELL ID: MW-3D

Local ID: 5 Ft Falling Manual
Date: 4/13/2006
Time: 14:57

INPUT

Construction:

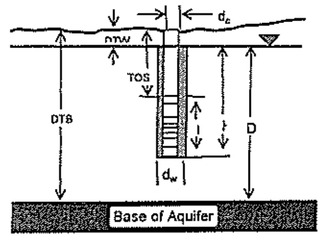
Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	10 Feet

Depths to:

water level (DTW)	2.5 Feet
top of screen (TOS)	15 Feet
Base of Aquifer (DTB)	25 Feet

Annular Fill:
across screen -- Medium Sand
above screen -- Bentonite

Aquifer Material -- Silt, Loess



COMPUTED

L_{wetted}	10 Feet
D =	22.45 Feet
H =	22.45 Feet
L/r_w =	29.09
$y_{0\text{-DISPLACEMENT}}$ =	2.00 Feet
$y_{0\text{-SLUG}}$ =	2.38 Feet

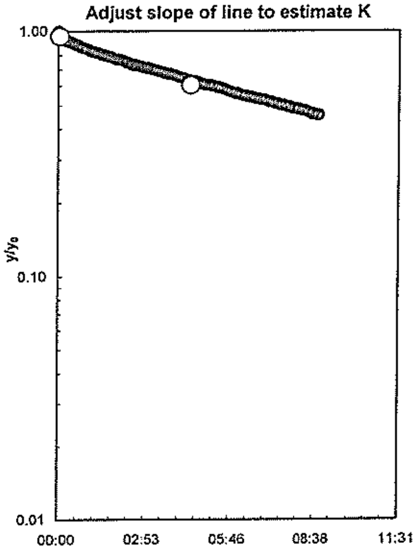
From look-up table using L/r_w

Fully penetrate C =	2.041
ln(Re/rw) =	3.000
Re =	6.90 Feet
Slope =	0.000753 $\log_{10}$/sec
$t_{90\%}$ recovery =	1329 sec

Input is consistent.

K = 0.16 Feet/Day

Adjust slope of line to estimate K



K= 0.16 is greater than likely maximum of 0.1 for Silt, Loess

Bouwer and Rice analysis of slug test, WRR 1976

REMARKS:

Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	1:00:10.0	0.50
2	1:00:30.0	0.69
3	1:00:40.0	0.72
4	1:00:50.0	0.75
5	1:01:00.0	0.79
6	1:01:10.0	0.82
7	1:01:20.0	0.85
8	1:01:30.0	0.87
9	1:01:40.0	0.90
10	1:01:50.0	0.92
11	1:02:00.0	0.95
12	1:02:10.0	0.96
13	1:02:20.0	0.98
14	1:02:30.0	1.01
15	1:02:40.0	1.04
16	1:02:50.0	1.05
17	1:03:00.0	1.07
18	1:03:10.0	1.08
19	1:03:20.0	1.10
20	1:03:30.0	1.12
21	1:03:40.0	1.14
22	1:03:50.0	1.16
23	1:04:00.0	1.17
24	1:04:10.0	1.19
25	1:04:20.0	1.21
26	1:04:30.0	1.25
27	1:04:40.0	1.25
28	1:04:50.0	1.26
29	1:05:00.0	1.28
30	1:05:10.0	1.29
31	1:05:20.0	1.30
32	1:05:30.0	1.32
33	1:05:40.0	1.33
34	1:05:50.0	1.35
35	1:06:00.0	1.37
36	1:06:10.0	1.38
37	1:06:20.0	1.40
38	1:06:30.0	1.41
39	1:06:40.0	1.42
40	1:06:50.0	1.44
41	1:07:00.0	1.45
42	1:07:10.0	1.46
43	1:07:20.0	1.47
44	1:07:30.0	1.49
45	1:07:40.0	1.50

WELL ID: MW-3D

Local ID: 5 Ft Rising Manual
Date: 4/13/2006
Time: 16:00

INPUT

Construction:

Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	10 Feet

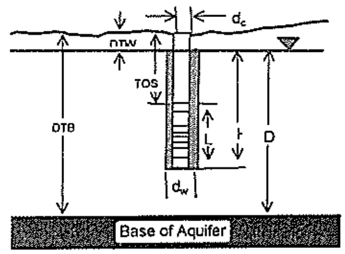
Depths to:

water level (DTW)	2.5 Feet
top of screen (TOS)	15 Feet
Base of Aquifer (DTB)	25 Feet

Annular Fill:

across screen -- Medium Sand
above screen -- Bentonite

Aquifer Material -- Silt, Loess



COMPUTED

L_{wetted}	10 Feet
D =	22.5 Feet
H =	22.5 Feet
L/r_w =	29.09
$y_{0\text{-DISPLACEMENT}}$ =	2.20 Feet
$y_{0\text{-SLUG}}$ =	2.38 Feet

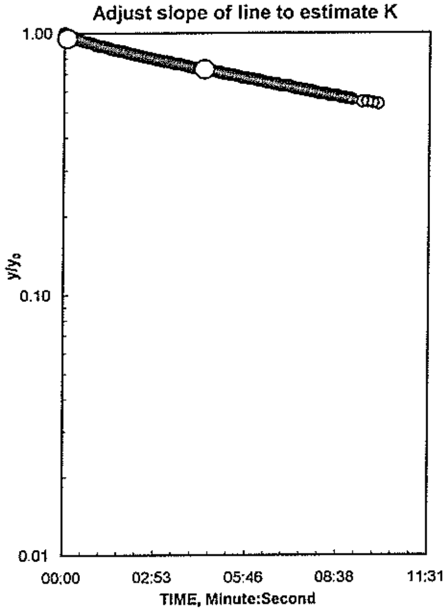
From look-up table using L/r_w

Fully penetrate C =	2.041
ln(Re/rw) =	3.001
Re =	6.91 Feet
Slope =	0.000452 $\log_{10}$/sec
$t_{90\%}$ recovery =	2211 sec

Input is consistent.

K = 0.094 Feet/Day

Adjust slope of line to estimate K



REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	1:00:05.0	4.70
2	1:00:15.0	4.63
3	1:00:25.0	4.61
4	1:00:35.0	4.57
5	1:00:45.0	4.54
6	1:00:55.0	4.52
7	1:01:05.0	4.48
8	1:01:15.0	4.46
9	1:01:25.0	4.44
10	1:01:35.0	4.41
11	1:01:45.0	4.39
12	1:01:55.0	4.37
13	1:02:05.0	4.35
14	1:02:15.0	4.33
15	1:02:25.0	4.31
16	1:02:35.0	4.29
17	1:02:45.0	4.27
18	1:02:55.0	4.25
19	1:03:05.0	4.23
20	1:03:15.0	4.21
21	1:03:25.0	4.20
22	1:03:35.0	4.18
23	1:03:45.0	4.17
24	1:03:55.0	4.15
25	1:04:05.0	4.13
26	1:04:15.0	4.12
27	1:04:25.0	4.10
28	1:04:35.0	4.09
29	1:04:45.0	4.08
30	1:04:55.0	4.06
31	1:05:05.0	4.04
32	1:05:15.0	4.03
33	1:05:25.0	4.02
34	1:05:35.0	4.00
35	1:05:45.0	3.98
36	1:05:55.0	3.97
37	1:06:05.0	3.96
38	1:06:15.0	3.95
39	1:06:25.0	3.93
40	1:06:35.0	3.92
41	1:06:45.0	3.90
42	1:06:55.0	3.89
43	1:07:05.0	3.88
44	1:07:15.0	3.87
45	1:07:25.0	3.85

WELL ID: MW-3D

Local ID: 2.5 Ft Falling Manual
Date: 4/13/2006
Time: 17:26

INPUT

Construction:

Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	10 Feet

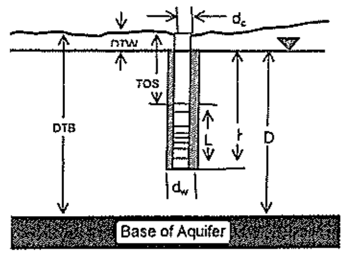
Depths to:

water level (DTW)	2.6 Feet
top of screen (TOS)	15 Feet
Base of Aquifer (DTB)	25 Feet

Annular Fill:

across screen -- Medium Sand
above screen -- Bentonite

Aquifer Material -- Silt, Loess



COMPUTED

L_{wetted}	10 Feet
D =	22.4 Feet
H =	22.4 Feet
L/r_w =	29.09
$y_{0\text{-DISPLACEMENT}}$ =	1.00 Feet
$y_{0\text{-SLUG}}$ =	1.19 Feet

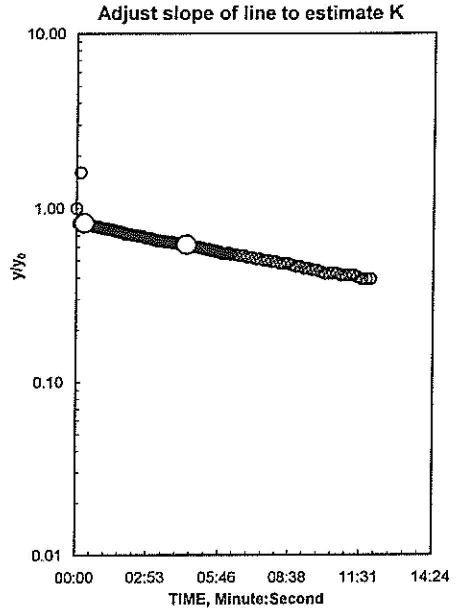
From look-up table using L/r_w

Fully penetrate C =	2.041
ln(Re/rw) =	2.998
Re =	6.89 Feet
Slope =	0.000506 log_{10}/sec
$t_{90\%}$ recovery =	1977 sec

Input is consistent.

K = 0.1 Feet/Day

Adjust slope of line to estimate K



Bouwer and Rice analysis of slug test, WRR 1976

REMARKS:

Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	1:00:05.0	1.60
2	1:00:15.0	1.00
3	1:00:25.0	1.79
4	1:00:35.0	1.80
5	1:00:45.0	1.81
6	1:00:55.0	1.82
7	1:01:05.0	1.83
8	1:01:15.0	1.84
9	1:01:25.0	1.84
10	1:01:35.0	1.85
11	1:01:45.0	1.86
12	1:01:55.0	1.87
13	1:02:05.0	1.89
14	1:02:15.0	1.89
15	1:02:25.0	1.90
16	1:02:35.0	1.91
17	1:02:45.0	1.91
18	1:02:55.0	1.93
19	1:03:05.0	1.93
20	1:03:15.0	1.94
21	1:03:25.0	1.95
22	1:03:35.0	1.95
23	1:03:45.0	1.96
24	1:03:55.0	1.96
25	1:04:05.0	1.97
26	1:04:15.0	1.98
27	1:04:25.0	1.99
28	1:04:35.0	1.99
29	1:04:45.0	2.00
30	1:05:00.0	2.00
31	1:05:10.0	2.01
32	1:05:20.0	2.02
33	1:05:30.0	2.03
34	1:05:40.0	2.03
35	1:05:50.0	2.04
36	1:06:00.0	2.05
37	1:06:10.0	2.05
38	1:06:20.0	2.06
39	1:06:40.0	2.07
40	1:07:00.0	2.08
41	1:07:20.0	2.09
42	1:07:40.0	2.10
43	1:08:00.0	2.11
44	1:08:20.0	2.12
45	1:08:40.0	2.12

WELL ID: MW-3D

Local ID: 2.5 Ft Rising Manual
Date: 4/13/2006
Time: 18:18

INPUT

Construction:

Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	10 Feet

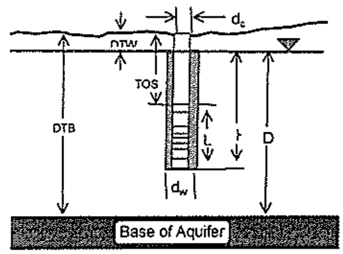
Depths to:

water level (DTW)	2.54 Feet
top of screen (TOS)	15 Feet
Base of Aquifer (DTB)	25 Feet

Annular Fill:

across screen -- Medium Sand
above screen -- Bentonite

Aquifer Material -- Silt, Loess



COMPUTED

L_{wetted}	10 Feet
D =	22.46 Feet
H =	22.46 Feet
L/r_w =	29.09
$y_{0\text{-DISPLACEMENT}}$ =	0.97 Feet
$y_{0\text{-SLUG}}$ =	1.19 Feet

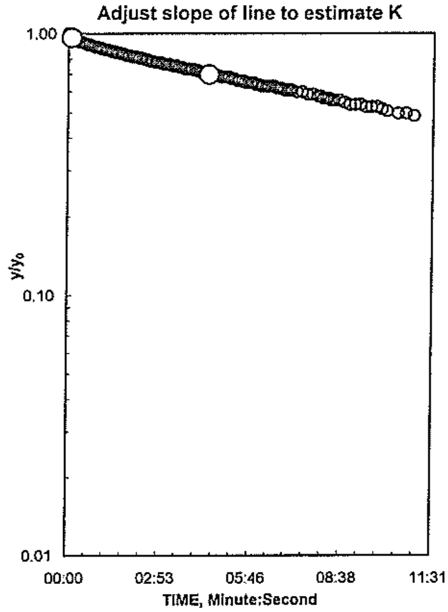
From look-up table using L/r_w

Fully penetrate C =	2.041
ln(Re/rw) =	3.000
Re =	6.90 Feet
Slope =	0.00054 $\log_{10}$/sec
$t_{90\%}$ recovery =	1851 sec

Input is consistent.

K = 0.11 Feet/Day

Adjust slope of line to estimate K



K= 0.11 is greater than likely maximum of 0.1 for Silt, Loess

REMARKS: Bouwer and Rice analysis of slug test, WRR 1976

Reduced Data

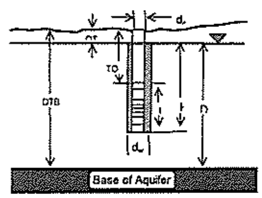
Entry	Time, Hr:Min:Sec	Water Level
1	1:00:05.0	3.51
2	1:00:15.0	3.46
3	1:00:25.0	3.44
4	1:00:35.0	3.43
5	1:00:45.0	3.42
6	1:00:55.0	3.40
7	1:01:05.0	3.39
8	1:01:15.0	3.38
9	1:01:25.0	3.37
10	1:01:35.0	3.36
11	1:01:45.0	3.35
12	1:01:55.0	3.34
13	1:02:05.0	3.33
14	1:02:15.0	3.33
15	1:02:25.0	3.32
16	1:02:35.0	3.31
17	1:02:45.0	3.30
18	1:02:55.0	3.29
19	1:03:05.0	3.28
20	1:03:15.0	3.28
21	1:03:25.0	3.27
22	1:03:35.0	3.26
23	1:03:45.0	3.25
24	1:03:55.0	3.25
25	1:04:05.0	3.24
26	1:04:15.0	3.23
27	1:04:25.0	3.22
28	1:04:35.0	3.22
29	1:04:45.0	3.21
30	1:04:55.0	3.20
31	1:05:05.0	3.20
32	1:05:15.0	3.19
33	1:05:25.0	3.18
34	1:05:35.0	3.18
35	1:05:45.0	3.17
36	1:05:55.0	3.17
37	1:06:05.0	3.16
38	1:06:15.0	3.15
39	1:06:25.0	3.15
40	1:06:35.0	3.15
41	1:06:45.0	3.14
42	1:06:55.0	3.13
43	1:07:05.0	3.13
44	1:07:20.0	3.12
45	1:07:40.0	3.11

WELL ID: MW-9D

Local ID: 5 Ft Rising Manual
Date: 4/13/2006
Time: 8:51

INPUT

Construction:	
Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	10 Feet
Depths to:	
water level (DTW)	6.58 Feet
top of screen (TOS)	8 Feet
Base of Aquifer (DTB)	18 Feet
Annular Fill:	
across screen --	Medium Sand
above screen --	Bentonite
Aquifer Material --	Silt, Loess



COMPUTED

L_{wetted}	10 Feet
D =	11.42 Feet
H =	11.42 Feet
L/r_w =	29.09
$y_{0\text{-DISPLACEMENT}}$ =	1.70 Feet
$y_{0\text{-SLUG}}$ =	2.38 Feet

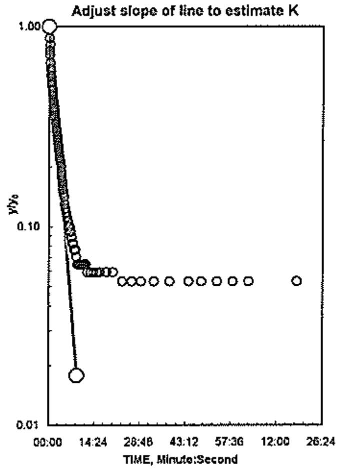
From look-up table using L/r_w

Fully penetrate C =	2.041
ln(Re/rw) =	2.603
Re =	4.64 Feet
Slope =	0.003213 $\log_{10}$/sec
$t_{90\%}$ recovery =	311 sec

Input is consistent.

K =	0.58 Feet/Day

Adjust slope of line to estimate K



K= 0.58 is greater than likely maximum of 0.1 for Silt, Loess

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

Reduced Data

Entry	Time, Hr:Min:Sec	Water Level	Entry	Time, Hr:Min:Sec	Water Level
1	8:51:40.0	8.28	51	8:55:50.0	6.88
2	8:51:45.0	8.25	52	8:55:55.0	6.87
3	8:51:50.0	8.07	53	8:56:00.0	6.86
4	8:51:55.0	7.87	54	8:56:05.0	6.85
5	8:52:00.0	7.81	55	8:56:10.0	6.84
6	8:52:05.0	7.96	56	8:56:15.0	6.84
7	8:52:10.0	7.70	57	8:56:20.0	6.83
8	8:52:15.0	7.63	58	8:56:25.0	6.83
9	8:52:20.0	7.60	59	8:56:30.0	6.82
10	8:52:25.0	7.55	60	8:56:35.0	6.82
11	8:52:30.0	7.53	61	8:56:40.0	6.82
12	8:52:35.0	7.48	62	8:56:45.0	6.80
13	8:52:40.0	7.44	63	8:56:55.0	6.79
14	8:52:45.0	7.41	64	8:57:05.0	6.79
15	8:52:50.0	7.39	65	8:57:15.0	6.78
16	8:52:55.0	7.36	66	8:57:25.0	6.77
17	8:53:00.0	7.34	67	8:57:35.0	6.77
18	8:53:05.0	7.31	68	8:57:45.0	6.76
19	8:53:10.0	7.30	69	8:57:55.0	6.76
20	8:53:15.0	7.28	70	8:58:05.0	6.75
21	8:53:20.0	7.26	71	8:58:15.0	6.75
22	8:53:25.0	7.24	72	8:58:25.0	6.75
23	8:53:30.0	7.22	73	8:58:35.0	6.74
24	8:53:35.0	7.19	74	8:58:45.0	6.74
25	8:53:40.0	7.17	75	8:58:55.0	6.73
26	8:53:45.0	7.15	76	8:59:05.0	6.73
27	8:53:50.0	7.14	77	8:59:15.0	6.72
28	8:53:55.0	7.13	78	8:59:25.0	6.72
29	8:54:00.0	7.11	79	8:59:35.0	6.72
30	8:54:05.0	7.10	80	8:59:45.0	6.71
31	8:54:10.0	7.09	81	9:00:00.0	6.71
32	8:54:15.0	7.07	82	9:00:15.0	6.71
33	8:54:20.0	7.06	83	9:00:30.0	6.70
34	8:54:25.0	7.05	84	9:00:45.0	6.69
35	8:54:30.0	7.04	85	9:01:00.0	6.69
36	8:54:35.0	7.02	86	9:01:15.0	6.69
37	8:54:40.0	7.01	87	9:01:30.0	6.69
38	8:54:45.0	7.00	88	9:01:45.0	6.69
39	8:54:50.0	6.99	89	9:02:00.0	6.69
40	8:54:55.0	6.98	90	9:02:30.0	6.69
41	8:55:00.0	6.96	91	9:03:00.0	6.69
42	8:55:05.0	6.96	92	9:03:30.0	6.69
43	8:55:10.0	6.95	93	9:04:00.0	6.68
44	8:55:15.0	6.95	94	9:05:00.0	6.68
45	8:55:20.0	6.94	95	9:06:00.0	6.68
46	8:55:25.0	6.94	96	9:07:00.0	6.68
47	8:55:30.0	6.93	97	9:08:00.0	6.68
48	8:55:35.0	6.92	98	9:10:00.0	6.68
49	8:55:40.0	6.90	99	9:12:00.0	6.68
50	8:55:45.0	6.89	100	9:15:00.0	6.67

WELL ID: MW-9D

Local ID: 2.5 Ft Falling Manual
Date: 4/13/2006
Time: 10:18

INPUT

Construction:

Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	10 Feet

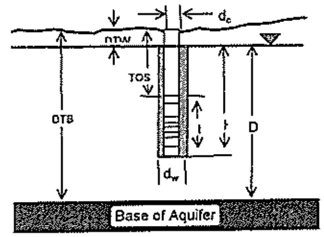
Depths to:

water level (DTW)	6.7 Feet
top of screen (TOS)	8 Feet
Base of Aquifer (DTB)	18 Feet

Annular Fill:

across screen -- Medium Sand
above screen -- Bentonite

Aquifer Material -- Silt, Loess



COMPUTED

L_{wetted}	10 Feet
D =	11.3 Feet
H =	11.3 Feet
L/r_w =	29.09
$y_{0\text{-DISPLACEMENT}}$ =	1.00 Feet
$y_{0\text{-SLUG}}$ =	1.19 Feet

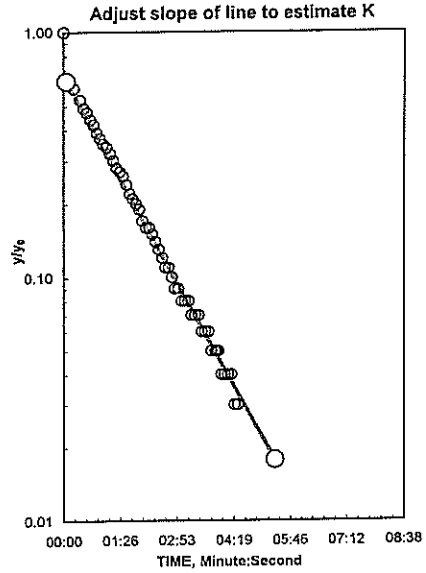
From look-up table using L/r_w

Fully penetrate C =	2.041
ln(Re/rw) =	2.597
Re =	4.61 Feet
Slope =	0.004888 $\log_{10}$/sec
$t_{90\%}$ recovery =	205 sec

Input is consistent.

