BROWNFIELD REDEVELOPMENT ASSESSMENT REPORT

FOR

TRAVERSE CITY PLACE BROWNFIELD PLAN AREA

AREA BETWEEN GRANDVIEW PARKWAY, HALL, UNION, STATE, FRONT, AND PINE STREETS TRAVERSE CITY, MICHIGAN

MIB000000180

September 30, 2013

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EXECUTIVE SUMMARY

The Michigan Department of Environmental Quality (MDEQ) conducts Brownfield Redevelopment Assessments (BFRAs) to assist local communities with redevelopment projects by providing environmental assessment information. BFRAs are conducted by the MDEQ to satisfy the Site Specific Assessment task of its 128(a) Brownfield Cooperative Agreement with the United States Environmental Protection Agency. The BFRAs provide information on brownfield properties where potential environmental contamination may be acting as an impediment to future redevelopment activities. They also provide information to determine if a property is a facility as defined in Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 201) and provide recommendations for addressing issues during redevelopment. A facility is defined as any area, place, or property that contains a hazardous substance at a concentration that exceeds Generic Residential Cleanup Criteria established in Section 20120a(1)(a) or (17) of Part 201. File and data searches and environmental sample collection and analyses are used to obtain the needed information to make the determination and recommendations. This report presents the findings of the Traverse City Place Brownfield Plan Area (TCPBPA) property BFRA.

This BFRA report is written for the purpose of providing information on the property that will encourage redevelopment in a way that ensures protection of the public health, safety, welfare, and the environment. This information is intended for use by the local unit of government, the MDEQ, potential developers, and any other stakeholder who may become involved in the future redevelopment of the property. The report includes a summary of the property background, assessment procedures, results, conclusions, and recommendations. The conclusion as to whether the property is a facility as defined in Part 201 is made by comparison of sample concentrations of hazardous substances to the Generic Residential Cleanup Criteria established under Part 201. This report also compares the sample concentrations to other Generic Nonresidential Cleanup Criteria to provide additional information to promote appropriate redevelopment activities.

The BFRA of the TCPBPA property was requested by Ms. Jean Derenzy, Deputy Director of the Grand Traverse County Brownfield Redevelopment Authority. The area involves numerous properties owned by a variety of people; and encompasses parcels located between Hall, Grandview, Union, State, Front, and Pine Streets in Traverse City. The general area of the city is referred to as the Warehouse District. As part of their plans for redevelopment of the TCPBPA property, the Grand Traverse County Brownfield Redevelopment Authority would like it to remain as a mixed use area, but with greater density. These properties are potentially being impacted by a plume of cyanide contamination discovered during the Hotel Indigo redevelopment project. The Hotel Indigo project is located at the southeast corner of Grandview Parkway and Hall Street at the addresses of 263, 235, and 223 West Grandview Parkway. The BFRA is necessary to delineate the extent and the source of the cyanide contamination

discovered in the groundwater. The TCPBPA property is located east, south, and southeast of the Hotel Indigo project.

The request by the Grand Traverse County Brownfield Redevelopment Authority resulted in the MDEQ conducting a BFRA of the property. This BFRA included file and historic information searches, push-point survey of groundwater surface water interface, and the collection of subsurface soil and groundwater samples, Global Positioning System (GPS) data collection of sample locations and property features, and the collection of property feature photographs.

A meeting to aid in designing the field sampling plan was conducted on May 8, 2013, at the Cadillac District Office with two MDEQ project managers and Mr. Douglas Kilmer, a representative from AKT Peerless who is working on behalf of the Grand Traverse County Brownfield Redevelopment Authority. In addition, the meeting included MDEQ Cadillac District Office staff that assisted with site file research. It was concluded that the MDEQ would conduct a field screening survey along Grand Traverse Bay, north of the TCPBPA property, to aid in the selection of temporary monitoring well locations, collect soil boring samples to be analyzed by AKT Peerless, install and sample several temporary monitoring wells, and conduct vertical aquifer sampling.

The Push-Point Survey was conducted along Grand Traverse Bay on May 23 and 24, 2013, just north of the TCPBPA property to aid in the selection of temporary monitoring well locations. Field work was conducted on June 18-21, 2013, and June 24-26, 2013; and included the collection of 16 soil boring samples from 8 locations along Garland Street (samples were collected from 2 horizons at each location) and 1 soil boring sample along Hall Street, the installation and sampling of 10 temporary monitoring wells, and 3 vertical aquifer sampling locations along Hall Street (samples were collected from 4 horizons at each location). Photographs of general property conditions were taken along with GPS data to determine sample and feature locations.

Analysis of the samples detected the presence of organic and inorganic contaminants in the soil boring and groundwater samples at levels greater than the Generic Residential Cleanup Criteria of Part 201. The contaminants in the soil borings on the Property include: cyanide at concentrations above Part 201 Soil Residential Direct Contact Criteria; cyanide at concentrations above Part 201 Soil Residential Drinking Water Protection Criteria; and cyanide, mercury, and selenium at concentrations exceeding Part 201 Soil Groundwater Surface Water Interface (GSI) Protection Criteria.

The contaminants in the groundwater on the Property include: cyanide and lead at concentrations above Part 201 Residential Drinking Water Criteria; and carbazole, cyanide, lead, mercury, 2-methylnaphthalene, naphthalene, selenium, silver, 2,4-trimethylbenzene, and xylenes at concentrations exceeding Part 201 GSI Criteria.

Based on the findings of the BFRA, MDEQ staff recommends that the following issues should be addressed before or during the redevelopment of the TCPBPA property:

Future development of the property must consider the impacts from the migration of contaminated groundwater onto the parcels. Action should be taken to abate the potential threat caused by the presence of contaminants exceeding Residential Cleanup Criteria in the groundwater and soils by mitigation of these contaminants or restricting access to the contaminated areas. The full extent of the contamination should be determined and appropriate precautions implemented to prevent exposure during redevelopment. The “due care” obligations must be met as specified in Section 7a of Part 201 during redevelopment activities. These obligations include not exacerbating the existing contamination, exercising due care to assure there are no unacceptable exposures, and taking reasonable precautions against the reasonably foreseeable activities of third parties.

Further information concerning Part 201 cleanup criteria, due care provisions, and remedial and/or removal activities may be obtained from the MDEQ, Remediation and Redevelopment Division (RRD), Cadillac District Office at 231-775-3960.

INTRODUCTION

The Michigan Department of Environmental Quality (MDEQ) was contracted via a cooperative agreement (CA) with the United States Environmental Protection Agency (U.S. EPA) to conduct Brownfield Redevelopment Assessments (BFRAs). BFRAs are performed to fulfill the Site Specific Assessment (SSA) task in the Section 128(a) CA. The Section 128(a) CA was entered into between the MDEQ and the U.S. EPA as a result of the "Small Business Liability Relief and Brownfield Revitalization Act" amendments to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (Title 42 of the United States Code, Section 9601). The BFRA of the Traverse City Place Brownfield Plan Area (TCPBPA) property was requested by the Grand Traverse County Brownfield Redevelopment Authority to assist in their redevelopment plans for the property.