K =	0.88 Feet/Day

Adjust slope of line to estimate K



K= 0.88 is greater than likely maximum of 0.1 for Silt, Loess

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

Reduced Data

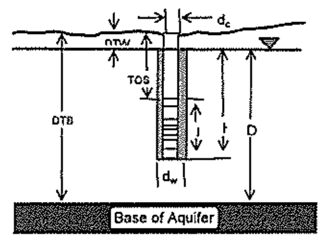
Entry	Time, Hr:Min:Sec	Water Level
1	1:00:05.0	5.70
2	1:00:20.0	6.11
3	1:00:30.0	6.17
4	1:00:35.0	6.21
5	1:00:40.0	6.23
6	1:00:45.0	6.26
7	1:00:50.0	6.28
8	1:00:55.0	6.31
9	1:01:00.0	6.33
10	1:01:05.0	6.35
11	1:01:10.0	6.36
12	1:01:15.0	6.38
13	1:01:20.0	6.40
14	1:01:25.0	6.42
15	1:01:30.0	6.43
16	1:01:35.0	6.44
17	1:01:40.0	6.46
18	1:01:45.0	6.48
19	1:01:50.0	6.49
20	1:01:55.0	6.50
21	1:02:00.0	6.51
22	1:02:05.0	6.53
23	1:02:10.0	6.54
24	1:02:15.0	6.54
25	1:02:20.0	6.55
26	1:02:25.0	6.56
27	1:02:30.0	6.57
28	1:02:35.0	6.58
29	1:02:40.0	6.59
30	1:02:45.0	6.59
31	1:02:50.0	6.60
32	1:02:55.0	6.61
33	1:03:00.0	6.61
34	1:03:05.0	6.62
35	1:03:10.0	6.62
36	1:03:15.0	6.62
37	1:03:20.0	6.63
38	1:03:25.0	6.63
39	1:03:30.0	6.63
40	1:03:35.0	6.64
41	1:03:40.0	6.64
42	1:03:45.0	6.64
43	1:03:50.0	6.65
44	1:03:55.0	6.65
45	1:03:58.0	6.65

WELL ID: MW-9D

Local ID: 2.5 Ft Rising Manual
Date: 4/13/2006
Time: 10:40

INPUT

Construction:	
Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	10 Feet
Depths to:	
water level (DTW)	6.7 Feet
top of screen (TOS)	8 Feet
Base of Aquifer (DTB)	18 Feet
Annular Fill:	
across screen –	Medium Sand
above screen –	Bentonite
Aquifer Material --	Silt, Loess



yet OMPUTED

L_{wetted}	10 Feet
D =	11.3 Feet
H =	11.3 Feet
L/r_w =	29.09
$y_{0\text{-DISPLACEMENT}}$ =	0.68 Feet
$y_{0\text{-SLUG}}$ =	1.19 Feet

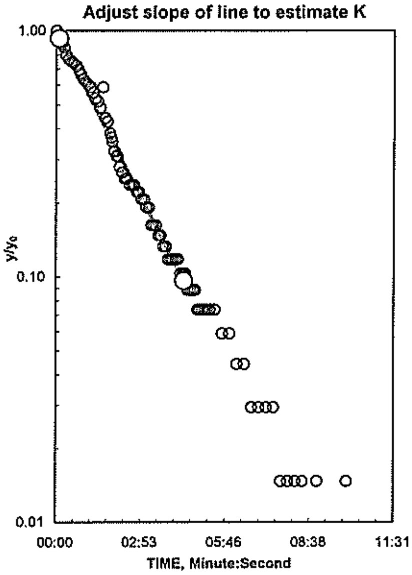
From look-up table using L/r_w

Fully penetrate C =	2.041
ln(Re/rw) =	2.597
Re =	4.61 Feet
Slope =	0.003839 $\log_{10}$/sec
$t_{90\%}$ recovery =	261 sec

Input is consistent.

K = 0.69 Feet/Day

Adjust slope of line to estimate K



K= 0.69 is greater than likely maximum of 0.1 for Silt, Loess

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	1:00:05.0	7.38
2	1:00:10.0	7.34
3	1:00:15.0	7.30
4	1:00:20.0	7.28
5	1:00:25.0	7.24
6	1:00:30.0	7.22
7	1:00:35.0	7.21
8	1:00:40.0	7.20
9	1:00:45.0	7.19
10	1:00:50.0	7.17
11	1:00:55.0	7.15
12	1:01:00.0	7.13
13	1:01:05.0	7.12
14	1:01:10.0	7.11
15	1:01:15.0	7.10
16	1:01:20.0	7.08
17	1:01:25.0	7.06
18	1:01:30.0	7.05
19	1:01:35.0	7.03
20	1:01:40.0	7.10
21	1:01:45.0	7.00
22	1:01:50.0	6.99
23	1:01:55.0	6.96
24	1:01:58.0	6.95
25	1:02:00.0	6.94
26	1:02:03.0	6.92
27	1:02:05.0	6.92
28	1:02:08.0	6.91
29	1:02:10.0	6.91
30	1:02:15.0	6.89
31	1:02:20.0	6.88
32	1:02:25.0	6.87
33	1:02:30.0	6.87
34	1:02:35.0	6.86
35	1:02:40.0	6.86
36	1:02:45.0	6.86
37	1:02:50.0	6.85
38	1:02:55.0	6.85
39	1:03:00.0	6.84
40	1:03:05.0	6.84
41	1:03:10.0	6.83
42	1:03:15.0	6.83
43	1:03:20.0	6.81
44	1:03:25.0	6.81
45	1:03:30.0	6.81

WELL ID: MW-10D

Local ID: 5 Ft Falling Manual
Date: 4/13/2006
Time: 11:37

INPUT

Construction:

Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	10 Feet

Depths to:

water level (DTW)	6.77 Feet
top of screen (TOS)	8 Feet
Base of Aquifer (DTB)	18 Feet

Annular Fill:

across screen -- Medium Sand
above screen -- Bentonite

Aquifer Material -- Silt, Loess

COMPUTED

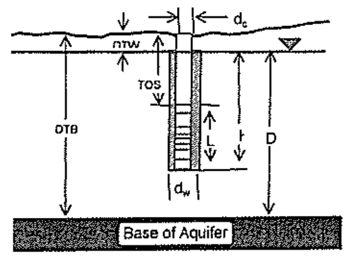
L_{wetted}	10 Feet
D =	11.23 Feet
H =	11.23 Feet
L/r_w =	29.09
$y_{0\text{-DISPLACEMENT}}$ =	1.97 Feet
$y_{0\text{-SLUG}}$ =	2.38 Feet

From look-up table using L/r_w

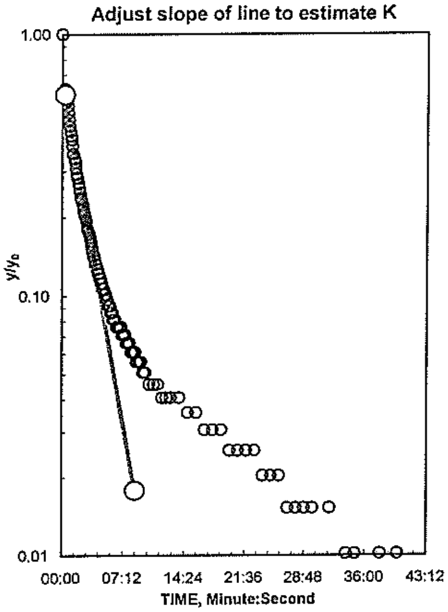
Fully penetrate C =	2.041
ln(Re/rw) =	2.593
Re =	4.60 Feet
Slope =	0.003047 $\log_{10}$/sec
$t_{90\%}$ recovery =	328 sec

Input is consistent.

K = 0.55 Feet/Day



Adjust slope of line to estimate K



K= 0.55 is greater than likely maximum of 0.1 for Silt, Loess

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

Reduced Data

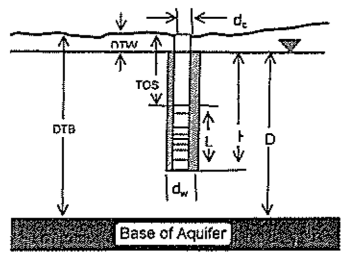
Entry	Time, Hr:Min:Sec	Water Level
1	1:00:10.0	4.80
2	1:00:35.0	5.60
3	1:00:45.0	5.67
4	1:00:55.0	5.78
5	1:01:05.0	5.89
6	1:01:15.0	5.96
7	1:01:25.0	6.03
8	1:01:40.0	6.11
9	1:01:50.0	6.16
10	1:02:00.0	6.21
11	1:02:15.0	6.26
12	1:02:25.0	6.30
13	1:02:40.0	6.33
14	1:02:50.0	6.36
15	1:03:00.0	6.38
16	1:03:10.0	6.41
17	1:03:20.0	6.42
18	1:03:30.0	6.44
19	1:03:40.0	6.46
20	1:03:50.0	6.48
21	1:04:00.0	6.49
22	1:04:10.0	6.51
23	1:04:20.0	6.52
24	1:04:30.0	6.53
25	1:04:40.0	6.54
26	1:04:50.0	6.55
27	1:05:00.0	6.56
28	1:05:10.0	6.56
29	1:05:20.0	6.57
30	1:05:30.0	6.58
31	1:05:40.0	6.59
32	1:05:50.0	6.59
33	1:06:00.0	6.60
34	1:06:10.0	6.60
35	1:06:20.0	6.61
36	1:06:30.0	6.61
37	1:06:50.0	6.62
38	1:07:10.0	6.62
39	1:07:30.0	6.63
40	1:07:50.0	6.64
41	1:08:10.0	6.64
42	1:08:30.0	6.65
43	1:08:50.0	6.65
44	1:09:15.0	6.66
45	1:09:45.0	6.67

WELL ID: MW-10D

Local ID: 5 Ft Rising Manual
Date: 4/13/2006
Time: 12:21

INPUT

Construction:	
Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	10 Feet
Depths to:	
water level (DTW)	6.77 Feet
top of screen (TOS)	8 Feet
Base of Aquifer (DTB)	18 Feet
Annular Fill:	
across screen --	Medium Sand
above screen --	Bentonite
Aquifer Material --	Silt, Loess



COMPUTED

L_{wetted}	10 Feet
D =	11.23 Feet
H =	11.23 Feet
L/r_w =	29.09
$y_{0\text{-DISPLACEMENT}}$ =	1.94 Feet
$y_{0\text{-SLUG}}$ =	2.38 Feet

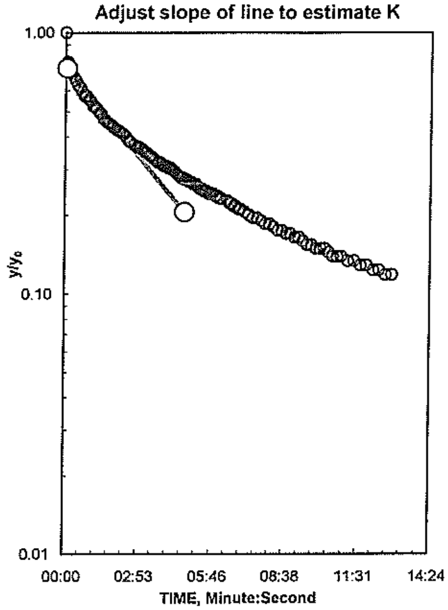
From look-up table using L/r_w

Fully penetrate C =	2.041
ln(Re/rw) =	2.593
Re =	4.60 Feet
Slope =	0.001959 $\log_{10}$/sec
$t_{90\%}$ recovery =	511 sec

Input is consistent.

K = 0.35 Feet/Day

Adjust slope of line to estimate K



K= 0.35 is greater than likely maximum of 0.1 for Silt, Loess

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

Reduced Data

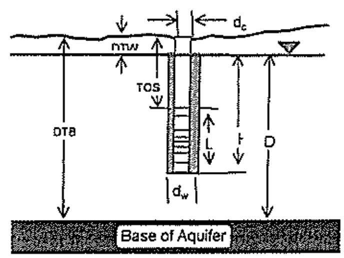
Entry	Time, Hr:Min:Sec	Water Level
1	1:00:05.0	8.71
2	1:00:15.0	8.17
3	1:00:25.0	8.08
4	1:00:35.0	7.99
5	1:00:45.0	7.92
6	1:00:55.0	7.88
7	1:01:05.0	7.83
8	1:01:15.0	7.78
9	1:01:25.0	7.73
10	1:01:35.0	7.68
11	1:01:45.0	7.65
12	1:01:55.0	7.63
13	1:02:05.0	7.60
14	1:02:15.0	7.58
15	1:02:25.0	7.56
16	1:02:35.0	7.52
17	1:02:50.0	7.49
18	1:03:00.0	7.48
19	1:03:10.0	7.46
20	1:03:20.0	7.44
21	1:03:30.0	7.42
22	1:03:40.0	7.40
23	1:03:50.0	7.39
24	1:04:00.0	7.37
25	1:04:10.0	7.36
26	1:04:20.0	7.35
27	1:04:30.0	7.33
28	1:04:40.0	7.31
29	1:04:50.0	7.30
30	1:05:00.0	7.29
31	1:05:10.0	7.28
32	1:05:20.0	7.27
33	1:05:30.0	7.26
34	1:05:40.0	7.25
35	1:05:50.0	7.24
36	1:06:00.0	7.23
37	1:06:10.0	7.22
38	1:06:30.0	7.21
39	1:06:40.0	7.20
40	1:06:50.0	7.19
41	1:07:00.0	7.18
42	1:07:20.0	7.16
43	1:07:40.0	7.15
44	1:08:00.0	7.13
45	1:08:20.0	7.12

WELL ID: MW-10D

Local ID: 2.5 Ft Falling Manual
Date: 4/13/2006
Time: 13:01

INPUT

Construction:		
Casing dia. (d_c)	2	Inch
Annulus dia. (d_w)	8.25	Inch
Screen Length (L)	10	Feet
Depths to:		
water level (DTW)	6.84	Feet
top of screen (TOS)	8	Feet
Base of Aquifer (DTB)	18	Feet
Annular Fill:		
across screen -- Medium Sand		
above screen -- Bentonite		
Aquifer Material -- Silt, Loess		



COMPUTED

L_{wetted}	10	Feet
D =	11.16	Feet
H =	11.16	Feet
L/r_w =	29.09	
$y_{0\text{-DISPLACEMENT}}$ =	0.97	Feet
$y_{0\text{-SLUG}}$ =	1.19	Feet

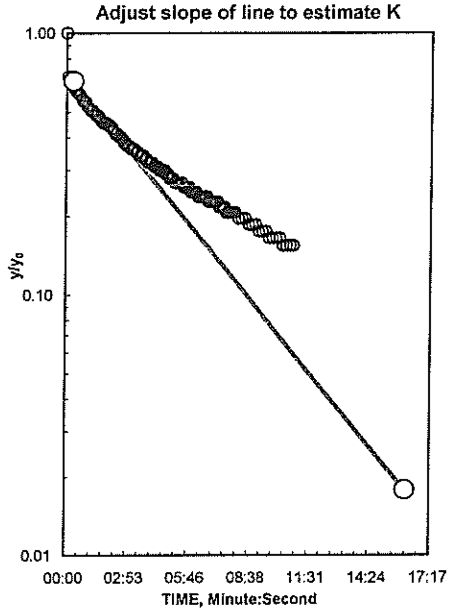
From look-up table using L/r_w

Fully penetrate C =	2.041	
ln(Re/rw) =	2.589	
Re =	4.58	Feet
Slope =	0.001649	$\log_{10}$/sec
$t_{90\%}$ recovery =	606	sec

Input is consistent.

K = 0.29 Feet/Day

Adjust slope of line to estimate K



K= 0.29 is greater than likely maximum of 0.1 for Silt, Loess

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

Slug_Bouwer-Rice 10D Test 12

Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	1:00:10.0	5.87
2	1:00:20.0	6.20
3	1:00:30.0	6.23
4	1:00:40.0	6.26
5	1:00:50.0	6.28
6	1:01:00.0	6.31
7	1:01:10.0	6.33
8	1:01:20.0	6.35
9	1:01:30.0	6.36
10	1:01:40.0	6.37
11	1:01:50.0	6.39
12	1:02:00.0	6.40
13	1:02:10.0	6.41
14	1:02:20.0	6.42
15	1:02:30.0	6.44
16	1:02:40.0	6.45
17	1:02:50.0	6.46
18	1:03:00.0	6.47
19	1:03:10.0	6.48
20	1:03:20.0	6.49
21	1:03:30.0	6.50
22	1:03:40.0	6.51
23	1:03:50.0	6.51
24	1:04:00.0	6.52
25	1:04:10.0	6.53
26	1:04:20.0	6.54
27	1:04:30.0	6.54
28	1:04:40.0	6.55
29	1:04:50.0	6.55
30	1:05:00.0	6.56
31	1:05:10.0	6.57
32	1:05:15.0	6.57
33	1:05:25.0	6.58
34	1:05:40.0	6.58
35	1:05:50.0	6.59
36	1:06:00.0	6.59
37	1:06:10.0	6.60
38	1:06:20.0	6.60
39	1:06:30.0	6.61
40	1:06:40.0	6.61
41	1:06:50.0	6.61
42	1:07:00.0	6.62
43	1:07:10.0	6.62
44	1:07:20.0	6.62
45	1:07:30.0	6.63

WELL ID: MW-10D

Local ID: 2.5 Ft Rising Manual
Date: 4/13/2006
Time: 13:33

INPUT

Construction:

Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	10 Feet

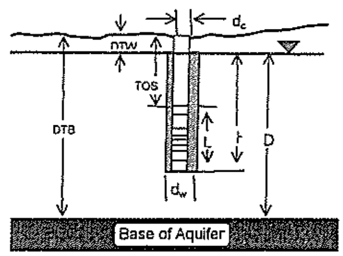
Depths to:

water level (DTW)	6.77 Feet
top of screen (TOS)	8 Feet
Base of Aquifer (DTB)	18 Feet

Annular Fill:

across screen -- Medium Sand
above screen -- Bentonite

Aquifer Material -- Silt, Loess



COMPUTED

L_{wetted}	10 Feet
D =	11.23 Feet
H =	11.23 Feet
L/r_w =	29.09
$y_{0\text{-DISPLACEMENT}}$ =	0.97 Feet
$y_{0\text{-SLUG}}$ =	1.19 Feet

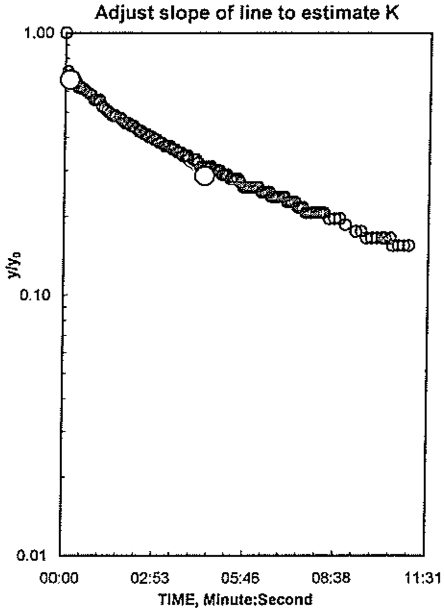
From look-up table using L/r_w

Fully penetrate C =	2.041
ln(Re/rw) =	2.593
Re =	4.60 Feet
Slope =	0.001421 $\log_{10}$/sec
$t_{90\%}$ recovery =	704 sec

Input is consistent.