A brownfield property is a real property, usually an abandoned, idled, or under-utilized industrial or commercial property, or a portion thereof, where the presence or potential presence of a hazardous substance, pollutant, or contaminant may be acting as an impediment to expansion, redevelopment, or reuse of the property. Properties targeted for the SSA task are those brownfield properties that have an active potential for expansion, redevelopment, or reuse.

BFRAs are intended to provide information on such properties where potential environmental contamination may be acting as an impediment to future redevelopment activities. MDEQ staff conducts environmental investigations of brownfield properties to determine the types and locations of past and present activities, potential relevant migration pathways of concern, types and concentrations of potential contaminants, and the need for remedial and/or removal actions on the property. These findings are summarized in this BFRA report along with the determination of whether the property meets the definition of a facility as defined in Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 201). A facility is an area that contains a hazardous substance at a concentration that exceeds residential cleanup criteria established in Section 20120a(1)(a) or (17) of Part 201.

As part of the BFRA, property specific exposure pathways are evaluated for potential exposure routes and relevancy with regard to Part 201. These pathways are evaluated to determine the potential risks posed by elevated levels of hazardous substances in those pathways. As stated in Part 201, a relevant pathway means an exposure pathway that is reasonable and relevant because there is a reasonable potential for exposure to a hazardous substance to occur to a human or non-human receptor from a source or release of a hazardous substance. The components of an exposure pathway are a source or release of a hazardous substance, an exposure point, an exposure route, and, if the exposure point is not the source or point of release, a transport

medium. The existence of an exposure control measure, exposure barrier or other similar feature, such as a municipal water supply, does not automatically make an exposure pathway irrelevant.

The BFRA of the TCPBPA property was conducted in accordance with the CA with the U.S. EPA. The BFRA included file and information searches, a reconnaissance inspection of the property, a push-point survey of groundwater/surface water interface, the collection of subsurface soil and groundwater samples, Global Positioning System (GPS) data collection of sample locations and property features, the collection of property feature photographs, data evaluation, and the compilation of all this data into this report.

PROPERTY BACKGROUND

Property Description

The TCPBPA property is located southeast of the intersection of Grandview and Hall Streets, Traverse City, Michigan, Grand Traverse County, Township 27 North, Range 11 West, Section 3, Garfield Township. The latitude is 44º.45'56.08" north and the longitude is 85º.37'34.45" west. The property is located within the city limit of Traverse City and the general area is referred to as the Warehouse District. The area is comprised of mainly commercial properties with some residential/apartment properties. According to the Grand Traverse County Parcel Detail Report, the parcels are owned by both government and private entities. There are about 8 acres within the area and approximately 12 acres of surrounding parcels. See Figure 1 for the Property Location map. Figure 2A, Property Features – Current, map contains the 2010 aerial photo of the Hotel Indigo parcels, the TCPBPA property, and other possibly impacted properties.

Property History

According to the BFRA application for the TCPBPA property, there is a variety of historical uses of these parcels, which includes a manufacturing gas plant, fuel terminal, agricultural processing, coal burning power plant, and automotive related uses. Figure 2B, Property Features – Historical, map contains an overlay of the area with Sanborn Maps from the 1920s and some of the historical uses during that period are identified. These historical uses include the former gas plant that was located on the southeast corner of Grandview and Hall Streets; the former CB Taylor Coal Company that was located near the northeast corner of Front and Hall Streets; the former Rennie Oil Company that was located along Garland Street and the Boardman River; a former vehicle garage that was near the southeast corner of Front and Pine Streets; and a former auto body and fender repair that was located along Garland, east of Hall. According to the MDEQ Storage Tank Information Database, there are two leaking underground storage tank sites that are located at 207 and 211 West Grandview Parkway. There were confirmed releases at these properties, but these sites have been closed. The site at 207 West Grandview Parkway received an approved partial closure on April 10, 2013 as this was a State funded site, while the site at 211 West Grandview Parkway had an approved closure report on September 29, 2008.

A Phase I Environmental Site Assessment, two Phase II Environmental Site Assessments, and a Baseline Environmental Assessment of 263, 235, and 223 West Grandview Parkway, Traverse City, Michigan were provided by the BFRA applicant, the Grand Traverse County Brownfield Redevelopment Authority. During the redevelopment of these parcels, cyanide was discovered in the groundwater. The horizontal and vertical extent of the cyanide contamination in the groundwater in the TCPBPA area is unknown, but could impact future redevelopment.

PROCEDURES AND RESULTS

Reconnaissance Inspection Observations

A BFRA property reconnaissance was conducted at the TCPBPA property on May 23, 2013. The purpose of the reconnaissance was to determine the type, location, and quantity of observable areas of potential contamination, and to gather information to be used in development of the BFRA sampling plan. The property reconnaissance involved a three person investigative team consisting of three MDEQ project managers, who conducted a push-point survey in Grand Traverse Bay, just north of the area, to aid in positioning of proposed sampling locations. The team documented the structures and debris types located throughout the property and identified the environmental concerns associated with each area of concern on the property. Figure 2A, Property Features – Current, map contains a base aerial photo from 2010 of the Hotel Indigo parcels, the TCPBPA property, and other possibly impacted properties. The buildings on the parcels associated with the Hotel Indigo project are present in the 2010 aerial photo, but have since been demolished.

Known areas of concern include the following based on the property audit and reconnaissance field notes:

- Historical use of the parcels in the area including a manufacturing gas plant, a fuel terminal, agricultural processing, a coal burning power plant, and automotive related uses; and

- Cyanide contamination in the groundwater discovered at the Hotel Indigo project.

Sampling Procedures

The field sampling event was conducted in June 2013 and included the collection of 17 soil boring and 22 groundwater samples from suspected areas of contamination at the TCPBPA property. The sample locations were surveyed in utilizing a Trimble GeoXH Global Positioning System (GPS) unit with an accuracy of approximately 0.10 meters.

The samples were collected in order to:

- Determine the concentrations of U.S. EPA Target Compound List compounds (organic compounds) and Target Analyte List analytes (inorganic elements) which may be present at the property.

- Identify potential contamination in subsurface soils on the property.

- Identify potential contaminant source areas.

- Ascertain potential contaminant migration pathways from possible source areas.

- Identify health and safety concerns, including threats posed to nearby residential populations, future workers or occupants, or natural resources associated with the different sample media.

- Evaluate and determine whether the TCPBPA property is a facility in accordance with the definition found in Part 201, Section 20101(o).