K =	0.25 Feet/Day

Adjust slope of line to estimate K



K= 0.25 is greater than likely maximum of 0.1 for Silt, Loess

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	1:00:05.0	7.74
2	1:00:15.0	7.44
3	1:00:22.0	7.42
4	1:00:30.0	7.37
5	1:00:40.0	7.36
6	1:00:50.0	7.34
7	1:01:00.0	7.31
8	1:01:10.0	7.31
9	1:01:20.0	7.27
10	1:01:30.0	7.25
11	1:01:40.0	7.24
12	1:01:55.0	7.22
13	1:02:05.0	7.21
14	1:02:15.0	7.20
15	1:02:25.0	7.18
16	1:02:35.0	7.17
17	1:02:45.0	7.16
18	1:02:55.0	7.15
19	1:03:05.0	7.14
20	1:03:15.0	7.13
21	1:03:25.0	7.13
22	1:03:35.0	7.12
23	1:03:45.0	7.11
24	1:03:55.0	7.10
25	1:04:10.0	7.09
26	1:04:20.0	7.08
27	1:04:30.0	7.07
28	1:04:40.0	7.07
29	1:04:50.0	7.06
30	1:05:00.0	7.06
31	1:05:10.0	7.05
32	1:05:20.0	7.04
33	1:05:30.0	7.04
34	1:05:40.0	7.03
35	1:05:50.0	7.02
36	1:06:00.0	7.02
37	1:06:10.0	7.02
38	1:06:20.0	7.01
39	1:06:30.0	7.01
40	1:06:40.0	7.00
41	1:06:50.0	7.00
42	1:07:00.0	7.00
43	1:07:10.0	6.99
44	1:07:20.0	6.99
45	1:07:30.0	6.98

WELL ID: MW-12D

Local ID: 7 Ft. Falling Head
Date: 4/27/2006
Time: 14:51

INPUT

Construction:

Casing dia. (d_c)	2	Inch
Annulus dia. (d_w)	8.25	Inch
Screen Length (L)	10	Feet

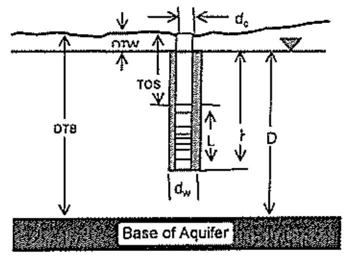
Depths to:

water level (DTW)	4.21	Feet
top of screen (TOS)	8	Feet
Base of Aquifer (DTB)	18	Feet

Annular Fill:

across screen -- Medium Sand
above screen -- Bentonite

Aquifer Material -- Fine Sand



COMPUTED

L_{wetted}	10	Feet
D =	13.79	Feet
H =	13.79	Feet
L/r_w =	29.09	
$y_{0\text{-DISPLACEMENT}}$ =	3.97	Feet
$y_{0\text{-SLUG}}$ =	3.33	Feet

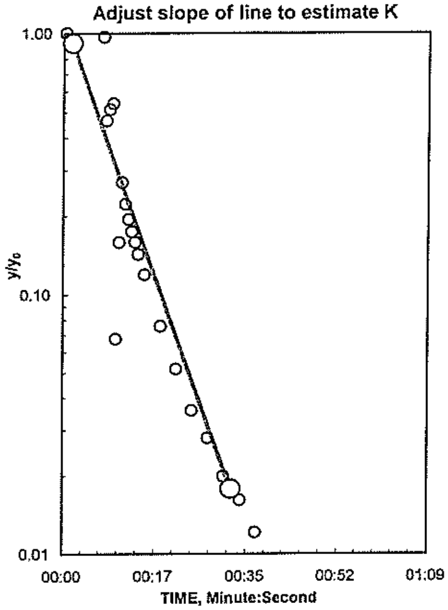
From look-up table using L/r_w

Fully penetrate C =	2.041	
ln(Re/rw) =	2.717	
Re =	5.20	Feet
Slope =	0.056939	$\log_{10}$/sec
$t_{90\%}$ recovery =	18	sec

Input is consistent.

K = 11 Feet/Day

Adjust slope of line to estimate K



Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	0:00:06.0	0.24
2	0:00:13.2	0.37
3	0:00:13.8	2.37
4	0:00:14.4	2.18
5	0:00:15.0	2.07
6	0:00:15.6	3.94
7	0:00:16.2	3.58
8	0:00:16.8	3.14
9	0:00:17.4	3.33
10	0:00:18.0	3.44
11	0:00:18.6	3.52
12	0:00:19.2	3.58
13	0:00:19.8	3.64
14	0:00:21.0	3.74
15	0:00:24.0	3.91
16	0:00:27.0	4.01
17	0:00:30.0	4.07
18	0:00:33.0	4.10
19	0:00:36.0	4.13
20	0:00:39.0	4.15
21	0:00:42.0	4.16
22	0:00:45.0	4.18
23	0:00:48.0	4.18
24	0:00:51.0	4.18
25	0:00:54.0	4.19
26	0:00:57.0	4.18
27	0:01:00.0	4.19

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

WELL ID: MW-12D

Local ID: 7 Ft. Rising Head
Date: 4/27/2006
Time: 14:51

INPUT

Construction:

Casing dia. (d_c)	2	Inch
Annulus dia. (d_w)	8.25	Inch
Screen Length (L)	10	Feet

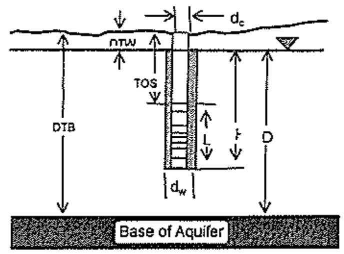
Depths to:

water level (DTW)	4.21	Feet
top of screen (TOS)	8	Feet
Base of Aquifer (DTB)	18	Feet

Annular Fill:

across screen -- Medium Sand
above screen -- Bentonite

Aquifer Material -- Fine Sand



COMPUTED

L_{wetted}	10	Feet
D =	13.79	Feet
H =	13.79	Feet
L/r_w =	29.09	
$y_{0\text{-DISPLACEMENT}}$ =	2.89	Feet
$y_{0\text{-SLUG}}$ =	3.33	Feet

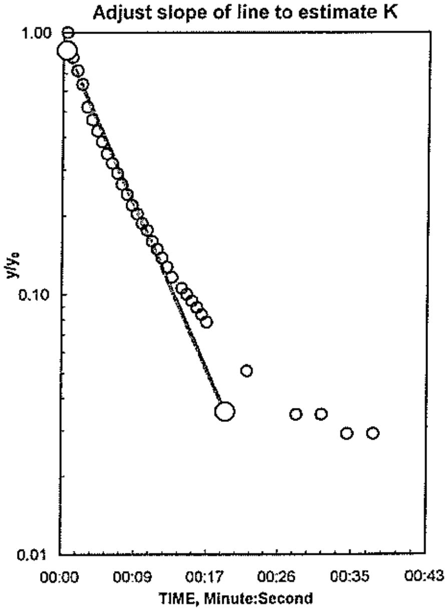
From look-up table using L/r_w

Fully penetrate C =	2.041	
ln(Re/rw) =	2.717	
Re =	5.20	Feet
Slope =	0.072377	$\log_{10}$/sec
$t_{90\%}$ recovery =	14	sec

Input is consistent.

K = 14 Feet/Day

Adjust slope of line to estimate K



Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	0:00:02.4	7.10
2	0:00:03.0	6.53
3	0:00:03.6	6.28
4	0:00:04.2	6.04
5	0:00:04.8	5.71
6	0:00:05.4	5.55
7	0:00:06.0	5.43
8	0:00:06.6	5.32
9	0:00:07.2	5.21
10	0:00:07.8	5.13
11	0:00:08.4	5.05
12	0:00:09.0	4.97
13	0:00:09.6	4.91
14	0:00:10.2	4.85
15	0:00:10.8	4.80
16	0:00:11.4	4.75
17	0:00:12.0	4.72
18	0:00:12.6	4.67
19	0:00:13.2	4.64
20	0:00:13.8	4.61
21	0:00:14.4	4.58
22	0:00:15.0	4.55
23	0:00:16.2	4.52
24	0:00:16.8	4.50
25	0:00:17.4	4.48
26	0:00:18.0	4.47
27	0:00:18.6	4.45
28	0:00:19.2	4.44
29	0:00:24.0	4.36
30	0:00:30.0	4.31
31	0:00:33.0	4.31
32	0:00:36.0	4.29
33	0:00:39.0	4.29

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

WELL ID: MW-12D

Local ID: 5 Ft. Falling Head
Date: 4/27/2006
Time: 15:12

INPUT

Construction:

Casing dia. (d_c)	2	Inch
Annulus dia. (d_w)	8.25	Inch
Screen Length (L)	10	Feet

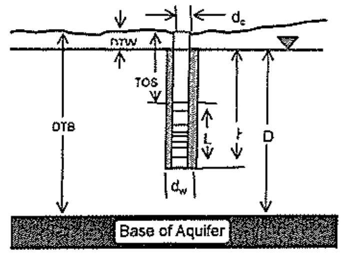
Depths to:

water level (DTW)	4.21	Feet
top of screen (TOS)	8	Feet
Base of Aquifer (DTB)	18	Feet

Annular Fill:

across screen -- Medium Sand
above screen -- Bentonite

Aquifer Material -- Fine Sand



COMPUTED

L_{wetted}	10	Feet
D =	13.79	Feet
H =	13.79	Feet
L/r_w =	29.09	
$y_{0\text{-DISPLACEMENT}}$ =	2.91	Feet
$y_{0\text{-SLUG}}$ =	2.38	Feet

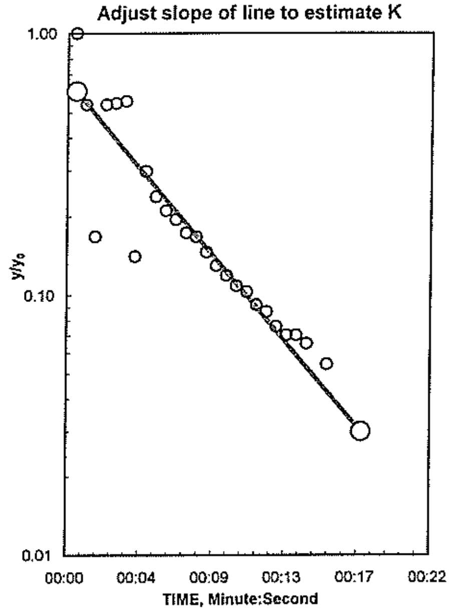
From look-up table using L/r_w

Fully penetrate C =	2.041	
ln(Re/rw) =	2.717	
Re =	5.20	Feet
Slope =	0.076612	$\log_{10}$/sec
$t_{90\%}$ recovery =	13	sec

Input is consistent.

K = 14 Feet/Day

Adjust slope of line to estimate K



Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	0:00:06.0	1.30
2	0:00:06.6	2.65
3	0:00:07.2	3.72
4	0:00:07.8	2.65
5	0:00:08.4	2.63
6	0:00:09.0	2.60
7	0:00:09.6	3.80
8	0:00:10.2	3.34
9	0:00:10.8	3.52
10	0:00:11.4	3.60
11	0:00:12.0	3.64
12	0:00:12.6	3.71
13	0:00:13.2	3.72
14	0:00:13.8	3.78
15	0:00:14.4	3.83
16	0:00:15.0	3.86
17	0:00:15.6	3.89
18	0:00:16.2	3.91
19	0:00:16.8	3.94
20	0:00:17.4	3.96
21	0:00:18.0	3.99
22	0:00:18.6	4.01
23	0:00:19.2	4.01
24	0:00:19.8	4.02
25	0:00:21.0	4.05

REMARKS:

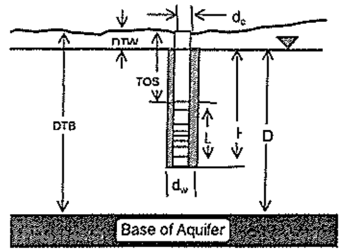
Bouwer and Rice analysis of slug test, WRR 1976

WELL ID: MW-12D

Local ID: 5 Ft. Rising Head
Date: 4/27/2006
Time: 15:20

INPUT

Construction:	
Casing dia. (d_c)	2 Inch
Annulus dia. (d_w)	8.25 Inch
Screen Length (L)	10 Feet
Depths to:	
water level (DTW)	4.21 Feet
top of screen (TOS)	8 Feet
Base of Aquifer (DTB)	18 Feet
Annular Fill:	
across screen --	Medium Sand
above screen --	Bentonite
Aquifer Material --	Fine Sand



COMPUTED

L_{wetted}	10 Feet
D =	13.78 Feet
H =	13.78 Feet
L/r_w =	29.09
$y_{0\text{-DISPLACEMENT}}$ =	2.58 Feet
$y_{0\text{-SLUG}}$ =	2.38 Feet

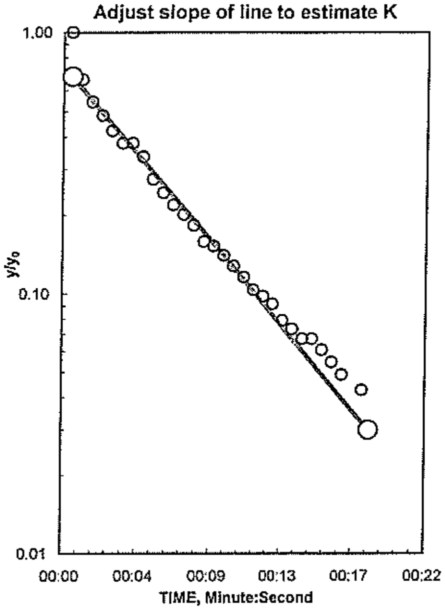
From look-up table using L/r_w

Fully penetrate C =	2.041
ln(Re/rw) =	2.716
Re =	5.20 Feet
Slope =	0.076187 $\log_{10}$/sec
$t_{90\%}$ recovery =	13 sec

Input is consistent.

K = 14 Feet/Day

Adjust slope of line to estimate K



Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	0:00:03.6	6.80
2	0:00:04.2	5.92
3	0:00:04.8	5.62
4	0:00:05.4	5.46
5	0:00:06.0	5.31
6	0:00:06.6	5.20
7	0:00:07.2	5.20
8	0:00:07.8	5.09
9	0:00:08.4	4.93
10	0:00:09.0	4.85
11	0:00:09.6	4.79
12	0:00:10.2	4.74
13	0:00:10.8	4.69
14	0:00:11.4	4.63
15	0:00:12.0	4.61
16	0:00:12.6	4.58
17	0:00:13.2	4.55
18	0:00:13.8	4.52
19	0:00:14.4	4.49
20	0:00:15.0	4.47
21	0:00:15.6	4.46
22	0:00:16.2	4.42
23	0:00:16.8	4.41
24	0:00:17.4	4.39
25	0:00:18.0	4.39
26	0:00:18.6	4.38
27	0:00:19.2	4.36
28	0:00:19.8	4.35
29	0:00:21.0	4.33

REMARKS: Bouwer and Rice analysis of slug test, WRR 1976

Retardation Factor

Retardation Factor Calculator

Retardation Factor $R = 1 + \rho_b k_d / \theta$

R = retardation factor
ρ_b = bulk density = $\rho_s(1-\theta)$
ρ_s = solids density
θ = porosity
k_d = (soil) distribution coefficient = $f_{oc} K_{oc}$
f_{oc} = fraction organic carbon
K_{oc} = organic carbon/water partition coefficient

Example Data | Calculate | Clear
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Input Parameters

Site Name	Midler Avenue Brownfield	
Date	May 2006	Current Date
Porosity (θ)	0.40	(Try 0.25)
Fraction Organic Carbon (f_{oc})	0.08	(Try 0.0001)
Chemical Data Source	BIOSCREEN or BIOCHLOR user guides	
Note:	BIOSCREEN and BIOCHLOR user guides: BIOSCREEN Natural Attenuation Decisions Support System Version 1.3, EPA/600/R-96/087, August 1996.	

Data

revision date	August, 1996 and January, 2000
Chemical	(PCE) tetrachloroethene (perchloroethene)

Default Parameters

Solids Density (ρ_s)	2.65	Default
K_{oc} value	426	L/kg

Results

Bulk Density (ρ_b)	1.59	g/cm^3
k_d	34.08	L/kg
Retardation Factor (R)	140.	

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Page author: Jim Weaver, of U.S. EPA, Office of Research and Development, Athens Georgia who last modified this content on: October 21, 2002

U.S. Environmental Protection Agency

EPA On-line Tools for Site Assessment Calculation

Retardation Factor

Retardation Factor Calculator

Retardation Factor $R = 1 + \rho_b k_d / \theta$

R = retardation factor
ρ_b = bulk density = $\rho_s(1-\theta)$
ρ_s = solids density
θ = porosity
k_d = (soil) distribution coefficient = $f_{oc}\ K_{oc}$
f_{oc} = fraction organic carbon
K_{oc} = organic carbon/water partition coefficient

Example Data | Calculate | Clear
Save Data | Recall Data | Go Back

Input Parameters

Site Name	Midler Avenue Brownfield	
Date	May 2006	Current Date
Porosity (θ)	0.40	(Try 0.25)
Fraction Organic Carbon (f_{oc})	0.08	(Try 0.0001)
Chemical Data Source	BIOSCREEN or BIOCHLOR user guides	
Note:	BIOSCREEN and BIOCHLOR user guides: BIOSCREEN Natural Attenuation Decisions Support System Version 1.3, EPA/600/R-96/087, August 1996.	

Data

revision date	August, 1996 and January, 2000
Chemical	(TCE) trichloroethene

Default Parameters

Solids Density (ρ_s)	2.65	Default
K_{oc} value	130	L/kg

Results

Bulk Density (ρ_b)	1.59	g/cm^3
k_d	10.40	L/kg
Retardation Factor (R)	42.	

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Page author: Jim Weaver, of U.S. EPA, Office of Research and Development, Athens Georgia who last modified this content on: October 21, 2002

Retardation Factor

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Retardation Factor Calculator

Retardation Factor $R = 1 + \rho_b k_d / \theta$

R = retardation factor
ρ_b = bulk density = $\rho_s(1-\theta)$
ρ_s = solids density
θ = porosity
k_d = (soil) distribution coefficient = $f_{oc}\ K_{oc}$
f_{oc} = fraction organic carbon
K_{oc} = organic carbon/water partition coefficient

Example Data | Calculate | Clear
Save Data | Recall Data | Go Back

Input Parameters

Site Name	Midler Avenue Brownfield	
Date	May 2006	Current Date
Porosity (θ)	0.40	(Try 0.25)
Fraction Organic Carbon (f_{oc})	0.08	(Try 0.0001)
Chemical Data Source	BIOSCREEN or BIOCHLOR user guides	
Note:	BIOSCREEN and BIOCHLOR user guides: BIOSCREEN Natural Attenuation Decisions Support System Version 1.3, EPA/600/R-96/087, August 1996.	

Data

revision date	August, 1996 and January, 2000
Chemical	dichloroethene (undifferentiated isomers)

Default Parameters

Solids Density (ρ_s)	2.65	Default
K_{oc} value	125	L/kg

Results

Bulk Density (ρ_b)	1.59	g/cm^3
k_d	10.00	L/kg
Retardation Factor (R)	41.	

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Page author: Jim Weaver, of U.S. EPA, Office of Research and Development, Athens Georgia who last modified this content on: October 21, 2002

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This page was generated on Friday, May 26, 2006

View the graphical version of this page at: http://www.epa.gov/Athens/learn2model/part-two/onsite/retard.htm

U.S. Environmental Protection Agency

EPA On-line Tools for Site Assessment Calculation

Retardation Factor

Retardation Factor Calculator

Retardation Factor $R = 1 + \rho_b k_d / \theta$

R = retardation factor
ρ_b = bulk density = $\rho_s(1-\theta)$
ρ_s = solids density
θ = porosity
k_d = (soil) distribution coefficient = $f_{oc} K_{oc}$
f_{oc} = fraction organic carbon
K_{oc} = organic carbon/water partition coefficient

Example Data | Calculate | Clear
Save Data | Recall Data | Go Back

Input Parameters

Site Name	Midler Avenue Brownfield	
Date	May 2006	Current Date
Porosity (θ)	0.40	(Try 0.25)
Fraction Organic Carbon (f_{oc})	0.08	(Try 0.0001)
Chemical Data Source	BIOSCREEN or BIOCHLOR user guides	
Note:	BIOSCREEN and BIOCHLOR user guides: BIOSCREEN Natural Attenuation Decisions Support System Version 1.3, EPA/600/R-96/087, August 1996.	

Data

revision date	August, 1996 and January, 2000
Chemical	(VC) vinyl chloride or chloroethene

Default Parameters

Solids Density (ρ_s)	2.65	Default
K_{oc} value	29.6	L/kg

Results

Bulk Density (ρ_b)	1.59	g/cm^3
k_d	2.368	L/kg
Retardation Factor (R)	10.	

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Page author: Jim Weaver, of U.S. EPA, Office of Research and Development, Athens Georgia who last modified this content on: October 21, 2002

JULY 2004 PRELIMINARY SITE INVESTIGATION REPORT

ENGINEERS
DESIGN BUILD
TECHNICAL RESOURCES
OPERATIONS

C&S Engineers, Inc.
499 Col. Eileen Collins Boulevard
Syracuse, NY 13212
phone 315-455-2000
fax 315-455-9667
www.cscos.com

July 30, 2004

Mr. Jed S. Schneider
Senior Vice President of Construction
Pioneer Midler Avenue, LLC
250 South Clinton Street
Syracuse, New York 13202

Re: PRE-BCA REPORT

File: C81.001.001

Dear Mr. Schneider:

This letter summarizes the findings of pre-BCA activities conducted by C&S Engineers, Inc. at the Pioneer Midler LLC site in Syracuse, New York. The project was undertaken based on the C&S proposal dated June 24, 2004. The objective of this proposed scope of work was to conduct an assessment of specific potentially significant areas of concern as previously identified in reports and discussions. This assessment included excavation of test pits, visual observation, physical screening using field instrumentation, and laboratory analysis of select samples to identify the presence of residual contaminants. The intent of this effort was to provide you with information to assist in making decisions on moving forward with the project and the BCP process. Subsequent to the acceptance of the original scope of work, Pioneer requested the excavation of three additional test pits in the western portion of the property to provide information for the design of a retention basin.

The following sections describe the activities and findings for each area. Copies of the test pit logs are provided in Attachment A and a copy of the analytical report is provided in Attachment B. A figure depicting the site is also attached.

C&D fill area located in the northeastern quadrant of the subject parcel

Three test trenches were excavated in this area: T-1 north zone, T-2 central zone, and T-3 south zone. Each test trench was started as near to the east property boundary as practicable. T-1 was 100-ft long, T-2 was 130-ft, and T-3 was 100-ft. Each test trench was approximately five feet to six feet deep. Water was encountered in each trench at approximately five feet below grade. Material encountered in the trenches consisted of clean fill in the upper three feet; this was predominantly soil and gravel. Below this a variety of material was encountered including foundry sands, foundry slag and glass, scrap wood and metal, concrete, asphalt, and tar. At approximately six feet below grade, a white marl was identified. A six inch stratum of brown peat was found atop the marl in most places. Trenching did not extend more than one foot into the marl.

Volatile organic vapors were encountered in the first trench (T-1) approximately 70 feet from the east end of the trench. This material registered 275 ppm on the field photoionization detector during a head space evaluation. The material exhibited a black stain and a slight sheen developed on the surface of the water proximate to the material. A sample of the material was collected for laboratory analysis for volatile organic compounds (VOCs) via EPA method 8260 and PCBs via EPA method 8082.

Volatile organic vapors, stained soil, or sheens were encountered elsewhere in the former C&D area. A composite soil sample from T-2 and T-3 was collected for laboratory analysis for VOCs and PCBs.

Results of the analytical work showed that PCBs were not detected in either sample. The composite sample from trenches T-2 and T-3 also showed no detectable levels of VOCs (other that the laboratory contaminant acetone, which is a common laboratory solvent)). The sample from T-1 showed three detectable VOCs: acetone (a laboratory contaminant), 2-butanone (another probable laboratory contaminant), and tetrachloroethene. The level of tetrachloroethene detected (160 ug/kg) is lower than the State recommended soil cleanup objective of 1,400 ug/kg (TAGM 4046) for this compound.

Former pond area located between Building 1 and Building 3 Loading Dock

One test trench was excavated in the former pond area located between Buildings 1 and 3. The upper four feet of the trench consisted of fill which included scrap wood, bricks, asphalt, concrete, rocks, and miscellaneous refuse (cast iron sink, metal pail, metal cans). At approximately four feet below grade, a gray organic silty clay was encountered that was moist to wet and had a very plastic nature. It appeared to be the bottom of the former pond where silt, clay, and natural organic matter had settled over time. Groundwater was encountered above this silt/clay and varied from three feet below grade in the north end of the trench to as deep as seven feet below grade near the middle of the trench. Groundwater at the southern extent of the trench was four feet below grade.

Two composite soil samples were collected from the Pond trench; one from the southern extent and one from the more northerly extent where marl was encountered. The samples were submitted for laboratory analysis for VOCs and PCBs.

The analytical results did not show the presence of PCBs or VOCs. A reported detection of acetone in both samples is suspected to be laboratory contamination.

Area Q - Former petroleum storage tank location

Two trenches were made across the assumed location of the UST. Both trenches were approximately six feet deep. The northeasterly trench consisted mostly of foundry sand and slag. Water was found at five feet below grade. The southwesterly trench consisted of foundry sand and marble stone fragments with some occurrences of slag. Groundwater was also found at five feet below grade at this location.

No laboratory samples were collected from these trenches.

Area S - Former petroleum storage tanks location

The area was trenched in several places. No volatile organic vapors, stained soil, or sheens were encountered in any of the trenches. Foundry sands and slag were the predominant materials found in this area, and water was encountered at approximately four feet below the surface. There was no indication of imported fill material such as clean crushed stone. No samples were collected.

Former Powerhouse

Two wipe samples were collected from the former power house. Three active and one inactive transformers were present in the building. The first sample (Power Bldg Floor - grab) was collected from the floor in an area of oil staining in front of the left-most transformer in the building. The second sample (Power Bldg Transformer - Grab) was collected from an oil-stained area on the front of the middle transformer. Samples were submitted to the laboratory for PCB analysis.

The sample from the floor showed a level of 5.5 μg/wipe of Aroclor 1260. The sample from the front of the transformer was reported as 1.3 μg/wipe of Aroclor 1260.

West Area Extra Trenches

Three trenches were excavated for the purpose of determining groundwater levels in the area at the west end of the Property. No samples were collected in this area. The following describes the findings in that area.

South Trench (Midler T-1): Total depth of ten feet. 0-5 feet below the surface consisted of fill composed of slag, foundry sand, and sand/silt. 5-10 feet consisted of black to gray sand; wet at eight feet below grade. A white to pinkish marl was encountered at ten feet below grade. Groundwater entered the trench at eight feet below grade.

Middle Trench (Midler T-2): Total depth of six feet. 0-3 feet below the surface consisted of a brown, dry mixture of top soil and rocks. 4-6 ft consisted of black to gray sand and foundry sand mixed with rocks. Groundwater entered the trench at six feet below grade.

North Trench (Midler T-3): Total depth of three feet. 0-3 below the surface feet consisted of fill composed of slag, foundry sand, sand/silt. Wet marl was encountered at three feet below grade. Groundwater entered the trench at three feet below grade.

Summary

Investigations were conducted at several locations to evaluate potential significant environmental issues relative to future development qt the site. Tasks included excavation of test trenches, observation of excavated materials, analytical testing of soil, and sampling and analysis of oil-stained areas in the powerhouse.

Based on the results of this evaluation, we do not believe that there are environmental issues at the site that would be prohibitively costly to correct or that would prevent development.

Thank you for the opportunity to assist Pioneer Midler Avenue, LLC with this project. We are available to meet at your convenience to discuss these findings. Please call us if there are any questions.

Sincerely yours,

C&S ENGINEERS, INC.

Thomas A. Barba

Thomas A. Barba
Senior Project Scientist

TAB:cah
Attachments

cc: Ken Kamlet, Esq. - Newman Development

ATTACHMENT A

Test Pit Logs

C&S ENGINEERS

C&S Engineers, Inc.

499 Col Eileen Collins Blvd, Syracuse, New York 13212
(315) 455-2000 Fax: (315) 455-9667

TEST PIT LOG

Test Pit No: Pond North | Date: 7-22-04 | Page: 1 of 1

Project: Midler Avenue Pre-BCA Investigation

Client: Pioneer Midler Avenue, LLC | Start: 1300

Contractor: CRAL Contracting, Inc. | Finish: 1600

Equipment: Kobelco SK160 LC | Inspector: J. Holmquist

Scale in Feet	Strata Depth Change	Sample No.	Sample Depth Range	Description of Materials	Remarks
	0 - 3.5			Brown to black, sand and silt, some misc construction/demolition debris, moist	
	3.5 - 4.5			White marl, wet, groundwater at 3-ft	
	4.5 - 5.5			Brown peat, wet	

Groundwater		
Date	Time	Depth
	see above	

Cobbles (2.5 to 10 inches diameter):
< 5%

Boulders (greater than 10 inches diameter):
< 1%

C&S Engineers, Inc.
499 Col Eileen Collins Blvd, Syracuse, New York 13212
(315) 455-2000 Fax: (315) 455-9667

TEST PIT LOG

Test Pit No: Pond South
Date: 7-22-04

Project: Midler Avenue Pre-BCA Investigation
Client: Pioneer Midler Avenue, LLC
Contractor: CRAL Contracting, Inc.
Equipment: Kobelco SK160 LC
Start: 1300
Finish: 1600
Inspector: J. Holmquist

Scale in Feet	Strata Depth Change	Sample No.	Sample Depth Range	Description of Materials	Remarks
	0 - 4			Foundry sand and slag, scrap wood and wetal, misc construction/demolition debris, moist	
	4			Black to gray, organic silt/clay, wet	
				Groundwater at 4-ft below grade	

Groundwater		
Date	Time	Depth
	see above	

Cobbles (2.5 to 10 inches diameter):
< 5%
Boulders (greater than 10 inches diameter):
< 1%

C&S Engineers, Inc.
499 Col Eileen Collins Blvd, Syracuse, New York 13212
(315) 455-2000 Fax: (315) 455-9667

TEST PIT LOG

Test Pit No: C&D Area T-2 Date: 7-23-04

Project: Midler Avenue Pre-BCA Investigation
Client: Pioneer Midler Avenue, LLC Start: 0900
Contractor: CRAL Contracting, Inc. Finish: 1100
Equipment: Kobelco SK160 LC Inspector: J. Holmquist

Scale in Feet	Strata Depth Change	Sample No.	Sample Depth Range	Description of Materials	Remarks
	0 - 5			Foundry sand and slag, some construction/ demolition debris, scrap wood and metal, moist	Some VOVs in soil encountered approx 70-ft east of property boundary in trench 3-ft to 5-ft below grade. Black stain soil.
	5.5			White marl, wet Wet at 5-ft. Groundwater 5-ft below grade	

Groundwater		
Date	Time	Depth
	see above	

Cobbles (2.5 to 10 inches diameter):
< 5%
Boulders (greater than 10 inches diameter):
none

C&S
499 Col Eileen Collins Blvd, Syracuse, New York 13212
Engineers, Inc.
(315) 455-2000 Fax: (315) 455-9667

TEST PIT LOG

Test Pit No: C&D Area T-3 Date: 7-23-04

Project: Midler Avenue Pre-BCA Investigation

Client: Pioneer Midler Avenue, LLC Start: 1100

Contractor: CRAL Contracting, Inc. Finish: 1200

Equipment: Kobelco SK160 LC Inspector: J. Holmquist

Scale in Feet	Strata Depth Change	Sample No.	Sample Depth Range	Description of Materials	Remarks
	0 - 3			Foundry sand and slag, some construction/ demolition debris, scrap wood and metal, moist, root zone at 3-ft	
	3 - 5			Black to gray, medium sand, some foundry sand moist Wet at 4-ft. Groundwater 4-ft below grade	
	5 - 6			Brown peat, wet	
	6			White marl, wet	

Groundwater		
Date	Time	Depth
	see above	

Cobbles (2.5 to 10 inches diameter):
< 5%

Boulders (greater than 10 inches diameter):
none

C&S
499 Col Eileen Collins Blvd, Syracuse, New York 13212
Engineers, Inc.

TEST PIT LOG

(315) 455-2000 Fax: (315) 455-9667

Test Pit No: Area S (Former ASTs) Date: 7-23-04

Project: Midler Avenue Pre-BCA Investigation

Client: Pioneer Midler Avenue, LLC Start: 1400

Contractor: CRAL Contracting, Inc. Finish: 1500

Equipment: Kobelco SK160 LC Inspector: J. Holmquist

Scale in Feet	Strata Depth Change	Sample No.	Sample Depth Range	Description of Materials	Remarks
	0 - 4			Foundry sand and slag, crushed stone, moist	
				Wet at 4-ft. Groundwater 4-ft below grade	

Groundwater		
Date	Time	Depth
	see above	

Cobbles (2.5 to 10 inches diameter):
< 5%

Boulders (greater than 10 inches diameter):
none

C&S Engineers, Inc.
499 Col Eileen Collins Blvd, Syracuse, New York 13212
(315) 455-2000 Fax: (315) 455-9667

TEST PIT LOG

Test Pit No: Midler Ave T-1 Date: 7-22-04 Page: 1 of 1

Project: Midler Avenue Pre-BCA Investigation

Client: Pioneer Midler Avenue, LLC Start: 1100

Contractor: CRAL Contracting, Inc. Finish: 1130

Equipment: Kobelco SK160 LC Inspector: J. Holmquist

Scale in Feet	Strata Depth Change	Sample No.	Sample Depth Range	Description of Materials	Remarks
	0 - 5			Foundry sand and slag	
	5 - 10			Black to gray, medium sand	
	10			White marl	
				Water entering above marl at 8-ft below grade	

Groundwater		
Date	Time	Depth
	see above	

Cobbles (2.5 to 10 inches diameter):
< 5%

Boulders (greater than 10 inches diameter):
none

C&S

499 Col Eileen Collins Blvd, Syracuse, New York 13212

Engineers, Inc.

TEST PIT LOG

(315) 455-2000 Fax: (315) 455-9667

Test Pit No: Midler Ave T-2 Date: 7-22-04

Project: Midler Avenue Pre-BCA Investigation

Client: Pioneer Midler Avenue, LLC

Contractor: CRAL Contracting, Inc.

Equipment: Kobelco SK160 LC

Start: 1130

Finish: 1200

Inspector: J. Holmquist

Scale in Feet	Strata Depth Change	Sample No.	Sample Depth Range	Description of Materials	Remarks
	0 - 3			Brown, top soil and rock cobbles, dry	
	3 - 6			Black to gray, medium sand, foundry sand and slag, some rock cobbles Groundwater at 6-ft below grade	

Groundwater		
Date	Time	Depth
	see above	

Cobbles (2.5 to 10 inches diameter):
< 5%

Boulders (greater than 10 inches diameter):
none

C&S Engineers, Inc.
499 Col Eileen Collins Blvd, Syracuse, New York 13212
(315) 455-2000 Fax: (315) 455-9667

TEST PIT LOG

Test Pit No: Midler Ave T-3 Date: 7-22-04 Page: 1 of 1

Project: Midler Avenue Pre-BCA Investigation

Client: Pioneer Midler Avenue, LLC Start: 1200

Contractor: CRAL Contracting, Inc. Finish: 1215

Equipment: Kobelco SK160 LC Inspector: J. Holmquist

Scale in Feet	Strata Depth Change	Sample No.	Sample Depth Range	Description of Materials	Remarks
	0 - 3			Brown to black, medium sand, foundry sand and slag, moist	
	3			White marl Groundwater at 3-ft below grade	

Groundwater		
Date	Time	Depth
	see above	

Cobbles (2.5 to 10 inches diameter):
< 5%

Boulders (greater than 10 inches diameter):
none

ATTACHMENT B

Analytical Report

C&S ENGINEERS

LSL

Tom Barba
C&S Engineers, Inc.
499 Col. Eileen Collins Blvd
N. Syracuse, NY 13212

Phone: (315) 455-2000
FAX: (315) 455-9667

Laboratory Analysis Report

For

C&S Engineers, Inc.

Client Project ID:

Pioneer Midler

LSL Project ID: **0412284**

Receive Date/Time: 07/23/04 15:20

Project Received by: MW

Life Science Laboratories, Inc.

LSL Central Lab	LSL North Lab	LSL Finger Lakes Lab	LSL Southern Tier Lab	LSL MidLakes Lab
5854 Butternut Drive	131 St. Lawrence Avenue	16 N. Main St., PO Box 424	30 East Main Street	699 South Main Street
East Syracuse, NY 13057	Waddington, NY 13694	Wayland, NY 14572	Cuba, NY 14727	Canandaigua, NY 14424
Tel. (315) 445-1105	Tel. (315) 388-4476	Tel. (585) 728-3320	Tel. (585) 968-2640	Tel. (585) 396-0270
Fax (315) 445-1301	Fax (315) 388-4061	Fax (585) 728-2711	Fax (585) 968-0906	Fax (585) 396-0377
NYS DOH ELAP #10248	NYS DOH ELAP #10900	NYS DOH ELAP #11667	NYS DOH ELAP #10760	NYS DOH ELAP #11369
PA DEP #68-2556				

This report was reviewed by: Linda Waters QC **Date:** 7/28/04

Life Science Laboratories, Inc.