Standard MDEQ sample collection, preservation, and decontamination procedures, as outlined in the work plan, were followed for all samples. Sample collection and preservation followed the MDEQ Remediation and Redevelopment Division (RRD) Operational Memorandum 2, Attachments 4-6. Soil samples analyzed for volatile organic compounds (VOCs) were field preserved with methanol. Soil samples collected for other analyses were not chemically preserved. MDEQ staff was responsible for the collection of the soil boring samples; however, AKT Peerless handled the transport of the soil boring samples, SB-01 through SB-08, to ALS Environmental for the analysis. SB-11 was transported by MDEQ staff and analyzed by the MDEQ Environmental Laboratory for the Michigan Ten metals and cyanide, only. Water samples analyzed for VOCs were field preserved with hydrochloric acid. Water samples analyzed for semi-volatile organic (SVOC) compounds were not field preserved. Water samples analyzed for total metals were field preserved with nitric acid to a hydrogen ionization potential (pH) of less than 2 and water samples analyzed for both available and total cyanide were field preserved with sodium hydroxide to a pH of more than 12.

The MDEQ quality assurance/quality control procedures as outlined in the Quality Assurance Project Plan for Site Assessment and Brownfield Activities were followed (MDEQ, 2003). Upon collection of the samples, all samples were labeled and placed in insulated sample shipment coolers. The interior of the shipment coolers was kept at a temperature of approximately 4° Celsius with ice and delivered to the MDEQ Environmental Laboratory. Groundwater samples and soil boring sample, SB-11, were transported by MDEQ staff to the MDEQ Environmental Laboratory for analysis.

Sample Analysis

Soil and water samples were analyzed for organic compounds and inorganic analytes, consistent with the MDEQ RRD Operational Memorandum 2, Attachment 1. Soil samples SB-01 through SB-08 were analyzed by ALS Environmental of AKT Peerless Environmental Services that was working on behalf of the Grand Traverse County Brownfield Redevelopment Authority. These samples were analyzed for volatile organics, semi-volatile organics and metals, but not cyanide. SB-11 was analyzed for metals and cyanide only and all the water samples were analyzed for volatile organics, semi-volatile organics, metals, and cyanide by the MDEQ Environmental Laboratory utilizing the following methods:

Compound/Analyte	**Analytical Method**	
	Soil	**Water**
Volatile Organics	SW8260 (ALS Env.)	8260
Semi-volatile Organics	SW8270 (ALS Env.)	8270
Arsenic, Barium, Cadmium, Chromium, Copper, Lead, Selenium, Silver, Zinc	6020 SW6020A (ALS Env.)	6020
Available Cyanide	OIA-1677	OIA-1677
Cyanide	ASTM D 7511-09	ASTM D 7511-09
Mercury	7471 SW7471 (ALS Env.)	7470

It should be noted that with regard to the chromium analyses, only total chromium was analyzed. Upon analysis, laboratory results were sent to the Investigation Team Leader and processed for this report. Laboratory analytical data for soil samples SB-01 through SB-8 are provided in Appendix B and were analyzed by ALS Environmental. Laboratory analytical data for the samples analyzed by the MDEQ Environmental Laboratory are provided in Appendix B.

Sample Analytical Results Compared to Criteria

Contaminant concentrations in samples exceeding the Generic Cleanup Criteria (Criteria) promulgated pursuant to Part 201 are noted in the attached summary tables and will be described in the following sections. The current Part 201 Criteria are provided in Appendix C. Sample contaminant concentrations were rounded to two significant figures whenever laboratory results were reported in more than two significant figures. This is to allow for comparison of laboratory results to Criteria, which are presented in two significant figures. RRD Operational Memorandum 1 states that Criteria "should be compared to analytical data presented in two significant figures."

The attached summary tables show all sample Criteria exceedances. However, not all Criteria may be applicable. An applicable criterion is a cleanup criterion for a relevant pathway. A pathway that is not relevant will not have applicable criteria. A pathway evaluation will be completed in the Discussion section. If an exposure pathway is not listed below, it means that no exceedances of Criteria in that pathway were found.

As noted above regarding the chromium analyses, only total chromium was analyzed. Per Part 201 rules, the total chromium concentrations are compared to the hexavalent chromium criteria. Also, the default values for hardness and pH were used to determine the "G" footnoted Groundwater Surface Water Interface (GSI) Criteria. The default values used were a water hardness value of 100 milligrams calcium carbonate per liter and a pH of 7.

No background samples were collected for the soil boring and groundwater samples. Because background samples were not collected, there is not a property specific background determination. Any sample concentrations of naturally occurring inorganic analytes above Criteria, but equal to or below statewide default background levels, are not considered exceedances of Part 201 Criteria in this report.

Soil Boring Samples

The intent of the soil boring sampling was to identify potential contamination in the deep soils, to determine if any downward migration of contamination has occurred from probable source areas, and to determine potential health and safety concerns, including threats posed to nearby residential populations, future workers or occupants, or resources associated with the deep soils at the property. To accomplish this sampling task, 8 soil boring samples (plus 1 duplicate) were collected from 8 separate boring locations along Garland Street, which included 2 samples per soil boring from different horizons. One soil boring sample, SB-11, was collected along Hall Street during the BFRA. All samples were collected utilizing a Geoprobe® rig with a high density polyethylene lined Macro-Core® sampler from depths ranging from 0 to 11.5 feet below the ground surface according to the procedures outlined in the work plan. These

procedures included screening the core with a photoionization detector to help determine the presence of VOCs and potential sampling points within the cores. All soil boring boreholes were properly abandoned following an approved standard operating procedure. This procedure entailed slowly filling the abandoned borehole with granular bentonite to within six inches of the surface then topping off the borehole with immediate surrounding material. In addition, all the boreholes that were located in an area with asphalt or concrete cover were topped with asphalt patch or concrete.

See Figure 3 for a map showing Soil Boring Sample Locations. A description of the soil boring locations, lithology, and sample characteristics can be found in Table 1. SB-01 through SB-08 were collected along Garland Street. Two samples were collected from each soil boring location at different depths. The MDEQ collected the samples, while AKT Peerless was responsible for transport and analysis of these soil boring samples on behalf of the Grand Traverse County Brownfield Redevelopment Authority. The MDEQ collected SB-11 from the same location as VAS-01 and the MDEQ was responsible for the transport and analysis of this soil boring sample along with all the groundwater samples. Table 2 provides a summary of the soil boring sample analytical results compared to Part 201 Criteria and indicates the Criteria exceedances. Appendix B contains all the analytical results for the soil boring and groundwater samples.

Analysis of the soil boring samples collected during the BFRA detected the presence of organic and inorganic analytes at concentrations above Part 201 Criteria. The following lists the Criteria exceedances for soil boring samples and the compounds/analytes and samples with concentrations in excess of Criteria. The full extent of the contaminants in the deep soils was not delineated during the BFRA of the TCPBPA property.

Exceedances above the Soil Residential Drinking Water Protection Criteria:

These Criteria represent concentrations of hazardous substances in soils that may leach from the soil into groundwater at concentrations in the groundwater exceeding generic Residential Drinking Water Criteria.

Cyanide was detected in SB-11 at a concentration of 240 parts per million (ppm) which exceeds the 4.0 ppm Criterion.