A copy of this report was sent to:

Date Printed: 7/28/04

-- LABORATORY ANALYSIS REPORT --

C&S Engineers, Inc.   *N. Syracuse, NY*

Sample ID: **Power Bldg Floor -Grab**   **LSL Sample ID:** **0412284-001**

Location: Pioneer Midler

Sampled: 07/22/04 10:15   **Sampled By:** JH

Sample Matrix: Wipe

Analytical Method Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) NYSDOH 312-3M/EPA 8082 PCB's in Wipes					
Aroclor-1016	<0.5	ug/wipe	7/26/04	7/27/04	AMW
Aroclor-1221	<0.5	ug/wipe	7/26/04	7/27/04	AMW
Aroclor-1232	<0.5	ug/wipe	7/26/04	7/27/04	AMW
Aroclor-1242	<0.5	ug/wipe	7/26/04	7/27/04	AMW
Aroclor-1248	<0.5	ug/wipe	7/26/04	7/27/04	AMW
Aroclor-1254	<0.5	ug/wipe	7/26/04	7/27/04	AMW
Aroclor-1260	5.5	ug/wipe	7/26/04	7/27/04	AMW
This target analyte appears to be biologically degraded and/or environmentally weathered.					
Surrogate (DCB)	91	%R	7/26/04	7/27/04	AMW

-- LABORATORY ANALYSIS REPORT --

C&S Engineers, Inc. *N. Syracuse, NY*

Sample ID: **Power Bldg Transformer -Grab** **LSL Sample ID:** **0412284-002**

Location: Pioneer Midler

Sampled: 07/22/04 10:16 **Sampled By:** JH

Sample Matrix: Wipe

Analytical Method Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) NYSDOH 312-3M/EPA 8082 PCB's in Wipes					
Aroclor-1016	<0.5	ug/wipe	7/26/04	7/27/04	AMW
Aroclor-1221	<0.5	ug/wipe	7/26/04	7/27/04	AMW
Aroclor-1232	<0.5	ug/wipe	7/26/04	7/27/04	AMW
Aroclor-1242	<0.5	ug/wipe	7/26/04	7/27/04	AMW
Aroclor-1248	<0.5	ug/wipe	7/26/04	7/27/04	AMW
Aroclor-1254	<0.5	ug/wipe	7/26/04	7/27/04	AMW
Aroclor-1260	1.3	ug/wipe	7/26/04	7/27/04	AMW
This target analyte appears to be biologically degraded and/or environmentally weathered.					
Surrogate (DCB)	95	%R	7/26/04	7/27/04	AMW

-- LABORATORY ANALYSIS REPORT --

C&S Engineers, Inc. *N. Syracuse, NY*

Sample ID: **Pond A 3'-4' - Comp** **LSL Sample ID:** **0412284-003**

Location: Pioneer Midler

Sampled: 07/22/04 15:00 **Sampled By:** JH

Sample Matrix: SHW Dry Wt

Analytical Method Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 8082 PCB's					
Aroclor-1016	<0.4	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1221	<0.4	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1232	<0.4	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1242	<0.4	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1248	<0.4	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1254	<0.4	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1260	<0.4	mg/kg dry	7/26/04	7/28/04	AMW
Surrogate (DCB)	90	%R	7/26/04	7/28/04	AMW
(1) EPA 8260B TCL Volatiles					
Acetone	190	ug/kg dry		7/26/04	LEF
Benzene	<40	ug/kg dry		7/26/04	LEF
Bromodichloromethane	<40	ug/kg dry		7/26/04	LEF
Bromoform	<40	ug/kg dry		7/26/04	LEF
Bromomethane	<40	ug/kg dry		7/26/04	LEF
2-Butanone (MEK)	<80	ug/kg dry		7/26/04	LEF
Carbon disulfide	<40	ug/kg dry		7/26/04	LEF
Carbon tetrachloride	<40	ug/kg dry		7/26/04	LEF
Chlorobenzene	<40	ug/kg dry		7/26/04	LEF
Chloroethane	<40	ug/kg dry		7/26/04	LEF
Chloroform	<40	ug/kg dry		7/26/04	LEF
Chloromethane	<40	ug/kg dry		7/26/04	LEF
Dibromochloromethane	<40	ug/kg dry		7/26/04	LEF
1,1-Dichloroethane	<40	ug/kg dry		7/26/04	LEF
1,2-Dichloroethane	<40	ug/kg dry		7/26/04	LEF
1,1-Dichloroethene	<40	ug/kg dry		7/26/04	LEF
1,2-Dichloroethene, Total	<40	ug/kg dry		7/26/04	LEF
1,2-Dichloropropane	<40	ug/kg dry		7/26/04	LEF
cis-1,3-Dichloropropene	<40	ug/kg dry		7/26/04	LEF
trans-1,3-Dichloropropene	<40	ug/kg dry		7/26/04	LEF
Ethyl benzene	<40	ug/kg dry		7/26/04	LEF
2-Hexanone	<80	ug/kg dry		7/26/04	LEF
Methylene chloride	<80	ug/kg dry		7/26/04	LEF
4-Methyl-2-pentanone (MIBK)	<80	ug/kg dry		7/26/04	LEF
Styrene	<40	ug/kg dry		7/26/04	LEF
1,1,2,2-Tetrachloroethane	<40	ug/kg dry		7/26/04	LEF
Tetrachloroethene	<40	ug/kg dry		7/26/04	LEF
Toluene	<40	ug/kg dry		7/26/04	LEF
1,1,1-Trichloroethane	<40	ug/kg dry		7/26/04	LEF
1,1,2-Trichloroethane	<40	ug/kg dry		7/26/04	LEF
Trichloroethene	<40	ug/kg dry		7/26/04	LEF
Vinyl chloride	<40	ug/kg dry		7/26/04	LEF
Xylenes (Total)	<40	ug/kg dry		7/26/04	LEF
Surrogate (1,2-DCA-d4)	99	%R		7/26/04	LEF
Surrogate (Tol-d8)	106	%R		7/26/04	LEF
Surrogate (4-BFB)	117	%R		7/26/04	LEF

Elevated detection limit due to matrix interference.

-- LABORATORY ANALYSIS REPORT --

C&S Engineers, Inc.   *N. Syracuse, NY*

Sample ID: **Pond A 3'-4' - Comp**   **LSL Sample ID:** **0412284-003**

Location: Pioneer Midler

Sampled: 07/22/04 15:00   **Sampled By:** JH

Sample Matrix: SHW Dry Wt

Analytical Method / Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) Modified EPA 160.3 Total Solids					
Total Solids @ 103-105 C	57	%	7/28/04	7/28/04	LEF

-- LABORATORY ANALYSIS REPORT --

C&S Engineers, Inc. *N. Syracuse, NY*

Sample ID: Pond B 3'-5' - Comp **LSL Sample ID:** 0412284-004

Location: Pioneer Midler

Sampled: 07/22/04 16:00 **Sampled By:** JH

Sample Matrix: SHW Dry Wt

Analytical Method / Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 8082 PCB's					
Aroclor-1016	<0.4	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1221	<0.4	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1232	<0.4	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1242	<0.4	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1248	<0.4	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1254	<0.4	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1260	<0.4	mg/kg dry	7/26/04	7/28/04	AMW
Surrogate (DCB)	104	%R	7/26/04	7/28/04	AMW
(1) EPA 8260B TCL Volatiles					
Acetone	160	ug/kg dry		7/26/04	LEF
Benzene	<40	ug/kg dry		7/26/04	LEF
Bromodichloromethane	<40	ug/kg dry		7/26/04	LEF
Bromoform	<40	ug/kg dry		7/26/04	LEF
Bromomethane	<40	ug/kg dry		7/26/04	LEF
2-Butanone (MEK)	<80	ug/kg dry		7/26/04	LEF
Carbon disulfide	<40	ug/kg dry		7/26/04	LEF
Carbon tetrachloride	<40	ug/kg dry		7/26/04	LEF
Chlorobenzene	<40	ug/kg dry		7/26/04	LEF
Chloroethane	<40	ug/kg dry		7/26/04	LEF
Chloroform	<40	ug/kg dry		7/26/04	LEF
Chloromethane	<40	ug/kg dry		7/26/04	LEF
Dibromochloromethane	<40	ug/kg dry		7/26/04	LEF
1,1-Dichloroethane	<40	ug/kg dry		7/26/04	LEF
1,2-Dichloroethane	<40	ug/kg dry		7/26/04	LEF
1,1-Dichloroethene	<40	ug/kg dry		7/26/04	LEF
1,2-Dichloroethene, Total	<40	ug/kg dry		7/26/04	LEF
1,2-Dichloropropane	<40	ug/kg dry		7/26/04	LEF
cis-1,3-Dichloropropene	<40	ug/kg dry		7/26/04	LEF
trans-1,3-Dichloropropene	<40	ug/kg dry		7/26/04	LEF
Ethyl benzene	<40	ug/kg dry		7/26/04	LEF
2-Hexanone	<80	ug/kg dry		7/26/04	LEF
Methylene chloride	<80	ug/kg dry		7/26/04	LEF
4-Methyl-2-pentanone (MIBK)	<80	ug/kg dry		7/26/04	LEF
Styrene	<40	ug/kg dry		7/26/04	LEF
1,1,2,2-Tetrachloroethane	<40	ug/kg dry		7/26/04	LEF
Tetrachloroethene	<40	ug/kg dry		7/26/04	LEF
Toluene	<40	ug/kg dry		7/26/04	LEF
1,1,1-Trichloroethane	<40	ug/kg dry		7/26/04	LEF
1,1,2-Trichloroethane	<40	ug/kg dry		7/26/04	LEF
Trichloroethene	<40	ug/kg dry		7/26/04	LEF
Vinyl chloride	<40	ug/kg dry		7/26/04	LEF
Xylenes (Total)	<40	ug/kg dry		7/26/04	LEF
Surrogate (1,2-DCA-d4)	111	%R		7/26/04	LEF
Surrogate (Tol-d8)	103	%R		7/26/04	LEF
Surrogate (4-BFB)	111	%R		7/26/04	LEF

Elevated detection limit due to matrix interference.

-- LABORATORY ANALYSIS REPORT --

C&S Engineers, Inc. *N. Syracuse, NY*

LSL Sample ID: 0412284-004

Sample ID: **Pond B 3'-5' - Comp**
Location: Pioneer Midler
Sampled: 07/22/04 16:00 **Sampled By:** JH
Sample Matrix: SHW Dry Wt

Analytical Method / Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) Modified EPA 160.3 Total Solids					
Total Solids @ 103-105 C	58	%	7/28/04	7/28/04	LEF

-- LABORATORY ANALYSIS REPORT --

C&S Engineers, Inc. *N. Syracuse, NY*

Sample ID: C+D T1 70' West 5'-6' - Grab **LSL Sample ID:** 0412284-005

Location: Pioneer Midler

Sampled: 07/23/04 9:00 **Sampled By:** JH

Sample Matrix: SHW Dry Wt

Analytical Method / Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 8082 PCB's					
Aroclor-1016	<0.6	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1221	<0.6	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1232	<0.6	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1242	<0.6	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1248	<0.6	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1254	<0.6	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1260	<0.6	mg/kg dry	7/26/04	7/28/04	AMW
Surrogate (DCB)	105	%R	7/26/04	7/28/04	AMW
(1) EPA 8260B TCL Volatiles					
Acetone	1500	ug/kg dry		7/26/04	LEF
Benzene	<70	ug/kg dry		7/26/04	LEF
Bromodichloromethane	<70	ug/kg dry		7/26/04	LEF
Bromoform	<70	ug/kg dry		7/26/04	LEF
Bromomethane	<70	ug/kg dry		7/26/04	LEF
2-Butanone (MEK)	370	ug/kg dry		7/26/04	LEF
Carbon disulfide	<70	ug/kg dry		7/26/04	LEF
Carbon tetrachloride	<70	ug/kg dry		7/26/04	LEF
Chlorobenzene	<70	ug/kg dry		7/26/04	LEF
Chloroethane	<70	ug/kg dry		7/26/04	LEF
Chloroform	<70	ug/kg dry		7/26/04	LEF
Chloromethane	<70	ug/kg dry		7/26/04	LEF
Dibromochloromethane	<70	ug/kg dry		7/26/04	LEF
1,1-Dichloroethane	<70	ug/kg dry		7/26/04	LEF
1,2-Dichloroethane	<70	ug/kg dry		7/26/04	LEF
1,1-Dichloroethene	<70	ug/kg dry		7/26/04	LEF
1,2-Dichloroethene, Total	<70	ug/kg dry		7/26/04	LEF
1,2-Dichloropropane	<70	ug/kg dry		7/26/04	LEF
cis-1,3-Dichloropropene	<70	ug/kg dry		7/26/04	LEF
trans-1,3-Dichloropropene	<70	ug/kg dry		7/26/04	LEF
Ethyl benzene	<70	ug/kg dry		7/26/04	LEF
2-Hexanone	<100	ug/kg dry		7/26/04	LEF
Methylene chloride	<100	ug/kg dry		7/26/04	LEF
4-Methyl-2-pentanone (MIBK)	<100	ug/kg dry		7/26/04	LEF
Styrene	<70	ug/kg dry		7/26/04	LEF
1,1,2,2-Tetrachloroethane	<70	ug/kg dry		7/26/04	LEF
Tetrachloroethene	160	ug/kg dry		7/26/04	LEF
Toluene	<70	ug/kg dry		7/26/04	LEF
1,1,1-Trichloroethane	<70	ug/kg dry		7/26/04	LEF
1,1,2-Trichloroethane	<70	ug/kg dry		7/26/04	LEF
Trichloroethene	<70	ug/kg dry		7/26/04	LEF
Vinyl chloride	<70	ug/kg dry		7/26/04	LEF
Xylenes (Total)	170	ug/kg dry		7/26/04	LEF
Surrogate (1,2-DCA-d4)	115	%R		7/26/04	LEF
Surrogate (Tol-d8)	110	%R		7/26/04	LEF
Surrogate (4-BFB)	103	%R		7/26/04	LEF

Elevated detection limits due to the presence of a petroleum hydrocarbon pattern in the sample.

-- LABORATORY ANALYSIS REPORT --

C&S Engineers, Inc. *N. Syracuse, NY*

Sample ID: C+D T1 70' West 5'-6' - Grab **LSL Sample ID:** 0412284-005

Location: Pioneer Midler

Sampled: 07/23/04 9:00 **Sampled By:** JH

Sample Matrix: SHW Dry Wt

Analytical Method / Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) Modified EPA 160.3 Total Solids					
Total Solids @ 103-105 C	35	%	7/28/04	7/28/04	LEF

-- LABORATORY ANALYSIS REPORT --

C&S Engineers, Inc. *N. Syracuse, NY*

Sample ID: C+D T2 and T3 2'-5' - Comp **LSL Sample ID:** 0412284-006

Location: Pioneer Midler

Sampled: 07/23/04 11:00 **Sampled By:** JH

Sample Matrix: SHW Dry Wt

Analytical Method / Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 8082 PCB's					
Aroclor-1016	<0.2	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1221	<0.2	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1232	<0.2	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1242	<0.2	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1248	<0.2	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1254	<0.2	mg/kg dry	7/26/04	7/28/04	AMW
Aroclor-1260	<0.2	mg/kg dry	7/26/04	7/28/04	AMW
Surrogate (DCB)	101	%R	7/26/04	7/28/04	AMW
(1) EPA 8260B TCL Volatiles					
Acetone	80	ug/kg dry		7/26/04	LEF
Benzene	<30	ug/kg dry		7/26/04	LEF
Bromodichloromethane	<30	ug/kg dry		7/26/04	LEF
Bromoform	<30	ug/kg dry		7/26/04	LEF
Bromomethane	<30	ug/kg dry		7/26/04	LEF
2-Butanone (MEK)	<60	ug/kg dry		7/26/04	LEF
Carbon disulfide	<30	ug/kg dry		7/26/04	LEF
Carbon tetrachloride	<30	ug/kg dry		7/26/04	LEF
Chlorobenzene	<30	ug/kg dry		7/26/04	LEF
Chloroethane	<30	ug/kg dry		7/26/04	LEF
Chloroform	<30	ug/kg dry		7/26/04	LEF
Chloromethane	<30	ug/kg dry		7/26/04	LEF
Dibromochloromethane	<30	ug/kg dry		7/26/04	LEF
1,1-Dichloroethane	<30	ug/kg dry		7/26/04	LEF
1,2-Dichloroethane	<30	ug/kg dry		7/26/04	LEF
1,1-Dichloroethene	<30	ug/kg dry		7/26/04	LEF
1,2-Dichloroethene, Total	<30	ug/kg dry		7/26/04	LEF
1,2-Dichloropropane	<30	ug/kg dry		7/26/04	LEF
cis-1,3-Dichloropropene	<30	ug/kg dry		7/26/04	LEF
trans-1,3-Dichloropropene	<30	ug/kg dry		7/26/04	LEF
Ethyl benzene	<30	ug/kg dry		7/26/04	LEF
2-Hexanone	<60	ug/kg dry		7/26/04	LEF
Methylene chloride	<60	ug/kg dry		7/26/04	LEF
4-Methyl-2-pentanone (MIBK)	<60	ug/kg dry		7/26/04	LEF
Styrene	<30	ug/kg dry		7/26/04	LEF
1,1,2,2-Tetrachloroethane	<30	ug/kg dry		7/26/04	LEF
Tetrachloroethene	<30	ug/kg dry		7/26/04	LEF
Toluene	<30	ug/kg dry		7/26/04	LEF
1,1,1-Trichloroethane	<30	ug/kg dry		7/26/04	LEF
1,1,2-Trichloroethane	<30	ug/kg dry		7/26/04	LEF
Trichloroethene	<30	ug/kg dry		7/26/04	LEF
Vinyl chloride	<30	ug/kg dry		7/26/04	LEF
Xylenes (Total)	<30	ug/kg dry		7/26/04	LEF
Surrogate (1,2-DCA-d4)	110	%R		7/26/04	LEF
Surrogate (Tol-d8)	117	%R		7/26/04	LEF
Surrogate (4-BFB)	103	%R		7/26/04	LEF

Elevated detection limit due to matrix interference.

-- LABORATORY ANALYSIS REPORT --

C&S Engineers, Inc. *N. Syracuse, NY*

Sample ID: **C+D T2 and T3 2'-5' - Comp** **LSL Sample ID:** **0412284-006**

Location: Pioneer Midler

Sampled: 07/23/04 11:00 **Sampled By:** JH

Sample Matrix: SHW Dry Wt

Analytical Method / Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) Modified EPA 160.3 Total Solids					
Total Solids @ 103-105 C	83	%	7/28/04	7/28/04	LEF

SURROGATE RECOVERY CONTROL LIMITS FOR ORGANIC METHODS

Method	Surrogate(s)	Water Limits, %R	SHW Limits, %R
EPA 504	TCMX	80-120	NA
EPA 508	DCB	70-130	NA
EPA 515.4	DCAA	70-130	NA
EPA 524.2	1,2-DCA-d4, 4-BFB	80-120	NA
EPA 525.2	1,3-DM-2-NB, TPP, Per-d12	70-130	NA
EPA 526	1,3-DM-2-NB, TPP	70-130	NA
EPA 528	2-CP-3,4,5,6-d4, 2,4,6-TBP	70-130	NA
EPA 551.1	Decafluorobiphenyl	80-120	NA
EPA 552.2	2,3-DBPA	80-120	NA
EPA 601	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 602	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 608	DCB	30-150	NA
EPA 624	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 625, AE	2-Fluorophenol	21-110	NA
EPA 625, AE	Phenol-d5	10-110	NA
EPA 625, AE	2,4,6-Tribromophenol	10-123	NA
EPA 625, BN	Nitrobenzene-d5	35-114	NA
EPA 625, BN	2-Fluorobiphenyl	43-116	NA
EPA 625, BN	Terphenyl-d14	33-141	NA
EPA 8010	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8020	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8021	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8081	TCMX, DCB	30-150	30-150
EPA 8082	DCB	30-150	30-150
EPA 8151	DCAA	30-130	30-120
EPA 8260	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8270, AE	2-Fluorophenol	21-110	25-121
EPA 8270, AE	Phenol-d5	10-110	24-113
EPA 8270, AE	2,4,6-Tribromophenol	10-123	19-122
EPA 8270, BN	Nitrobenzene-d5	35-114	23-120
EPA 8270, BN	2-Fluorobiphenyl	43-116	30-115
EPA 8270, BN	Terphenyl-d14	33-141	18-137
DOH 310-13	Dodecane	40-110	40-110
DOH 310-14	Dodecane	40-110	40-110
DOH 310-15	Dodecane	40-110	40-110
DOH 310-34*	4-BFB	50-150	50-150
8015M_GRO*	4-BFB	50-150	50-150
8015M_DRO	Terphenyl-d14	50-150	50-150

*Run by GC/MS.

Units Key:	
	ug/l = microgram per liter
	ug/kg = microgram per kilogram
	mg/l = milligram per liter
	mg/kg = milligram per kilogram
	%R = Percent Recovery

Life Science Laboratories, Inc.
CHAIN OF CUSTODY RECORD

LSL

LSL Central Lab
5854 Butternut Drive
E. Syracuse, N.Y. 13057
Phone: (315)445-1105
Fax: (315)445-1301

LSL North Lab
131 St. Lawrence Ave.
Waddington, N.Y. 13694
Phone: (315)388-4476
Fax: (315)388-4061

LSL Finger L...

0472284
C+SE-2

LSL Southern Tier Lab
30 East Main St.
Cuba, N.Y. 14727
Phone: (585)968-2640
Fax: (585)968-0906

Report Address:
Name: TOM BARBA
Company: C+S Engineers
Street: 499 Col Eileen Collins Blvd
City/State: Syracuse NY
Zip: 13212
Phone: 455-2000
Fax: 455-9667
Email:

Turnaround
Normal 14 DAY ☐
Pre-Authorized: Next Day* ☐ 2-Day* ☐ 3-Day* ☒ 7-Day* ☐
*Additional Charges may apply

Date Needed or Special Instructions:

Authorization or P.O. #

LSL Project Number:

Client Project ID/Client Site ID Pioneer Midler

Client's Sample Identifications	Sample Date	Sample Time	Type grab/comp	Matrix	Preserv Added	Containers #	Containers size/type	Analyses	Preserv Check	LSL ID#
Power Bldg Floor	7-22	10:15	grab	–	–	1	wipe	PCB Wipe		001 A
Power Bldg Transformer	7-22	10:16	grab	–	–	1	wipe	PCB Wipe		002 A
POND A 3'-4'	7-22	3 PM	comp	soil	–	2	8 oz glass	EPA 8260 Totals EPA 8082 Totals		003 AB
POND B 3'-5'	7-22	4 PM	comp	soil	–	2				004
C+D T1 70' West 5'-6'	7-23	9 AM	grab	soil	–	2				005
C+D T2 and T3 2'-5'	7-23	11 AM	comp	soil	–	2				006

LSL use only:

Containers this C-O-C

Custody Transfers

		Date	Time
Sampled By: JOHN HOLMQUIST	Received By:		
Relinquished By: John Holmquist	Received By:		
Relinquished By:	Rec'd for Lab By: Matt W	07-23-04	15:20
Shipment Method:	Received Intact: Y N	Sample Temp	

RCVD

*** All areas of this Chain of Custody Record MUST be filled out in order to process samples in a timely manner IN PEN ONLY***

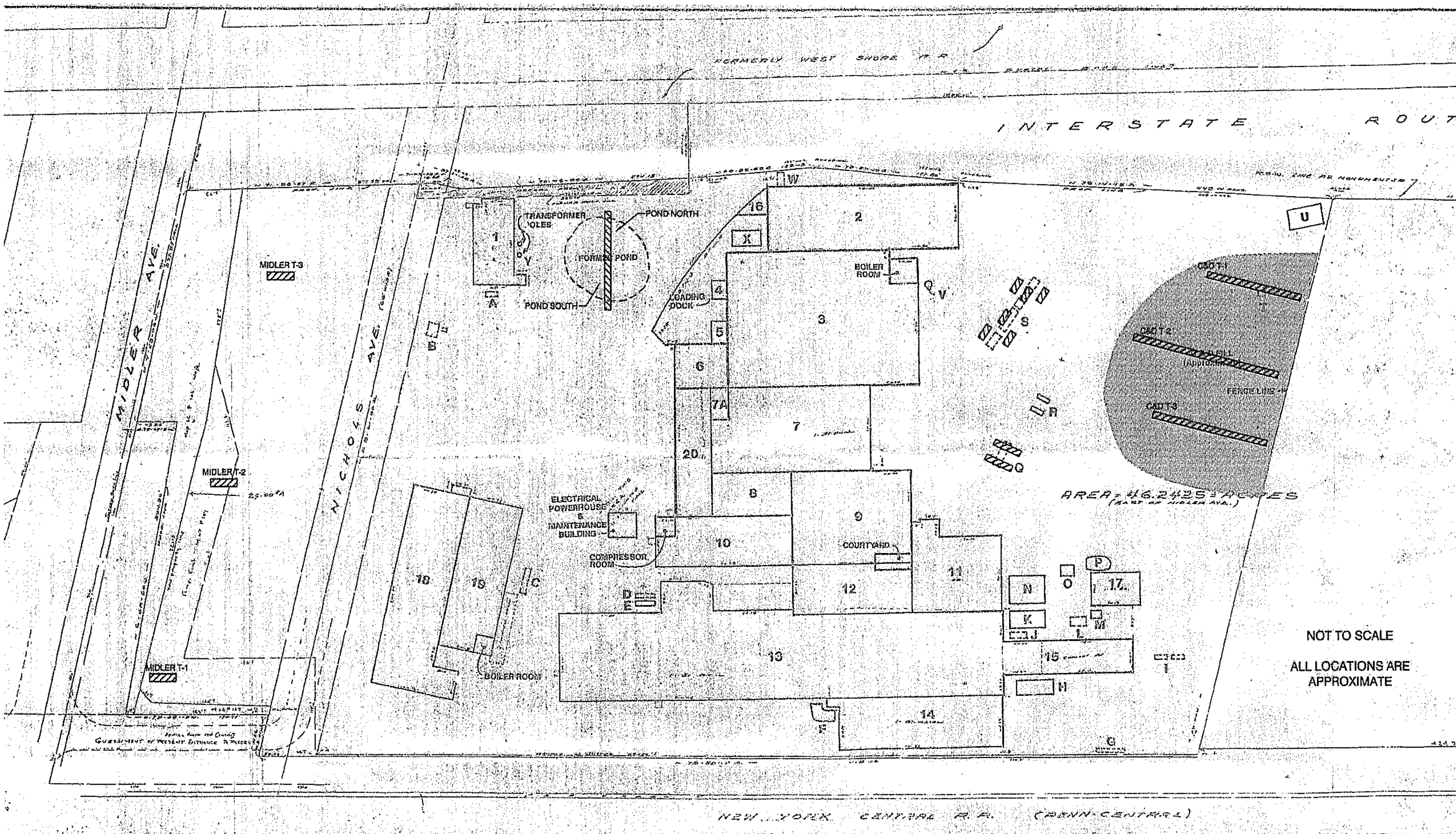
Req COC

13.6° OT

APPENDIX C

Site Figure

C&S ENGINEERS



KEY

AREA	DESCRIPTION (Drawing Date)
A	500 GALLON FUEL OIL TANK (1960)
B	500 GALLON GAS TANK AND PUMP (1960)
C	FUEL OIL TANK (1930)
D	OIL TANK (1930)
E	8,000 GALLON FUEL OIL TANK (1960)
F	TWO - 55 GALLON DRUMS AND FLORESCENT LIGHT FIXTURE BALLASTS AND DARKENED SOIL
G	SEVENTEEN - 55 GALLON DRUMS FLAMMABLE LIQUID (1960)
H	ASH/CINDER DEBRIS
I	OPEN INCINERATORS (1960)
J	PAINT STORAGE (1960)
K	STORAGE AND SUPER MARKET FIXTURES
L	LACQUER AND THINNER STORAGE IN DRUMS (1960)
M	TRANSFORMERS
N	ASH/CINDER DEBRIS
O	ROOF TAR, EPOXY PAINT, AND CONCRETE ADDITIVES
P	ASH/CINDER DEBRIS
Q	12,000 GALLON FUEL OIL TANK (1960)
R	GAS AND DIESEL TANKS
S	FUEL OIL TANKS - 10,000/20,000/500/11,000 GALLONS (1960)
T	275 GALLON FUEL OIL TANK
U	RELOCATED TANKS FROM AREA S, 5 GALLON ROOF TAR PAILS AND 55 GALLON DRUMS (GENERALLY EMPTY)
V	STACK
W	TRANSFORMERS (1980)
X	THREE TRANSFORMERS, TWO GAS FIRED HEATERS, ONE ELECTRIC FURNACE, AND ONE GAS/OILER BOILER
Y	POLE MOUNTED TRANSFORMERS

LEGEND

- FORMER OR HISTORICAL LOCATIONS
- CURRENTLY PRESENT
- TEST TRENCH LOCATION JULY 2004

PIONEER MIDLER AVENUE
PRE-BCA SITE INVESTIGATION

SITE MAP AND
TEST TRENCH LOCATIONS

C&S Engineers, Inc.

DATE

FILE: 631.001.070

FIGURE 1

INDEPENDENT GEOCHEMISTRY AND MICROBIOLOGY INVESTIGATIONS

ENGINEERS
DESIGN BUILD
TECHNICAL RESOURCES
OPERATIONS

C&S Engineers, Inc.
499 Col. Eileen Collins Boulevard
Syracuse, NY 13212
phone 315-455-2000
fax 315-455-9667
www.cscos.com

October 19, 2007

Ms. Karen Cahill, Project Manager
New York State Department of
Environmental Conservation
615 Erie Boulevard West
Syracuse, New York 13204-2400

Re: Midler City Industrial Park Site Brownfield Cleanup
NYSDEC Brownfield Site # C734103

File: C81.001.002.700

Dear Ms. Cahill:

C&S Engineers, Inc., on behalf of our client Pioneer Midler, LLC, submits this letter and accompanying laboratory data that has been gathered to assess whether the Midler Avenue Brownfield Site would be a viable candidate for monitored natural attenuation (MNA) relative to residual chlorinated volatile organic compound (CVOC) contamination that is present in groundwater beneath the site.

The summary hydrogeologic investigations at this site have yet to identify any characteristics that would contraindicate the feasibility of natural attenuation. The presence of high concentrations of Total Organic Carbon within the saturated overburden indicates that the peat/marl unit constitutes an abundant electron donor source. The existence of degradation compounds at declining concentrations in downgradient locations indicates that, if present, inorganic electron acceptors are not inhibiting some level of reductive dechlorination from occurring.

To gain an understanding of the presence of populations of dechlorinating microbes in the site groundwater regime, one sample was collected from each of three site monitoring wells (MW-3D, MW-11D, and SB-7-1) in October 2005, using sample kits provided by Microbial Insights of Rockford, Tennessee. This limited investigation was not a formal part of the RI. The samples were analyzed by Microbial Insights for the presence of Dehalococcoides (dechlorinating bacteria) and for functional genes and phylogenetic groups associated with dechlorinating conditions. The data generated (shown in Attachment A) indicated the presence of Dehalococcoides and functional genes at each of the wells.

To augment the Microbial Insights data, and to better assess post-IRM geochemical and microbiological conditions downgradient of one of the thermal treatment areas, additional groundwater samples were collected from monitoring well MW-13D on October 11, 2007. Field parameters (ORP, DO, temperature) were measured and groundwater samples were submitted to Test America, Inc (formerly STL Inc.) for analysis of a list of MNA indicators, including: dissolved inorganic carbon, dissolved organic carbon, VOCs, iron [total, Fe (II) and Fe (III)], nitrate, nitrite, sulfate, sulfide, and methane. Samples were also sent to SiREM Laboratories in Guelph, Ontario, Canada for other parameters including ethene, ethane, Dehalococcoides, and Vinyl Chloride Reductase (vcrA) gene analysis.

Table 1 in Attachment B presents the field and laboratory data generated from the October 11, 2007 groundwater sampling. Attachments C and D contain the laboratory reports from Test America and SiREM respectively.

Table 1 summarizes and provides a brief interpretation of the data. The table also provides a calculation of the site screening score using the USEPA's methodology from the 1998 *Technical Protocol for Evaluating Attenuation of Chlorinated Solvents in Ground Water.* A copy of the scoring criteria follows Table 1 (USEPA Table 2.3 and 2.4). According to the USEPA's criteria, a score exceeding 20 indicates that there is strong evidence for reductive dechlorination at the site. The score for the Pioneer Midler Avenue site from the October groundwater sampling at MW-13D is 22. The microbial and gene analysis from the October 2007 sampling and included in Table 1 also indicates the abundant presence of Dehalococcoides which is associated with reductive dechlorination. Of more specific interest is the significant population of Dehalococcoides which possess the Vinyl Chloride Reductase (vcrA) gene capable of reducing vinyl chloride to ethene and carbon dioxide.

Of the four main components of natural attenuation (biodegradation, dispersion, sorption, and volatilization), in our opinion biodegradation would be the dominant parameter at the Midler Avenue site due to the slow-moving groundwater environment. Dispersion, sorption, and volatilization would all have more affect in a groundwater regime with higher rates of flux than are present at the site. This same relatively static environment would offer the ability to periodically assess conditions with ample opportunity to identify and assess a change that might indicate a threat to potential downgradient receptors if they were present.

We hope the Department finds the enclosed lines of evidence helpful in coming to the conclusion that monitored natural attenuation is a viable remedy for the Midler Avenue Site. Should you have any questions or would like to discuss further, please let me know.

Sincerely,

C&S ENGINEERS, INC.

Steven M. Vinci, CPG
Managing Geologist

SMV/TAB:cah
Attachments

cc: Jed Schneider, Pioneer Midler Avenue, LLC
Mary Jane Peachey, NYSDEC
Greg Townsend, NYSDEC
Chris Magee, NYSDEC

ATTACHMENT A

Microbial Insights Data Report

microbialinsights

2340 Stock Creek Blvd.
Rockford TN 37853-3044
Phone: (865) 573-8188
Fax: (865) 573-8133
Email: info@microbe.com

Analysis Report

Client: Steven M. Vinci
C & S Engineers, Inc.
499 Col. Eileen Collins
Syracuse, NY 13212

Phone: (315) 455-2000

Fax: (315) 455-9667

MI Identifier: 036CJ **Date Rec:** 10/19/2005 **Report Date:** 10/25/2005

Client Project #: C81.002.001 **Client Project Name:** Pioneer Midler LLC

Purchase Order #:

Analysis Requested: CENSUS (final)

Comments:

All samples within this data package were analyzed under U.S. EPA Good Laboratory Practice Standards: Toxic Substances Control Act (40 CFR part 790). All samples were processed according to standard operating procedures. Test results submitted in this data package meet the quality assurance requirements established by Microbial Insights, Inc.

Reported By: Dora M Ogles

Reviewed By: Greg A. Davis

MICROBIAL INSIGHTS, INC.

2340 Stock Creek Blvd. Rockford, TN 37853-3044
Tel: (865) 573-8188; Fax: (865) 573-8133

CENSUS

Client: C & S Engineers, Inc.
Project: Pioneer Midler LLC

MI Project Number: 036CJ
Date Received: 10/19/2005

Sample Information

Client Sample ID:		MW-3D	MW-11D	SB-7-1
Sample Date:		10/17/2005	10/17/2005	10/17/2005
Units:		cells/bead	cells/bead	cells/bead
Dechlorinating Bacteria				
Dehalococcoides spp (1)	*DHC*	**4.13E+03**	**1.74E+03**	**9.69E+01**
Functional Genes				
BAV1 VC R-Dase (1)	BVC	**2.9E+03**	**1.98E+02**	**1.42E+02**
TCE R-Dase (1)	TCE	**7.99E+02**	**8.56E+02**	**1.12E+02**
Phylogenetic Group				
Eubacteria	EBAC	**2.76E+08**	**6.94E+07**	**6.16E+07**
Methanogens	MGN	**1.63E+06**	**2.37E+06**	**7.14E+05**
Sulfate Reducing Bacteria	DSR	**9.43E+06**	**6.74E+06**	**6.04E+06**

Legend:
NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
< = Result not detected

Notes:
1 Bio-Dechlor Census technology was developed by Dr. Loeffler and colleagues at Georgia Institute of Technology and was licensed for use through Regenesis.

ATTACHMENT B

Summary of October 11, 2007
MNA Indicators

Pioneer Midler Avenue, LLC
Remedial Investigation Report
Table 1 - MNA Indicators Data

October 2007 MNA Indicator Sampling				
Parameter	Result	Units	Interpretation	USEPA Site Criteria Score
Field Parameters				
Oxidation/Reduction Potential (ORP)	-324	mV	Concentration <-100 mg/L indicate reductive pathway is likely	2
Dissolved Oxygen	0	mg/L	Concentration <0.5 mg/L indicates reductive pathways are not repressed	3
Laboratory Analytical Parameters				
Dissolved Inorganic Carbon	110	mg/L	Levels > background indicate microbial metabolism of organic carbon	NL
Dissolved Organic Carbon	41	mg/L	Detections of DOC (or TOC) > 20 mg/L indicates that a non-depleted substrate (electron donor) is abundant	2
Vinyl Chloride	8.9 (SiREM)	mg/L	Indicates presence of reductive dechlorination of higher isomers	2
	21 (TA)	mg/L		
cis-1,2-dichloroethene	0.56	mg/L	Indicates presence of reductive dechlorination of higher isomers	2
Dehalococcoides Enumeration	2 X 10^8 (gene copies)	per liter	Values > 10^7/L indicate high concentration of Dehalococcoides (Dhc)	NL
Vinyl Chloride Reductase (vcrA)	6 X 10^7 (gene copies)	per liter	Indicates that 93% of total Dhc are vcrA gene copies	NL
Iron (total)	1.15	mg/l		
Ferric Iron	1.2	mg/L	Ferric Iron (Fe III) is an electron acceptor that competes with dehalorespiration	
Ferrous Iron	ND at 0.050	mg/L	Ferrous Iron (Fe II) >1 mg/L indicates reduced conditions and that anaerobic degradation of organic carbon is likely	0
Nitrite/Nitrate	ND at 0.050 (both)	mg/L	Absence of nitrate indicates is prerequisite for iron or sulfate reduction to occur	2
Sulfate	ND at 25	mg/L	Indicates sulfate is being reduced to sulfide and reductive dechlorination is likely to be efficient	3
Sulfide	0.8	mg/L		
Methane	13 (SiREM)	mg/L	Indicates strong reducing conditions are present and likely efficient dechlorination	3
	6 (TA)	mg/L		
Ethene	4.6	mg/L	Indicates strong presence of reductive dechlorination end products	3
Ethane	0.27	mg/L		
			Total USEPA Screening Score	22

NL = parameter not included in USEPA Site Screening Score
TA = Test America Laboratories

Table 2.3 Analytical Parameters and Weighting for Preliminary Screening for Anaerobic Biodegradation Processes[a/]

Analysis	Concentration in Most Contaminated Zone	Interpretation	Value
Oxygen*	<0.5 mg/L	Tolerated, suppresses the reductive pathway at higher concentrations	3
Oxygen*	>5 mg/L	Not tolerated; however, VC may be oxidized aerobically	-3
Nitrate*	<1 mg/L	At higher concentrations may compete with reductive pathway	2
Iron II*	>1 mg/L	Reductive pathway possible; VC may be oxidized under Fe(III)-reducing conditions	3
Sulfate*	<20 mg/L	At higher concentrations may compete with reductive pathway	2
Sulfide*	>1 mg/L	Reductive pathway possible	3
Methane*	<0.5 mg/L >0.5 mg/L	VC oxidizes Ultimate reductive daughter product, VC Accumulates	0 3
Oxidation Reduction Potential* (ORP) against Ag/AgCl electrode	<50 millivolts (mV) <-100mV	Reductive pathway possible Reductive pathway likely	1 2
pH*	5 < pH < 9 5 > pH >9	Optimal range for reductive pathway Outside optimal range for reductive pathway	0 -2
TOC	> 20 mg/L	Carbon and energy source; drives dechlorination; can be natural or anthropogenic	2
Temperature*	> 20°C	At T >20°C biochemical process is accelerated	1
Carbon Dioxide	>2x background	Ultimate oxidative daughter product	1
Alkalinity	>2x background	Results from interaction between CO_2 and aquifer minerals	1
Chloride*	>2x background	Daughter product of organic chlorine	2
Hydrogen	>1 nM	Reductive pathway possible, VC may accumulate	3
Hydrogen	<1 nM	VC oxidized	0
Volatile Fatty Acids	> 0.1 mg/L	Intermediates resulting from biodegradation of more complex compounds; carbon and energy source	2
BTEX*	> 0.1 mg/L	Carbon and energy source; drives dechlorination	2
Tetrachloroethene		Material released	0
Trichloroethene*		Material released Daughter product of PCE	0 2[a/]
DCE*		Material released Daughter product of TCE If cis is > 80% of total DCE it is likely a daughter product 1,1-DCE can be chemical reaction product of TCA	0 2[a/]
VC*		Material released Daughter product of DCE	0 2[a/]
1,1,1-Trichloroethane*		Material released	0
DCA		Daughter product of TCA under reducing conditions	2
Carbon Tetrachloride		Material released	0
Chloroethane*		Daughter product of DCA or VC under reducing conditions	2
Ethene/Ethane	>0.01mg/L >0.1 mg/L	Daughter product of VC/ethene	2 3
Chloroform		Material released Daughter product of Carbon Tetrachloride	0 2
Dichloromethane		Material released Daughter product of Chloroform	0 2

* Required analysis. a/ Points awarded only if it can be shown that the compound is a daughter product (i.e., not a constituent of the source NAPL).