Exceedances above the Soil Nonresidential Drinking Water Protection Criteria:

These Criteria represent concentrations of hazardous substances in soils that may leach from the soil into groundwater at concentrations in the groundwater exceeding generic Nonresidential Drinking Water Criteria.

Cyanide was detected in SB-11 at a concentration of 240 ppm which exceeds the 4.0 ppm Criterion.

Exceedances above the Soil Groundwater Surface Water Interface Protection Criteria:

These Criteria represent concentrations of hazardous substances in soils that may leach from the soil into groundwater at concentrations exceeding Generic GSI Criteria.

Cyanide was detected in SB-11 at a concentration of 240 ppm which exceeds the 0.10 ppm Criterion.

Mercury was detected in SB-06 (102 feet) at a concentration of 0.32 ppm and SB-11 at a concentration of 0.3 ppm which exceed the 0.05 ppm Criterion.

Selenium was detected in SB-05 (102 feet) at a concentration of 0.55 ppm which exceeds the 0.40 ppm Criterion.

Groundwater Samples

The intent of the groundwater sampling was to identify potential contamination in the groundwater, to determine if any downward migration of possible contamination had occurred from probable source areas into the shallow aquifer, and to determine potential health and safety concerns, including threats posed to nearby residential populations, future workers or occupants, or resources associated with the groundwater in the area of the Property. To accomplish this sampling task, 22 groundwater samples (including 2 duplicate samples) were collected from 10 temporary monitoring wells and 3 vertical aquifer sampling locations installed using a Geoprobe® rig according to the procedures outlined in the work plan.

The temporary monitor wells and vertical aquifer sample points were installed by driving small diameter well points directly into the aquifer after pre-probing the hole with an over-sized drive point. The temporary wells were constructed of one-inch polyvinyl chloride (PVC) riser pipe with a five-foot section of one-inch PVC #10 slot well screen. The well screens were set near the water table. A Geoprobe SP-16 was utilized for the vertical aquifer samples. The SP-16 was driven to 30 feet below ground level and then the expendable point was dislodged and the screen exposed. Upon installation, the wells were purged of heavy sediment and a steady low-flow purge rate of 500 milliliters/minute or less was established. The wells were purged using dedicated low density polyethylene (LDPE) and C-FLEX® tubing and a peristaltic pump. During the low-flow purging, temperature, pH, conductivity, oxidation reduction potential, and total dissolved solids were measured at continuing intervals until these measurements stabilized.

Once the listed groundwater parameters had stabilized, the well was sampled using low-flow techniques as outlined in the work plan. All temporary monitoring well samples and vertical aquifer samples were collected utilizing LDPE and C-FLEX® tubing and a peristaltic pump. See Figure 5 for a map showing the temporary monitoring well and vertical aquifer sample locations. Information on the groundwater sample characteristics and the temporary monitoring well construction can be found in Table 3. Table 4 provides a summary of the groundwater sample analytical results for the temporary monitoring well and vertical aquifer samples compared to the Part 201 Criteria and indicates the Criteria exceedances.

During the week of June 17, 2013, the temporary monitoring wells TMW-01 through TMW-06 and TMW-09 were installed. After installation of these temporary monitoring wells, the top of casing (TOC) and ground elevations were surveyed in using a survey level and rod to the nearest 0.01 foot. Due to the temporary nature of the monitoring wells, an arbitrary benchmark of 100.00 feet was set at “A” on the top of the hydrant located near TMW-01, along the north side of Grandview Parkway and the wells were surveyed in to that point. To determine depth to groundwater, static water levels were measured for each well from the TOC with an electronic water level meter. The static water level measurements were taken on Friday, June 21, 2013, to let the wells equilibrate to aquifer pressure. Static water level elevations were then determined using these measurements. Table 5 contains the groundwater elevation data. However, at the time of the survey, the properties located at the southeast corner of West Grandview Parkway and Hall Street (263, 235, and 223 West Grandview Parkway) were being de-watered at a rate of 150 gallons per minute for a construction project. The groundwater flow direction could not be determined due to the impact of the de-watering process at Hotel Indigo construction site. Once the final static water level elevations were collected, the temporary monitoring wells were removed and the boreholes were properly abandoned following an approved standard operating procedure. This procedure entailed slowly filling the abandoned borehole with bentonite chips to within six inches of the surface, then topping off the borehole with immediate surrounding material. In addition, all the boreholes that were located in the area with either asphalt or concrete cover were topped with either asphalt patch or concrete consistent with the original surface material.

During the week of June 24, 2013, the three temporary monitoring wells (TMW-07, TMW-08, and TMW-10) were installed as well as three vertical aquifer sample locations (VAS-01, VAS-02, and VAS-03). Samples were collected from four different horizons at each of the vertical aquifer sample locations. It should be noted that while groundwater samples were collected from these locations, the wells were not surveyed for groundwater elevation determination.

Analysis of the groundwater samples collected during the BFRA detected the presence of elevated levels of organic compounds and inorganic analytes at concentrations above their respective Part 201 Criteria. The following lists the criteria exceedances for

groundwater samples and the compounds/analytes and samples with concentrations in excess of criteria. The full extent of the contaminants in the groundwater was not delineated during the BFRA of the TCPBPA property.

Exceedances above the Residential Drinking Water Criteria:

These Criteria represent concentrations of hazardous substances in groundwater that pose a risk to Residential drinking water.

Cyanide was detected in TMW-04 at a concentration of 3,500 parts per billion (ppb), VAS-01 (16-20) at a concentration of 360 ppb, VAS-01 (12-16) at a concentration of 1,900 ppb, VAS-02 (12-16) at a concentration of 1,800 ppb, VAS-02 (12-16) DUP at a concentration of 1,800 ppb, and VAS-03 (12-16) at a concentration of 960 ppb, which exceed the 200 ppb Criterion.

Lead was detected in TMW-09 at a concentration of 160 ppb, which exceeds the 4.0 ppb Criterion.

Exceedances above the Nonresidential Drinking Water Criteria:

These Criteria represent concentrations of hazardous substances in groundwater that pose a risk to Nonresidential drinking water.

Cyanide was detected in TMW-04 at a concentration of 3,500 ppb, VAS-01 (16-20) at a concentration of 360 ppb, VAS-01 (12-16) at a concentration of 1,900 ppb, VAS-02 (12-16) at a concentration of 1,800 ppb, VAS-02 (12-16) DUP at a concentration of 1,800 ppb, and VAS-03 (12-16) at a concentration of 960 ppb, which exceed the 200 ppb Criterion.

Lead was detected in TMW-09 at a concentration of 160 ppb, which exceeds the 4.0 ppb Criterion.

Exceedances above the Groundwater Surface Water Interface Criteria:

These Criteria represent concentrations of hazardous substances in groundwater that pose a risk to surface water through migration of contaminated groundwater to surface water.

Carbazole was detected in TMW-04 at a concentration of 11 ppb, which exceeds the 10 ppb Criterion.

Cyanide was detected in TMW-01 at a concentration of 9 ppb, TMW-02 at a concentration of 63 ppb, TMW-02 DUP at a concentration of 63 ppb, TMW-03 at a concentration of 11 ppb, TMW-04 at a concentration of 3,500 ppb, TMW-05 at a

concentration of 9 ppb, TMW-06 at a concentration of 19 ppb, TMW-07 at a concentration of 21 ppb, TMW-09 at a concentration of 21 ppb, TMW-10 at a concentration of 18 ppb, VAS-01 (20-24) at a concentration of 27 ppb, VAS-01 (16-20) at a concentration of 360 ppb, VAS-01 (12-16) at a concentration of 1,900 ppb, VAS-02 (26-30) at a concentration of 11 ppb, VAS-02 (20-24) at a concentration of 12 ppb, VAS-02 (16-20) at a concentration of 38 ppb, VAS-02 (12-16) at a concentration of 1,800 ppb, VAS-02 (12-16) DUP at a concentration of 1,800 ppb, and VAS-03 (12-16) at a concentration of 960 ppb, which exceed the 5.2 ppb Criterion.

Lead was detected in TMW-09 at a concentration of 160 ppb, which exceeds the 10 ppb Criterion.

Mercury was detected in TMW-09 at a concentration of 0.2 ppb, which exceeds the 0.0013 ppb Criterion.

2-Methylnaphthalene was detected in TMW-04 at a concentration of 180 ppb and VAS-02 (12-16) at a concentration of 30 ppb, which exceed the 11 ppb Criterion.

Naphthalene was detected in TMW-04 at a concentration of 180 ppb, in VAS-02 (12-16) at a concentration of 480 ppb and TMW 08 at a concentration of 250 ppb, which exceed the 11 ppb Criterion.

Selenium was detected in VAS-01 (12-16) at a concentration of 6.4 ppb, which exceeds the 0.5 ppb Criterion.

Silver was detected in TMW-09 at a concentration of 0.3 ppb, which exceeds the 0.2 ppb Criterion.

1,2,4-Trimethylbenzene was detected in VAS-02 (12-16) at a concentration of 23 ppb and VAS-02 (12-16) DUP at a concentration of 22 ppb, which exceed the 17 ppb Criterion.

Xylenes were detected in VAS-02 (12-16) at a concentration of 60 ppb and VAS-02 (12-16) DUP at a concentration of 59 ppb, which exceed the 35 ppb Criterion.

Push-Point Survey

MDEQ staff conducted a Push-Point Survey of groundwater/surface water interface on the Grand Traverse Bay, north of the property on May 23 and 24, 2013, utilizing push-point samplers. The survey was completed prior to the field sampling to aid in the selection of sampling locations. A field screening kit to detect cyanide in water was conducted at each of the 48 push-point locations. During the purging of each push-point sampling location, the temperature, pH, conductivity, oxidation reduction potential, and total dissolved solids were measured with a Myron meter. The results from the push-point sampling survey are provided in Table 6. Figure 5 contains a map of the locations, both a distant and a close-up view.

DISCUSSION

MDEQ staff conducted a BFRA of the TCPBPA property in accordance with the CA with the U.S. EPA and according to the approved work plan. The BFRA included file and information searches, reconnaissance inspections of the property, a groundwater/ surface water interface survey, the collection and analyses of subsurface soil and groundwater samples, GPS data collection of sample locations and property features, and the collection of site feature photographs, data evaluation, and the compilation of all the data into this report.

Analysis of the soil and groundwater samples collected during the BFRA of the TCPBPA property detected the presence of organic and inorganic analytes at concentrations greater than the Generic Residential Cleanup Criteria. The contaminants in the soil borings on the Property include: cyanide at concentrations above Part 201 Soil Residential Direct Contact Criteria; cyanide at concentrations above Part 201 Soil Residential Drinking Water Protection Criteria; and cyanide, mercury, and selenium at concentrations exceeding Part 201 Soil GSI Protection Criteria. The contaminants in the groundwater on the Property include: cyanide and lead at concentrations above Part 201 Residential Drinking Water Criteria; and carbazole, cyanide, lead, mercury, 2-methylnaphthalene, naphthalene**,** selenium, silver, 2,4-trimethylbenzene, and xylenes at concentrations exceeding Part 201 GSI Criteria. The Property has been impacted by a groundwater contamination plume; therefore, the TCPBPA property does meet the definition of a facility under Part 201.

The contaminants in the subsurface soils on the TCPBPA property include: cyanide at concentrations of 240 ppm in SB-11, which exceeds the Part 201 Soil Residential Direct Contact Criteria. SB-11 was collected from the west side of Hall Street, south of the intersection of Hall and Grandview Parkway, at the same location as VAS-01. Groundwater sample results for VAS-01 (12-16 feet) detected cyanide at a concentration of 1,800 ppb. It should be noted that all the soil boring samples collected along Garland Street, SB-01 through SB-08, were not analyzed for cyanide.

The contaminants in the groundwater on the Property include: cyanide and lead at concentrations above Part 201 Residential Drinking Water Criteria. Cyanide was detected in TMW-04 at a concentration of 3,500 ppb, VAS-01 (16-20) at a concentration of 360 ppb, VAS-01 (12-16) at a concentration of 1,900 ppb, VAS-02 (12-16) at a concentration of 1,800 ppb, and VAS-02 (12-16) DUP at a concentration of 1,800 ppb, and VAS-03 (12-16) at a concentration of 960 ppb. All the VAS samples were collected along the west side of Hall Street, south of Grandview Parkway; and TMW-04 was collected near the intersection of Hall and Garland Streets. Lead was detected in TMW-09 at a concentration of 160 ppb. TMW-09 was collected near the Boardman River, on the north side of the river, south of Garland Street and east of Hall Street, just east of the fish weir/ladder.

There are several monitoring wells present in the area of the TCPBPA property, but access to the wells was not granted. Groundwater is likely migrating north toward Grand Traverse Bay, but due to the construction activities at the Hotel Indigo project that involve the de-watering of the parcel, groundwater flow could not be determined from the groundwater elevation data collected during the BFRA of the property. Grand Traverse Bay is located just north of Grandview Parkway and north of the TCPBPA property.

The Boardman River is located south of Garland Street, east of Hall Street, and flows into Grand Traverse Bay. Grand Traverse Bay is located just north of Grandview Parkway along the shore of Lake Michigan. Traverse City obtains its drinking water from a surface water intake located in Lake Michigan.

Based on the findings of the BFRA investigation, the following issues should be addressed before or during the redevelopment of the TCPBPA property:

- Action should be taken to abate the potential threat caused by the presence of contaminants of concern exceeding Part 201 Residential Cleanup Criteria in the soils by mitigation of these contaminants or restricting access to the contaminated areas. Cyanide was detected in SB-11 at a concentration which exceeds the Residential Direct Contact Criteria. The full extent of any contamination should be determined and appropriate precautions implemented to prevent exposure during redevelopment.