Table 2.4 Interpretation of Points Awarded During Screening Step 1

Score	Interpretation
0 to 5	Inadequate evidence for anaerobic biodegradation* of chlorinated organics
6 to 14	Limited evidence for anaerobic biodegradation* of chlorinated organics
15 to 20	Adequate evidence for anaerobic biodegradation* of chlorinated organics
> 20	Strong evidence for anaerobic biodegradation* of chlorinated organics

**reductive dechlorination*

ATTACHMENT C

Test America Data

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 220-3037-1

SDG Number: 220-3037

Job Description: STL Buffalo - Pioneer Midler

For:
TestAmerica Laboratories, Inc.
10 Hazelwood Drive
Amherst, NY 14228-2298

Attention: Mr. Richard Lafond

Jill Duhancik

Jill M Duhancik
Project Manager I
jill.duhancik@testamericainc.com
10/17/2007

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

TestAmerica Laboratories, Inc.
TestAmerica Connecticut 128 Long Hill Cross Road, Shelton, CT 06484
Tel (203) 929-8140 Fax (203) 929-8142 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

Job Narrative
220-J3037-1

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
Method(s) OLM04.2/Vol: The client requested lowest dilution possible. This sample has been run straight and at a 1:200 fold dilution. The straight analysis did have vinyl chloride present, but over-saturated. The diluted run has the correct concentration. The straight run also had a surrogate out of criteria due to the over-saturation. The compliant diluted analysis met all laboratory quality control criteria.

No other analytical or quality issues were noted.

METHOD SUMMARY

Client: TestAmerica Laboratories, Inc.

Job Number: 220-3037-1
Sdg Number: 220-3037

Description	Lab Location	Method	Preparation Method
Matrix: Water			
CLP Volatile Organic Compounds	TAL CT	OLM04.2	OLM04.2/Vol
Purge-and-Trap	TAL CT		SW846 5030B

Lab References:

TAL CT = TestAmerica Connecticut

Method References:

OLM04.2 = "Statement of Work for Organic Analysis", Multi-Media, Multi-Concentration September 1998

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

SAMPLE SUMMARY

Client: TestAmerica Laboratories, Inc.

Job Number: 220-3037-1
Sdg Number: 220-3037

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-3037-1	MW-13D	Water	10/11/2007 1420	10/12/2007 0935
220-3037-2TB	TRIP BLANK	Water	10/11/2007 0000	10/12/2007 0935

SAMPLE RESULTS

Client: TestAmerica Laboratories, Inc.

Job Number: 220-3037-1
Sdg Number: 220-3037

Client Sample ID: MW-13D

Lab Sample ID: 220-3037-1
Client Matrix: Water

Date Sampled: 10/11/2007 1420
Date Received: 10/12/2007 0935

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 10/12/2007 1341
Date Prepared: 10/12/2007 1341

Analysis Batch: 220-10223

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: O1404.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	10	U	0.10	10
Vinyl chloride	650	E	0.10	10
Bromomethane	10	U	0.10	10
Chloroethane	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
Carbon disulfide	9.3	J	0.10	10
Acetone	9.6	J	0.10	10
Methylene Chloride	10	U	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
Chloroform	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Benzene	8.3	J	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Trichloroethene	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
methyl isobutyl ketone	14		0.10	10
Toluene	10		0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	0.89	J	0.10	10
Styrene	10	U	0.10	10
Bromoform	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Xylenes, Total	6.5	J	0.10	10
cis-1,2-Dichloroethene	310	E	0.10	10
trans-1,2-Dichloroethene	60		0.10	10
Dichlorodifluoromethane	10	U	0.10	10
Trichlorofluoromethane	10	U	0.10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	0.10	10
Methyl tert-butyl ether	10	U	0.10	10
1,2-Dibromoethane	10	U	0.10	10
Isopropylbenzene	0.23	J M	0.10	10
1,3-Dichlorobenzene	10	U	0.10	10
1,4-Dichlorobenzene	10	U	0.10	10
1,2-Dichlorobenzene	10	U	0.10	10
1,2-Dibromo-3-Chloropropane	10	U	0.10	10

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 220-3037-1
Sdg Number: 220-3037

Client Sample ID: **MW-13D**

Lab Sample ID: 220-3037-1
Client Matrix: Water

Date Sampled: 10/11/2007 1420
Date Received: 10/12/2007 0935

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 10/12/2007 1341
Date Prepared: 10/12/2007 1341

Analysis Batch: 220-10223

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: O1404.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene	10	U	0.10	10
Methyl acetate	10	U	0.10	10
Cyclohexane	10	U	0.10	10
Methylcyclohexane	4.8	J	0.10	10

Surrogate	%Rec		Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	75	*	76 - 114
4-Bromofluorobenzene	104		86 - 115
Toluene-d8 (Surr)	89		88 - 110

Client: TestAmerica Laboratories, Inc.

Job Number: 220-3037-1
Sdg Number: 220-3037

Client Sample ID: MW-13D

Lab Sample ID: 220-3037-1
Client Matrix: Water

Date Sampled: 10/11/2007 1420
Date Received: 10/12/2007 0935

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol
Preparation: 5030B
Dilution: 200
Date Analyzed: 10/12/2007 1520
Date Prepared: 10/12/2007 1520

Analysis Batch: 220-10223
Run Type: DL

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: O1407.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	2000	U	20	2000
Vinyl chloride	21000		20	2000
Bromomethane	2000	U	20	2000
Chloroethane	2000	U	20	2000
1,1-Dichloroethene	2000	U	20	2000
Carbon disulfide	2000	U	20	2000
Acetone	2000	U	20	2000
Methylene Chloride	49	J B	20	2000
1,1-Dichloroethane	2000	U	20	2000
Methyl Ethyl Ketone	2000	U	20	2000
Chloroform	2000	U	20	2000
1,1,1-Trichloroethane	2000	U	20	2000
Carbon tetrachloride	2000	U	20	2000
Benzene	2000	U	20	2000
1,2-Dichloroethane	2000	U	20	2000
Trichloroethene	2000	U	20	2000
1,2-Dichloropropane	2000	U	20	2000
Bromodichloromethane	2000	U	20	2000
cis-1,3-Dichloropropene	2000	U	20	2000
methyl isobutyl ketone	2000	U	20	2000
Toluene	2000	U	20	2000
trans-1,3-Dichloropropene	2000	U	20	2000
1,1,2-Trichloroethane	2000	U	20	2000
Tetrachloroethene	2000	U	20	2000
2-Hexanone	2000	U	20	2000
Dibromochloromethane	2000	U	20	2000
Chlorobenzene	2000	U	20	2000
Ethylbenzene	2000	U	20	2000
Styrene	2000	U	20	2000
Bromoform	2000	U	20	2000
1,1,2,2-Tetrachloroethane	2000	U	20	2000
Xylenes, Total	2000	U	20	2000
cis-1,2-Dichloroethene	560	J	20	2000
trans-1,2-Dichloroethene	2000	U	20	2000
Dichlorodifluoromethane	2000	U	20	2000
Trichlorofluoromethane	2000	U	20	2000
1,1,2-Trichloro-1,2,2-trifluoroethane	2000	U	20	2000
Methyl tert-butyl ether	2000	U	20	2000
1,2-Dibromoethane	2000	U	20	2000
Isopropylbenzene	2000	U	20	2000
1,3-Dichlorobenzene	2000	U	20	2000
1,4-Dichlorobenzene	2000	U	20	2000
1,2-Dichlorobenzene	2000	U	20	2000
1,2-Dibromo-3-Chloropropane	2000	U	20	2000

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 220-3037-1
Sdg Number: 220-3037

Client Sample ID: MW-13D

Lab Sample ID: 220-3037-1
Client Matrix: Water

Date Sampled: 10/11/2007 1420
Date Received: 10/12/2007 0935

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol
Preparation: 5030B
Dilution: 200
Date Analyzed: 10/12/2007 1520
Date Prepared: 10/12/2007 1520

Analysis Batch: 220-10223

Run Type: DL

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: O1407.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene	2000	U	20	2000
Methyl acetate	2000	U	20	2000
Cyclohexane	2000	U	20	2000
Methylcyclohexane	2000	U	20	2000

Surrogate	%Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97	76 - 114
4-Bromofluorobenzene	100	86 - 115
Toluene-d8 (Surr)	93	88 - 110

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 220-3037-1
Sdg Number: 220-3037

Client Sample ID: **TRIP BLANK**

Lab Sample ID: 220-3037-2TB
Client Matrix: Water

Date Sampled: 10/11/2007 0000
Date Received: 10/12/2007 0935

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 10/12/2007 1317
Date Prepared: 10/12/2007 1317

Analysis Batch: 220-10223

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: O1403.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloromethane	10	U	0.10	10
Vinyl chloride	10	U	0.10	10
Bromomethane	10	U	0.10	10
Chloroethane	10	U	0.10	10
1,1-Dichloroethene	10	U	0.10	10
Carbon disulfide	10	U	0.10	10
Acetone	10	U	0.10	10
Methylene Chloride	0.26	J B	0.10	10
1,1-Dichloroethane	10	U	0.10	10
Methyl Ethyl Ketone	10	U	0.10	10
Chloroform	10	U	0.10	10
1,1,1-Trichloroethane	10	U	0.10	10
Carbon tetrachloride	10	U	0.10	10
Benzene	10	U	0.10	10
1,2-Dichloroethane	10	U	0.10	10
Trichloroethene	10	U	0.10	10
1,2-Dichloropropane	10	U	0.10	10
Bromodichloromethane	10	U	0.10	10
cis-1,3-Dichloropropene	10	U	0.10	10
methyl isobutyl ketone	10	U	0.10	10
Toluene	10	U	0.10	10
trans-1,3-Dichloropropene	10	U	0.10	10
1,1,2-Trichloroethane	10	U	0.10	10
Tetrachloroethene	10	U	0.10	10
2-Hexanone	10	U	0.10	10
Dibromochloromethane	10	U	0.10	10
Chlorobenzene	10	U	0.10	10
Ethylbenzene	10	U	0.10	10
Styrene	10	U	0.10	10
Bromoform	10	U	0.10	10
1,1,2,2-Tetrachloroethane	10	U	0.10	10
Xylenes, Total	10	U	0.10	10
cis-1,2-Dichloroethene	10	U	0.10	10
trans-1,2-Dichloroethene	10	U	0.10	10
Dichlorodifluoromethane	10	U	0.10	10
Trichlorofluoromethane	10	U	0.10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	0.10	10
Methyl tert-butyl ether	10	U	0.10	10
1,2-Dibromoethane	10	U	0.10	10
Isopropylbenzene	10	U	0.10	10
1,3-Dichlorobenzene	10	U	0.10	10
1,4-Dichlorobenzene	10	U	0.10	10
1,2-Dichlorobenzene	10	U	0.10	10
1,2-Dibromo-3-Chloropropane	10	U	0.10	10

Client: TestAmerica Laboratories, Inc.

Job Number: 220-3037-1
Sdg Number: 220-3037

Client Sample ID: TRIP BLANK

Lab Sample ID: 220-3037-2TB
Client Matrix: Water

Date Sampled: 10/11/2007 0000
Date Received: 10/12/2007 0935

OLM04.2/Vol CLP Volatile Organic Compounds

Method: OLM04.2/Vol
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 10/12/2007 1317
Date Prepared: 10/12/2007 1317

Analysis Batch: 220-10223

Instrument ID: HP 5890/5971A GC/MS
Lab File ID: O1403.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,2,4-Trichlorobenzene	10	U	0.10	10
Methyl acetate	10	U	0.10	10
Cyclohexane	10	U	0.10	10
Methylcyclohexane	10	U	0.10	10

Surrogate	%Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96	76 - 114
4-Bromofluorobenzene	102	86 - 115
Toluene-d8 (Surr)	95	88 - 110

DATA REPORTING QUALIFIERS

Client: TestAmerica Laboratories, Inc.

Job Number: 220-3037-1
Sdg Number: 220-3037

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	E	Compound concentration exceeds the upper level of the calibration range of the instrument for that specific analysis.
	J	Indicates an estimated value.
	M	Manual integrated compound.
	*	Surrogate exceeds the control limit
	B	The analyte was found in an associated blank, as well as in the sample.

Chain of Custody Record

SEVERN TRENT STL
Severn Trent Laboratories, Inc.

3037

STL-4124 (0901)

Client	CPS Engineers Inc
Address	499 Col. Eileen Collins Blvd
City / State / Zip Code	Syracuse, NY 13212
Project Name and Location (State)	Miller, NY
Contract/Purchase Order/Quote No.	
Project Manager	Tom Boyle?
Telephone Number (Area Code)/Fax Number	315-455-2000/9867?
Site Contact	
Lab Contact	
Carrier/Waybill Number	
Date	10/11/07
Chain of Custody Number	
Lab Number	
Page	1 of 1

Matrix columns (Air, Aqueous, Sed., Soil) were left blank. The H2SO4, NaOH and ZnAc/NaOH preservative columns were also left blank. Analysis (Attach list if more space is needed) columns:

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Unpres.	HNO3	HCl	ASP05 TCL Vol	Methane (ASP)	Nitrate Nitrite	Sulfide/Sulfate	Total Fe (ASP)	DOC (ASP)	DIC (ASP)	Special Instructions/Conditions of Receipt
MW-13D	10/11/07	1420			3	X							
MW-13D	11	1425			3		X						~~RUN [illegible]~~ non-diluted
MW-13D	11	1430	1					X					
MW-13D	11	1435	1						X				VOA's to Conn
(Extra Quantity Non-Filtered)	11	1440	1										DIC to Corpus
MW-13D	11	1445	1										
MW-13D	11	1450		1						X			
MW-13D	11	1455			2						X		
MW-13D	11	1500			2							X	
TRIP BLANK	—	—			1	X							

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☒ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other____

QC Requirements (Specify): ASP2000 w/Cat. B on Appropriate Analyses

Relinquished By	Date	Time	Received By	Date	Time
1. Thomas C. Wheeler?	10/11/07	1530	1. [signature]	10/11/07	1530
2. [signature]	10/11/07	1600	2. [signature]	10/11/07	1600
3. R English	10/11/07	19:30	3. [signature]	10/12/07	9:35

Comments: RUN Dissolved Methane straight - nondiluted 0.6°C

PASSED RAD SCREEN

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Sample ID: MW-13D
Lab Sample ID: A7B70701
Date Collected: 10/11/2007
Time Collected: 15:00

Date Received: 10/12/2007
Project No: NY4A9350
Client No: 428424
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
Metals Analysis							
Iron - Total	1150		50.0	UG/L	6010	10/15/2007 13:37	
Wet Chemistry Analysis							
Ferric Iron	1.2		0.10	MG/L	3500FE-D	10/16/2007	MMB
Ferrous Iron	ND		0.10	MG/L	3500D	10/12/2007 12:00	KD
Nitrate	ND		0.050	MG/L-N	353.2	10/15/2007 10:29	LRM
Nitrite	ND		0.050	MG/L-N	353.2	10/15/2007 10:29	LRM
Sulfate	ND		25.0	MG/L	300.0	10/15/2007 15:49	AEG
Sulfide	0.80		0.67	MG/L	376.1	10/13/2007 13:50	TL

Date: 10/16/2007
Time: 17:01:16

C & S - Syracuse New York Office
C & S - Midler MNA Testing

Sample ID: MW-13D
Lab Sample ID: A7B80801
Date Collected: 10/11/2007
Time Collected: 14:50

Date Received: 10/13/2007
Project No: NY4A9350
Client No: 428424
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
C&S - RSK 175 - METHANE - W							
Methane	6000		110	UG/L	RSK175	10/15/2007 12:02	DJB

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 560-6994-1

Job Description: Midler MNA Analysis

For:
TestAmerica Laboratories, Inc.
10 Hazelwood Drive
Amherst, NY 14228-2298

Attention: Mr. Richard Lafond

Erica H Padilla

Erica Padilla
Project Manager I
epadilla@stl-inc.com
10/16/2007

The test results entered in this report meet all NELAC requirements for accredited parameters. Any exceptions to NELAC requirements are noted in the report. Pursuant to NELAC, this report may not be reproduced except in full, and with written approval from the laboratory. TestAmerica Corpus Christi Certifications and Approvals: NELAC TX T104704210-06-TX, NELAC KS E-10362, Oklahoma 9968, USDA Soil Permit S-42935 Revised.

TestAmerica Laboratories, Inc.
TestAmerica Corpus Christi 1733 N. Padre Island Drive, Corpus Christi, TX 78408
Tel (361) 289-2673 Fax (361) 289-2471 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

Job Narrative
560-J6994-1

General Chemistry

Sample 560-6994-1 was analyzed for dissolved inorganic carbon (DIC) and dissolved organic carbon (DOC) using EPA method 415.1. Insufficient sample volume was received to prep/analyze a matrix spike/matrix spike duplicate (MS/MSD) for this sample.

EXECUTIVE SUMMARY - Detections

Client: TestAmerica Laboratories, Inc. Job Number: 560-6994-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
560-6994-1	**MW-13D**					
Dissolved						
Dissolved Organic Carbon-D		41	B	1.0	mg/L	415.1
Dissolved Inorganic Carbon-D		110	B	1.0	mg/L	415.1

METHOD SUMMARY

Client: TestAmerica Laboratories, Inc.

Job Number: 560-6994-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Dissolved Organic Carbon, Combustion or Oxidation	TAL CC	MCAWW 415.1	
Sample Filtration performed in the Field	TAL CC		FIELD_FLTRD

Lab References:

TAL CC = TestAmerica Corpus Christi

Method References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

METHOD / ANALYST SUMMARY

Client: TestAmerica Laboratories, Inc. Job Number: 560-6994-1

Method	Analyst	Analyst ID
MCAWW 415.1	Henny, April	AH

SAMPLE SUMMARY

Client: TestAmerica Laboratories, Inc.

Job Number: 560-6994-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
560-6994-1	MW-13D	Water	10/11/2007 1455	10/12/2007 0920

Mr. Richard Lafond
TestAmerica Laboratories, Inc.
10 Hazelwood Drive
Amherst, NY 14228-2298

Job Number: 560-6994-1

Client Sample ID: MW-13D
Lab Sample ID: 560-6994-1

Date Sampled: 10/11/2007 1455
Date Received: 10/12/2007 0920
Client Matrix: Water

Analyte	Result/Qualifier		Unit	MDL	RL	Dilution
Method: Dissolved-415.1			Date Analyzed:		10/12/2007 1324	
Dissolved Inorganic Carbon	110	B	mg/L	0.29	1.0	1.0
Method: Dissolved-415.1			Date Analyzed:		10/12/2007 1622	
Dissolved Organic Carbon	41	B	mg/L	0.29	1.0	1.0

DATA REPORTING QUALIFIERS

Client: TestAmerica Laboratories, Inc. Job Number: 560-6994-1

Lab Section	Qualifier	Description
General Chemistry		
	B	Compound was found in the blank and sample.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

QUALITY CONTROL RESULTS

Client: TestAmerica Laboratories, Inc. Job Number: 560-6994-1

Method Blank - Batch: 560-16288

Method: 415.1
Preparation: N/A

Lab Sample ID: MB 560-16288/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/12/2007 1324
Date Prepared: N/A

Analysis Batch: 560-16288
Prep Batch: N/A
Units: mg/L

Instrument ID: TOC OI Analytical 1020A
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 40 mL

Analyte	Result	Qual	MDL	RL
Dissolved Inorganic Carbon-D	0.31	J	0.29	1.0

Lab Control Spike - Batch: 560-16288

Method: 415.1
Preparation: N/A

Lab Sample ID: LCS 560-16288/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/12/2007 1324
Date Prepared: N/A

Analysis Batch: 560-16288
Prep Batch: N/A
Units: mg/L

Instrument ID: TOC OI Analytical 1020A
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 40 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Dissolved Inorganic Carbon-D	100	104	104	80 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: TestAmerica Laboratories, Inc.