- Contaminants were detected in the soil samples that exceeded both the Drinking Water Protection Criteria and the GSI Protection Criteria. Future redevelopment activities should be conducted in a manner that will not cause additional or adverse leaching of the contaminants in the soils into the groundwater.

- Cyanide and lead were detected in the groundwater samples at concentrations above Part 201 Residential Drinking Water Criteria. Therefore, the shallow groundwater at the TCPBPA property should not be used for drinking water purposes. Action should be taken to abate the potential threat caused by the presence of contaminants of concern migrating in the groundwater by mitigation of these contaminants. The full extent of any contamination should be determined and appropriate precautions implemented to prevent exposure during redevelopment.

- Contaminants were detected in the groundwater samples that exceeded both the Drinking Water Protection Criteria and the GSI Protection Criteria. Future redevelopment activities should be conducted in a manner that will

not cause additional or adverse leaching of the contaminants of concern in the soils into the groundwater.

- The contaminants of concern should be considered with respect to responsibilities that may exist under Part 201. The nature of any response activity that may be required is dependent on the intended use of the property and the party's liability under Part 201. A person who is liable for the contamination is required to achieve cleanup of the property consistent with the cleanup Criteria. The relevant Criteria are a function of the intended property use, such as residential or nonresidential. A non-liable developer is not required to implement a cleanup to achieve the appropriate cleanup Criteria. However, a non-liable party must comply with the "due care" obligations specified in Section 7a of Part 201. These obligations include not exacerbating the existing contamination, exercising due care to assure there are not unacceptable exposures, and taking reasonable precautions against the reasonably foreseeable activities of third parties.

- Further information concerning Part 201 cleanup criteria, due care provisions, and remedial and/or removal activities may be obtained from the MDEQ, RRD, Cadillac District Office at 231-775-1511.

BIBLIOGRAPHY

1. Inland Seas Engineering, Inc., Baseline Environmental Assessment, 263, 235, & 223 West Grandview Parkway, City of Traverse City, Grand Traverse County, Michigan, April 20, 2012.

2. Inland Seas Engineering, Inc., Phase I Environmental Site Assessment, 263, 235, & 223 West Grandview Parkway, City of Traverse City, Grand Traverse County, Michigan, April 20, 2012.

3. Inland Seas Engineering, Inc., Phase II Environmental Site Assessment, 263, 235, & 223 West Grandview Parkway, City of Traverse City, Grand Traverse County, Michigan, July 9, 2012.

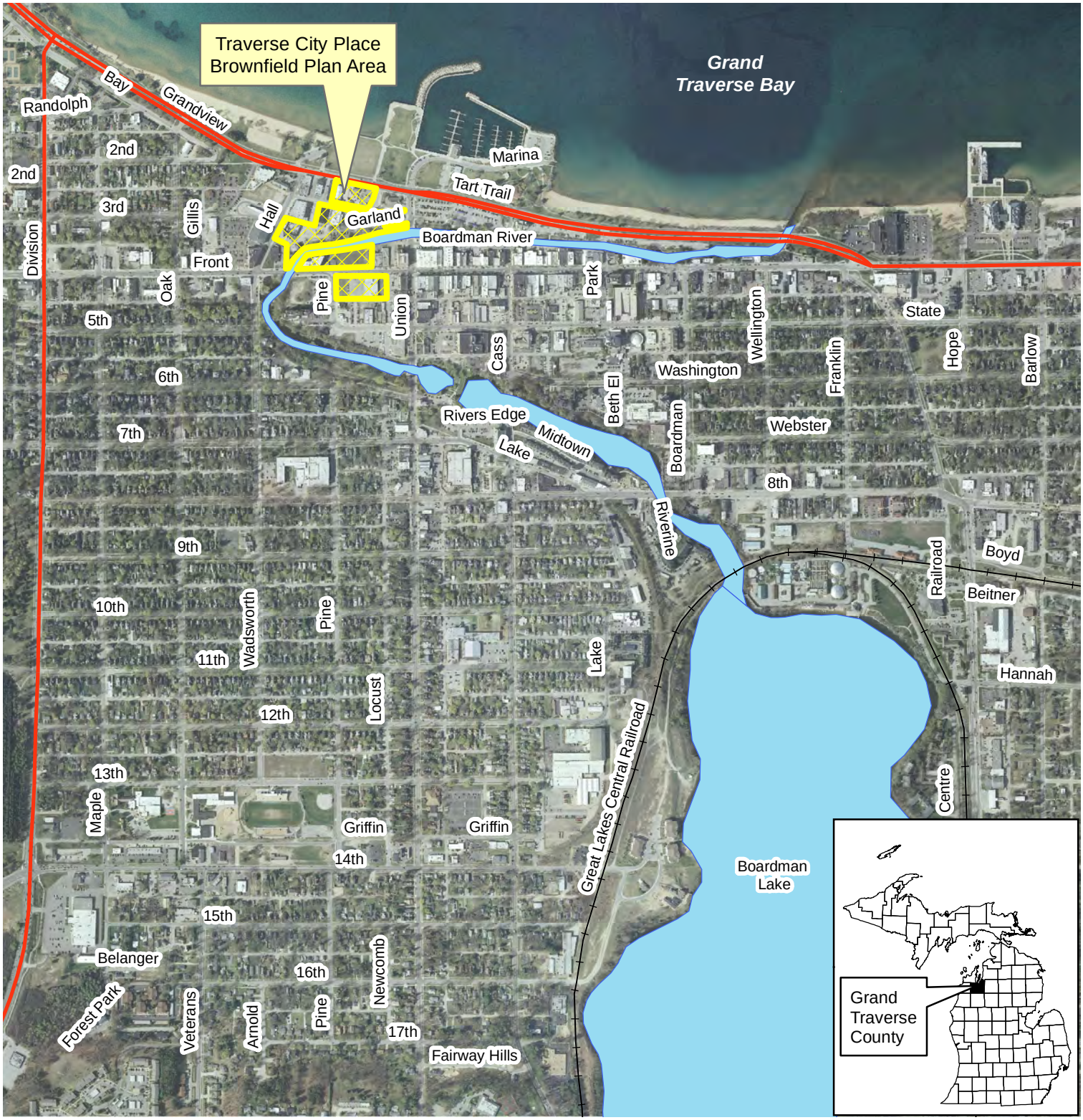
4. Inland Seas Engineering, Inc., Phase II Environmental Site Assessment, 263, 235, & 223 West Grandview Parkway, City of Traverse City, Grand Traverse County, Michigan, November 29, 2010.

5. Michigan Department of Environmental Quality (MDEQ), Quality Assurance Project Plan for Region 5 Superfund Site Assessment and Brownfield Activities in Michigan, January 16, 2003.

6. MDEQ, Remediation and Redevelopment Division, Superfund Section, Site File for Traverse City Place Brownfield Plan Area, May, 2013.

Figures

FIGURE 1
PROPERTY LOCATION



0 750 1,500 3,000 Feet

N
W E
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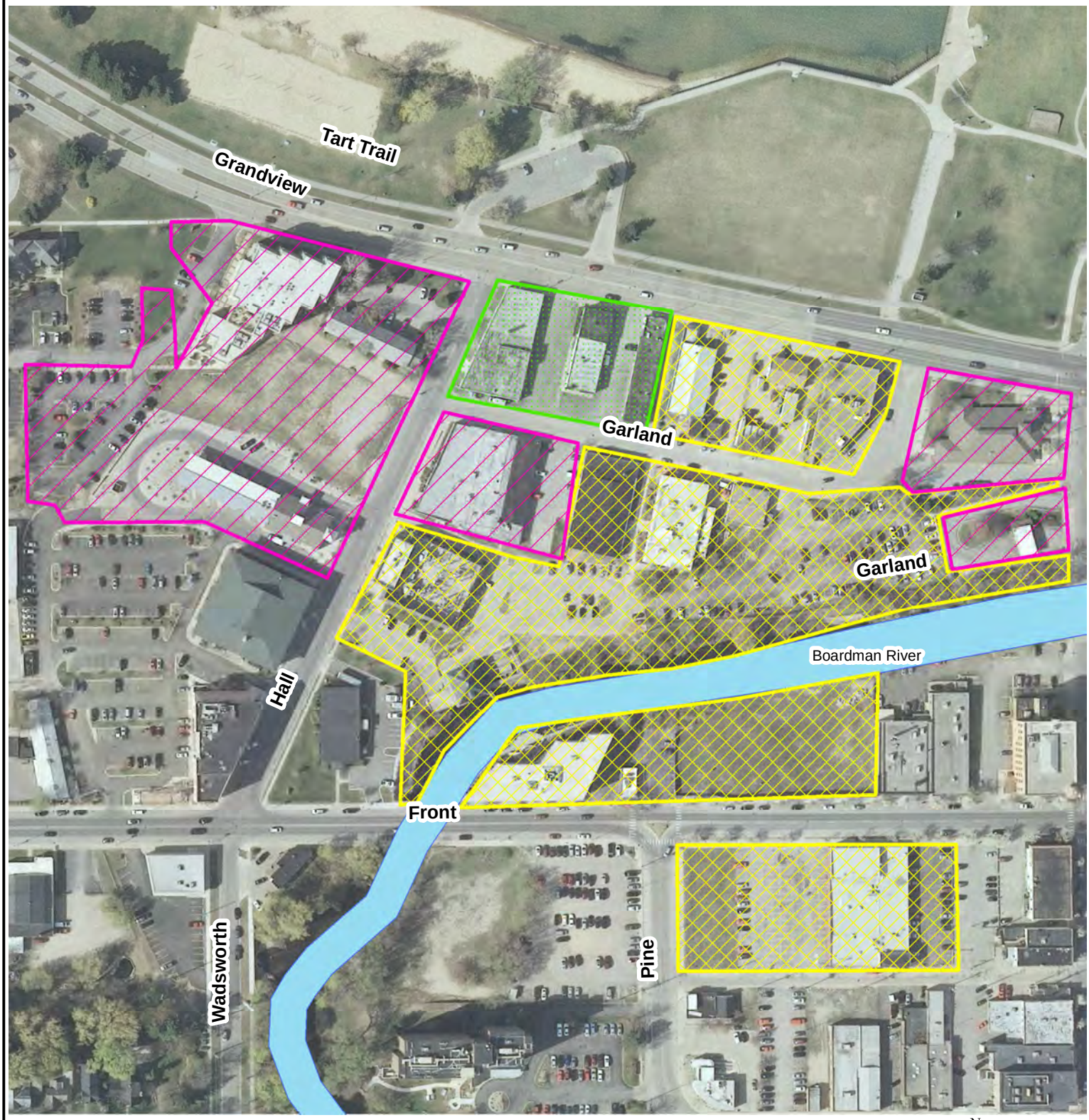
Traverse City Place Brownfield Plan Area
Grandview Parkway and Hall Street
Traverse City, MI 49684
T27N, R11W, Section 3
Garfield Township
Grand Traverse County
MIB000000180

Directions to Property:
From Lansing take U.S. 127 north to Clare;
Then take U.S 10 east to M-115 and
Go northwest to M-37/U.S. 31 and turn right;
Go north to Traverse City; Turn right on West
Grandview Parkway (M-22/M-37);
Go east/south to property at southeast corner
of Grandview Parkway and Hall Street.

Compiled by: Leni Steiner-Zehender
May 2013
Projected Coordinate System:
Michigan GeoRef, NAD-83, meters
Sources: Michigan Geographic
Data Llibrary and MSU 2010 Aerial

FIGURE 2A
PROPERTY FEATURES - CURRENT



0 100 200 400 Feet

Traverse City Place Brownfield Plan Area
Grandview Parkway and Hall Street
Traverse City, MI 49684
T27N, R11W, Section 3
Garfield Township
Grand Traverse County
MIB000000180