Job Number: 560-6994-1

Method Blank - Batch: 560-16294

Method: 415.1
Preparation: N/A

Lab Sample ID: MB 560-16294/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/12/2007 1622
Date Prepared: N/A

Analysis Batch: 560-16294
Prep Batch: N/A
Units: mg/L

Instrument ID: TOC OI Analytical 1020A
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 40 mL

Analyte	Result	Qual	MDL	RL
Dissolved Organic Carbon-D	0.41	J	0.29	1.0

Lab Control Spike - Batch: 560-16294

Method: 415.1
Preparation: N/A

Lab Sample ID: LCS 560-16294/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 10/12/2007 1622
Date Prepared: N/A

Analysis Batch: 560-16294
Prep Batch: N/A
Units: mg/L

Instrument ID: TOC OI Analytical 1020A
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 40 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Dissolved Organic Carbon-D	100	104	104	80 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

560-6994

4.4°C
IR#1

Chain of Custody Record

SEVERN TRENT **STL**
Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client	C&S Engineers Inc
Address	499 Col. Eileen Collins Blvd
City	Syracuse
State	NY
Zip Code	13212
Project Name and Location (State)	Midler, NY
Contract/Purchase Order/Quote No.	
Project Manager	Tom Barker
Telephone Number (Area Code)/Fax Number	315-455-2000/9667
Site Contact	
Lab Contact	
Carrier/Waybill Number	
Date	10/11/07
Lab Number	
Chain of Custody Number	298810
Page	1 of 1

Analysis (Attach list if more space is needed): ASP00 TCL VOCs; Methane (ASP00); Nitrate-Nitrite (ASP00); Sulfide & Sulfate (ASP00); Total Fe (ASP00); DOC (ASP00); DIC (ASP00)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	ASP00 TCL VOCs	Methane	Nitrate-Nitrite	Sulfide & Sulfate	Total Fe	DOC	DIC	Special Instructions/Conditions of Receipt
MW-13D	10/11/07	1420								3			X							
MW-13D	11	1425								3				X						non-dilute
MW-13D	11	1430					1								X					
MW-13D	11	1435					1									X				VOA's to Conn
(Extra Quantity Non-filtered)	11	1440					1													DIC to Corpus
MW-13D	11	1445					1													
MW-13D	11	1450							1								X			
MW-13D	11	1455								2								X		
MW-13D	11	1500								2									X	
TRIP BLANK	—	—								1			X							

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☑ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☒ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other____

QC Requirements (Specify): ASP2000 w/Cat. B on Appropriate Analyses

	Date	Time		Date	Time
1. Relinquished By: Thomas C. Wnuk	10/11/07	1530	1. Received By: [illegible]	10/11/07	1530
2. Relinquished By: [illegible]	10/11/07	1600	2. Received By: [illegible]	10/11/07	1600
3. Relinquished By: R. English	10/11/07	19:30	3. Received By: Tim K. Ellegy TAL-CC	10/12/07	0920

Comments: RUN Dissolved Methane straight - nondiluted

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Check List

Client: TestAmerica Laboratories, Inc.

Job Number: 560-6994-1

Login Number: 6994
Creator: Kellogg, Timothy L.
List Number: 1

List Source: TestAmerica Corpus Christi

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.4 C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	Not for VOC analysis.
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

ATTACHMENT D

SIREM Laboratory Data

SiREM
Site Recovery & Management
130 Research Lane, Suite 2
Guelph, Ontario N1G 5G3
Phone: (519) 822-2265
Fax: (519) 822-3151
www.siremlab.com

Interpretation of Quantitative Gene-Trac *Dehalococcoides* Test Results

1) Background:

Dehalococcoides group organisms (*Dhc*) are the only known microorganisms capable of complete dechlorination of chloroethenes (i.e., tetrachloroethene, trichloroethene, *cis*-dichloroethene, vinyl chloride to non-toxic ethene. The detection of the *Dhc* 16S ribosomal ribonucleic acid (rRNA) gene has been correlated with the complete biological dechlorination of chlorinated ethenes to ethene at contaminated sites (Hendrickson et. al., 2002, *Applied and Environmental Microbiology*, 68: 485-495). The Quantitative Gene-Trac *Dehalococcoides* test is a quantitative polymerase chain reaction (PCR) test used to determine the concentration of the *Dhc* 16S rRNA gene in soil and groundwater samples.

2) Interpretation of Test Results:

The Quantitative Gene-Trac test reports two types of results, *"Dehalococcoides* 16S rRNA Gene Copies" is a raw value whereas "% *Dehalococcoides* in Microbial Population" is the raw value expressed as percentage of total microbial population. A detailed explanation of the two types of results is provided below.

a) *Dehalococcoides* 16S rRNA Gene Copies

This value is the direct number of *Dhc* 16S rRNA gene copies detected in the sample. Results may be reported either per liter (for groundwater) or per gram (for soil). This number is generally interpreted as equivalent to the number of viable *Dhc* present in the sample when certain reasonable assumptions are made, including that the DNA quantified belongs to viable *Dhc* (i.e., not from dead *Dhc*) and that each *Dhc* cell contains only one 16S rRNA gene. Guidelines for relating this value to observable dechlorination impacts for groundwater samples are provided below.

- **Values of 10^3 gene copies per liter or lower,** indicate the sample contains low concentrations of *Dhc* organisms which may indicate that site conditions are sub-optimal for high rates of dechlorination. Increases in *Dhc* concentrations at the site may be possible if conditions are modified (e.g., electron donor addition).

- **Values of 10^4-10^6 gene copies per liter,** indicates the sample contains moderate concentrations of *Dhc* which may, or may not, be associated with observable dechlorination impacts (i.e., ethene).

- **Values at or above 10^7 gene copies per liter,** indicate the samples contains high concentrations of *Dhc* which is often associated with high rates of dechlorination and the production of ethene. Test results exceeding 10^9 gene copies/liter are rarely observed.

SiREM

b) % *Dehalococcoides* in Microbial Population (% *Dhc*)

This value presents the percentage of *Dhc* (% *Dhc*) relative to other microorganisms in the sample based on the formulas below. % *Dhc* is a measure of the predominance of *Dhc and,* in general, the higher this percentage the better.

$$\%\ Dhc = \frac{Number\ Dhc}{Number\ Dhc + Number\ other\ Bacteria}$$

Where:

$$Number\ other\ Bacteria = \frac{Total\ DNA\ in\ sample\ (ng) - DNA\ attributed\ to\ Dhc(ng)}{4.0\ x\ 10^{-6}\ ng\ DNA\ per\ bacterial\ cell}$$

The number of non-*Dhc* bacteria is estimated by assuming each non-*Dhc* bacterium contains 4.0 x 10^{-6} nanograms (ng) of DNA (Paul and Clark. 1996. *Soil Microbiology and Biochemistry*). Because the total mass of DNA in a sample is determined (by fluorometry) the total number of bacteria present can be estimated. For perspective, the % *Dhc* can range from very low fractions of percentages, in samples that have low numbers of *Dhc* and high numbers of other bacteria (incompletely colonized by *Dhc*), to greater than 50% in *Dhc* enriched cultures such as KB-1™ (fully colonized by *Dhc*).

In addition to determining the predominance of *Dhc*, this value is also used for interpretation of *Dhc* counts from different sampling locations or the same location over time, because it is normalized to total bacteria. In particular, the % *Dhc* value can be used to correct *Dhc* counts where samples are biased low due to non-representative sampling of biomass (bacteria). Example 1 below illustrates a scenario where the % *Dhc* value improves the interpretation of data where one sampling event was biased.

Example 1, use of % Dhc Value to interpret raw data

Example 1 presents results from monitoring well MW-1 sampled in April, May and June. Based on the raw *Dhc* counts alone (*Dehalococcoides* 16S rRNA Gene Copies) it might be assumed that the number of *Dhc* decreased 10-fold between April and May; however, based on the percentage of *Dhc* it is clear that the proportion of *Dhc* actually increased from April to May and that the low count is probably a case of sampling variability (biased low). The higher raw count and the higher percentage of *Dhc* in June confirms the trend of increasing *Dhc* concentrations over time.

Sample	***Dehalococcoides*** **16S rRNA Gene Copies**	**% *Dhc***	**Interpretation Based on % *Dhc***
MW-1–April	1.0 x 10^5/Liter	0.1%	*Dhc* is a low proportion of total microbial population
MW-1–May	1.0 x 10^4/Liter	1%	*Dhc* predominance increased 10-fold from April, low count from low biomass sampled, non-biased sample would be [(1.0/0.1) x 1.0 x10^5] = 10^6 /Liter
MW-1 June	1.0 x 10^7/Liter	10%	*Dhc* predominance moderate and has increased 100-fold from April

3) Explanation of Notes

Quantitation limit: The quantitation limit of Gene-Trac test is 2,150 *Dhc* 16S rRNA gene copies per liter. Note, the specific quantitation limit for each test varies depending on the volume of sample used in the DNA extraction process. For example, if only a ½ liter of water was used the quantitation limit would increase two-fold to 4300 gene copies per liter. The specific quantitation limit is provided only where *Dhc* is not detected.

Value is an estimated quantity between the quantitation limit and detection limit: This is applicable in situations where *Dhc* DNA is detected above the detection limit, but below the quantitation limit, of the standard curve. In such cases an estimated value is provided which is based on extrapolation of the standard curve.

Sample inhibited testing: Each Quantitative Gene-Trac test includes a quantification of the amount of DNA extracted from the sample and a second test to determine if the extracted DNA is suitable for *Dhc* testing (PCR with a universal Bacteria primer). If a sample is determined to contain DNA and PCR with universal primers is negative, it suggests that the extracted DNA inhibited the PCR. Inhibition may be caused by compounds present in the original groundwater sample (e.g., humic acids). Where inhibition occurs there is an increased likelihood of false negatives since *Dhc* DNA, if present, may not be detected.

DNA not extracted from the sample: If DNA is not detected in the sample then "DNA not extracted from the sample" is reported. This is commonly due to samples that contain little or no biomass (bacteria). In some cases sampling may not capture bacteria (e.g., when attached bacteria are not dislodged from the aquifer matrix).

4) Converting Standard Gene-Trac to *Dhc* 16S rRNA Gene Copies/Liter

Quantitative Gene-Trac provides quantitative results in *Dhc* 16S rRNA Gene Copies/Liter, whereas standard Gene-Trac provides semi-quantitative results using a plus scale. Based on parallel analysis of standard versus Quantitative Gene-Trac estimates of the number of *Dhc* gene copies for each + score in the standard test were determined. Note, the conversion factors do not apply in all cases and are meant to be used as a rule of thumb for relating standard Gene-Trac results to Quantitative-Gene-Trac.

Estimated 16S rRNA Gene Copies/Liter for Standard Gene-Trac Intensity Scores

Standard Gene-Trac Intensity Score	Approximate Range of 16S rRNA Gene Copies/Liter
+	10^3-10^5
++	10^4-10^6
+++	10^5-10^7
++++	10^6-10^8

SiREM Site Recovery & Management

130 Research Lane, Suite 2 Guelph, Ontario, N1G 5G3 Canada Tel: (519) 822-2265 Fax: (519) 822-3151

SiREM File Reference: S-1137

Analytical Results

Client: C & S Engineering
Client Project Number:
Date Samples Received: October 12, 2007
Date Samples Analysed: October 15, 2007

Client Sample ID	SiREM Reference ID	Client sample date	Sample dilution factor	Methane	Ethene	Ethane	Chloro-methane	Methanol	Vinyl-chloride	Chloro-ethane	Ethanol	Acetone	DCM	1,1-DCE	trans-1,2-DCE	1,1-DCA	cis-1,2-DCE	Chloro-form	1,2-DCA	1,1,1-TCA	TCE	1,1,2-TCA	PCE
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-13D	07-1079	11-Oct-07	10	13	4.6	0.27	<0.1	<10	8.9	<0.1	<10	<0.1	<0.1	<0.1	<0.1	<0.1	0.32	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
		QL	1	0.01	0.01	0.01	0.01	1	0.01	0.01	1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

Comments:

Method: GC/FID headspace
QL = Quantitation limit
J = associated value is estimated; compound positively detected
< = compound analysed for but not detected, associated value is QL. Sample QL is corrected for dilution.
E = compound exceeded calibration limits

Analyst: R. Schofield

R.Schofield, Laboratory Technician

Results approved: Jeff Roberts

Jeff Roberts
Senior Laboratory Technician

Date:
16-Oct-07

www.siremlab.com
130 Research Lane, Suite 2
Guelph, Ontario N1G 5G3
Phone (519) 822-2265
Fax (519) 822-3151

Certificate of Analysis: Quantitative Gene-Trac *Dehalococcoides* Assay

Customer: Tom Barba, C&S Engineers, Inc.
Project: Midler
Customer Reference: C81.002.001

SiREM Reference: S-1137
Report Issued: 17-Oct-07
Data Files: DHC-UP-0390/QPCR-0283

Table 1: Test Results

Customer Sample ID	SiREM Sample ID	Sample Collection Date	Sample Matrix	Percent Dhc [A]	*Dehalococcoides* Ennumeration [B]
MW-13D	DHC-3387	11-Oct-07	Groundwater	100%	2 x 10^8/liter

Notes:

[A] Percent *Dehalococcoides* (Dhc) in microbial population. This value is calculated by dividing the number of Dhc 16S ribosomal ribonucleic acid (rRNA) gene copies by the total number of bacteria as estimated by the mass of DNA extracted from the sample. Range represents normal variation in Dhc enumeration.

[B] Based on quantification of Dhc 16S rRNA gene copies. Dhc are generally reported to contain one 16S rRNA gene copy per cell; therefore, this number is often interpreted to represent the number of Dhc cells present in the sample.

Analyst: J. Wilkinson
Jennifer Wilkinson
Biotechnology Technologist

Approved: Ximena Druar
Ximena Druar, B.Sc.
Molecular Biology Coordinator

www.siremlab.com
130 Research Lane, Suite 2
Guelph, Ontario N1G 5G3
Phone (519) 822-2265
Fax (519) 822-3151

Certificate of Analysis: Gene-Trac-VC, Vinyl Chloride Reductase (*vcrA*) Assay

Customer: Tom Barba, C&S Engineers, Inc.

Project: Midler

Customer Reference: C81.002.001

SiREM Reference: S-1137

Report Issued: 17-Oct-07

Data Files: VC-QPCR-0100
VC-QPCR check-gel-0116

Table 1: Test Results

Customer Sample ID	SiREM Sample ID	Sample Collection Date	Sample Matrix	Percent *vcrA* [A]	Vinyl Chloride Reductase (*vcrA*) Gene Copies
MW-13D	VCR-0637	11-Oct-07	Groundwater	>93%	6×10^7/liter

Notes:

[A] Percent *vcrA* in microbial population. This value is calculated by dividing the number of vinyl chloride reductase A (*vcrA)* gene copies quantified by the total number of bacteria estimated to be in the sample based on the mass of DNA extracted from the sample. Range represents normal variation in enumeration of *vcrA* .

[1]Defined as "greater than" as total DNA extracted is below the sample specific quantitation limit. This value represents the minimum % *Dehalococcoides* assuming DNA is at the quantitation threshold.

Analyst: J Wilkinson
Jennifer Wilkinson
Biotechnology Technologist

Approved: Ximena Druar
Ximena Druar, B.Sc.
Molecular Biology Coordinator

Table 2: Detailed Test Parameters, GeneTrac Test Reference S-1137

Customer Sample ID	MW-13D
SiREM Test ID	DHC-3387/VCR-0637
Date Received	12-Oct-07
Sample Temperature	4.1 °C
Volume Used for DNA Extraction	100 mL
DNA Extraction Date	15-Oct-07
DNA Concentration in Sample (extractable)	ND[(1)]
Extracted DNA Quality Test (universal PCR primers)	Passed
Secondary DNA Purification	NR
Dhc qPCR Analysis Date	16-Oct-07
***vcrA* qPCR Analysis Date**	16-Oct-07
qPCR Controls (see Table 3)	Passed
Comments	- -

Notes:

Refer to Table 3 for detailed results of controls.
[1] < detection limit of 1.2 ng/L
ND = not detected
NR = not required

PCR = polymerase chain reaction
qPCR = quantitative PCR
Dhc = *Dehalococcoides*
ng/L = nanograms per liter

°C = degrees Celsius
mL = milliliters
DNA = Deoxyribonucleic acid

Table 3: Gene-Trac-Dhc Experimental Control Results, Gene-Trac Test Reference S-1137

Laboratory Control	Analysis Date	Control Description	Spiked Dhc 16S rRNA Gene Copies per Reaction	Recovered Dhc 16S rRNA Gene Copies per Reaction	Comments
Positive Control	16-Oct-07	qPCR with KB1 genomic DNA (1.2×10^5 copies)	1.2×10^5	1.0×10^5	Normal[1]
DNA Extraction Blank	16-Oct-07	DNA extraction sterile water (DB-0657)	0	ND	Normal
Negative Control	16-Oct-07	Tris Reagent Blank	0	ND	Normal

Notes:

[1] Within defined limits of +/- 50%

Dhc = *Dehalococcoides*

DNA = Deoxyribonucleic acid

ND = not detected

qPCR = quantitative PCR

16S rRNA = 16S ribosomal ribonucleic acid

Table 4: Gene-Trac-VC Experimental Control Results, Gene-Trac Test Reference S-1137

Laboratory Control	Analysis Date	Control Description	Spiked *vcrA* reductase Gene Copies per Reaction	Recovered *vcrA* reductase Gene Copies per Reaction	Comments
Positive Control Low Concentration	16-Oct-07	qPCR with cloned vinyl chloride dehalogenase gene (2.8×10^5 copies)	2.8×10^5	1.8×10^5	Normal[1]
Positive Control High Concentration	16-Oct-07	qPCR with cloned vinyl chloride dehalogenase gene (2.8×10^7 copies)	2.8×10^7	1.6×10^7	Normal[1]
DNA Extraction Blank	16-Oct-07	DNA extraction sterile water (DB-0657)	0	3.5×10^3	Detected within acceptable limits[2]
Negative Control	16-Oct-07	Tris Reagent Blank	0	ND	Normal

Notes:
ND = not detected
[1] Within defined limits of +/- 50%
[2] Acceptable where background is less than 2 orders of magnitude below sample result
qPCR = quantitative PCR
Dhc = *Dehalococcoides*
DNA = Deoxyribonucleic acid
vcrA = vinyl chloride reductase

Chain-of-Custody Form

SiREM Site Recovery & Management

130 Research Lane, Suite 2 · Guelph, Ontario, Canada N1G 5G3 · Phone (519) 822-2265 or toll free 1-866-251-1747 Fax (519) 822-3151
www.siremlab.com

№ 1425

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Lab # S-1137

Project Name	Miller
Project #	C81.002.001
Project Manager	Tom Barba
Email Address	
Company	C&S Engineers, Inc.
Address	499 Col. Eileen Collins Blvd., Syracuse, NY 13212
Phone #	315-455-2000
Fax #	315-455-9667
Sampler's Signature	Thomas C Wurick
Sampler's Printed Name	Thomas C Wurickx

Analysis

Preservative	0	0	1									
Analysis	Gene-Trac Method 1	Gene-Trac Method 2	Ethene									

Preservative Key
0. None
1. HCL
2. Other
3. Other
4. Other
5. Other
6. Other

Client Sample ID	Lab ID	Sampling Date	Sampling Time	Matrix	# of Containers	Gene-Trac Method 1	Gene-Trac Method 2	Ethene										Other Information
MW-13D		10/11/07	1400	NPW	1	X												
MW-13D		10/11/07	1400	NPW	1		X											
MW-13D		10/11/07	1400	NPW	6			X										

Sample Receipt

Cooler Condition:	Good
Cooler Temperature:	4.1°C
Custody Seals:	Yes ☐ No ☒

Invoice Information

P.O. #	
Bill To:	
Quotation #	

For Lab Use Only

	Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Thomas C Wurick	[signature]				
Printed Name	Thomas C. Wurickx	Kitson Molden				
Firm	C&S Engineers, Inc	SiREM				
Date/Time	10/11/07/1630	10/12/07				

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client