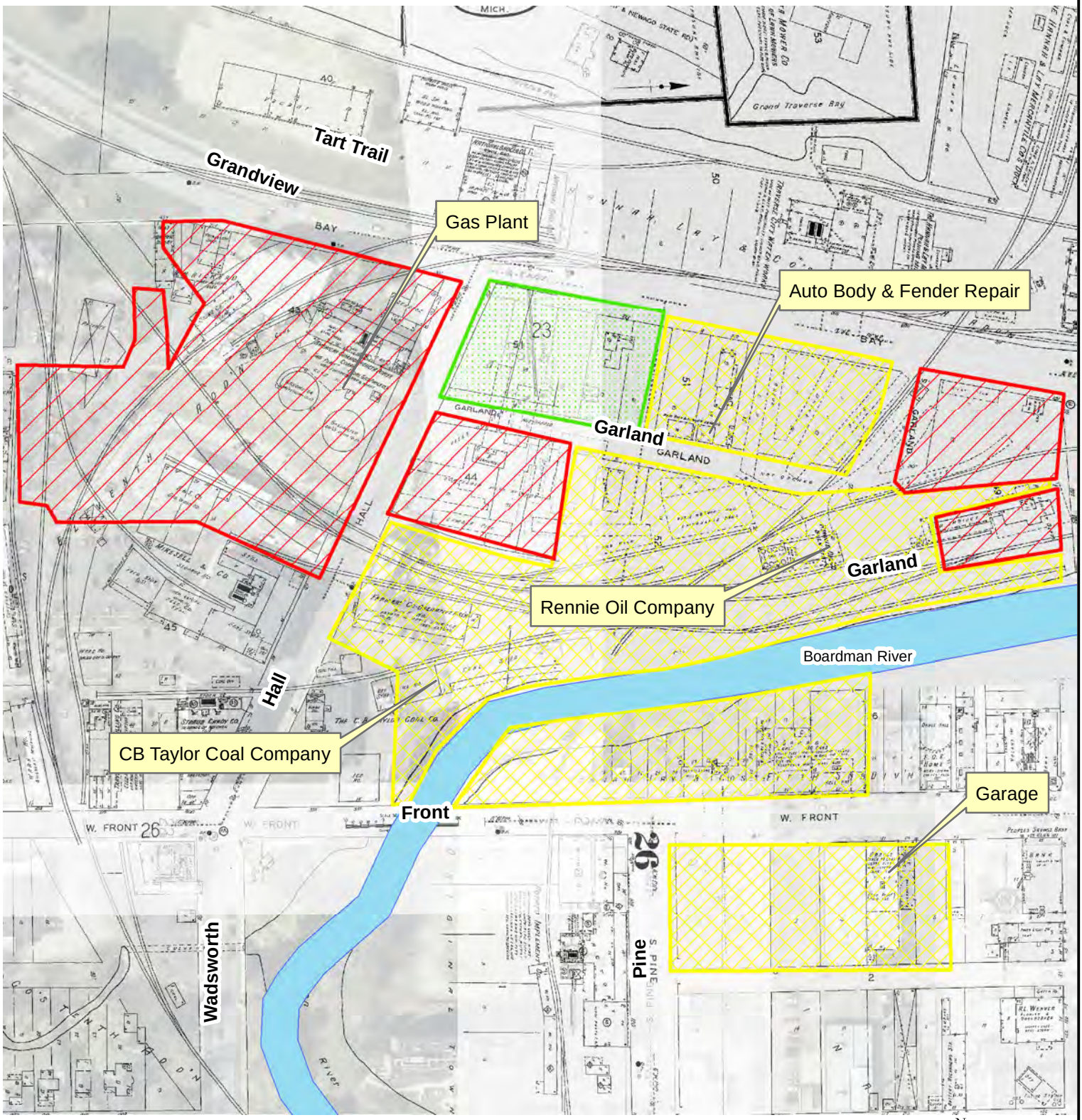
Legend

- Hotel Indigo Site
- Other Possibly Impacted Properties
- Property Boundary

N W E S

Compiled by: Leni Steiner-Zehender
May 2013
Projected Coordinate System:
Michigan GeoRef, NAD-83, meters
Sources: Michigan Geographic
Data Llibrary, MSU 2010 Aerial
and 1929 Sanborn Maps.

FIGURE 2B
PROPERTY FEATURES - HISTORICAL



Feet

0 100 200 400

Traverse City Place Brownfield Plan Area
Grandview Parkway and Hall Street
Traverse City, MI 49684
T27N, R11W, Section 3
Garfield Township
Grand Traverse County
MIB000000180

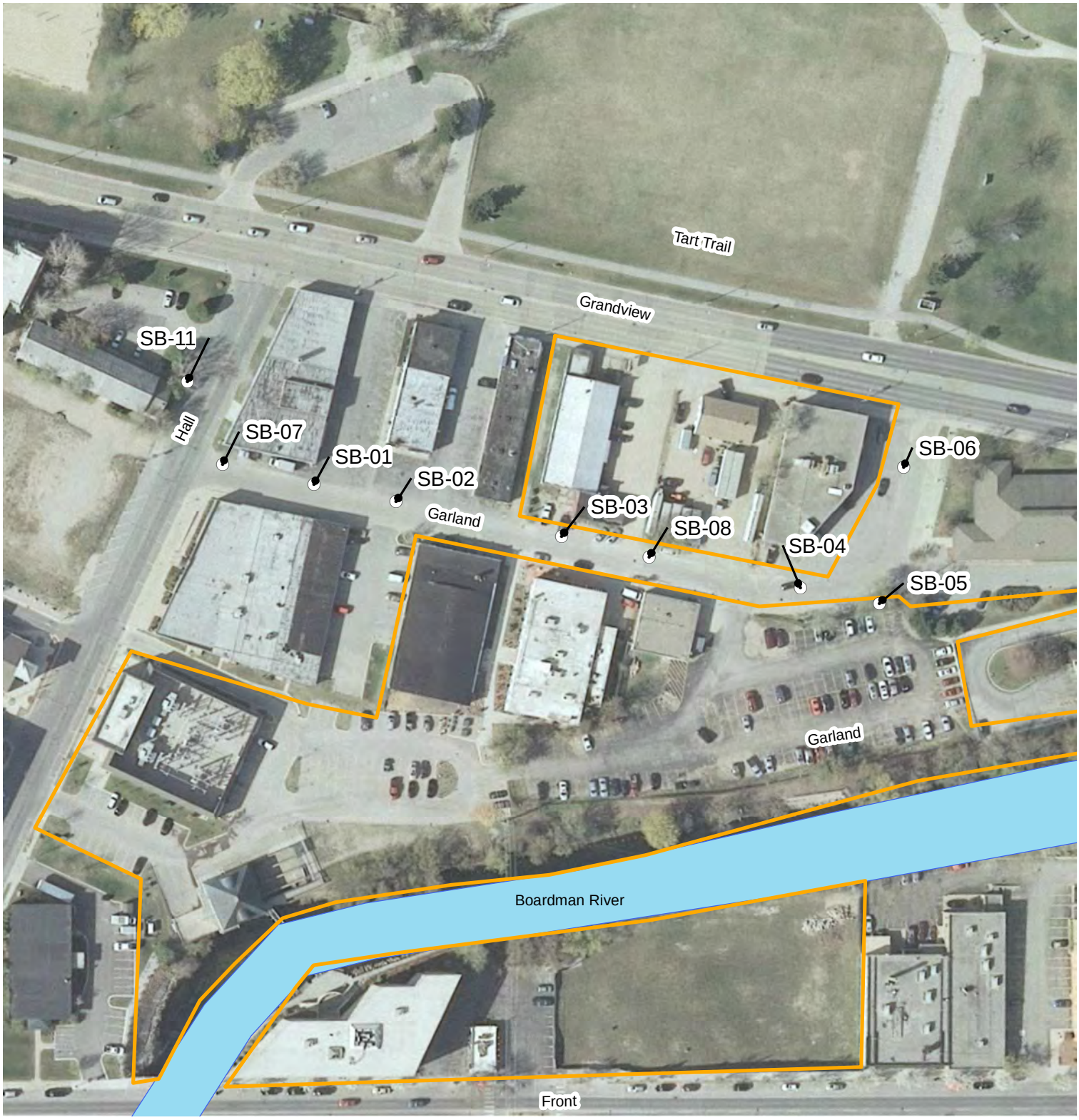
Legend

- Hotel Indigo Site
- Other Possibly Impacted Properties
- Property Boundary

N W E S

Compiled by: Leni Steiner-Zehender
May 2013
Projected Coordinate System:
Michigan GeoRef, NAD-83, meters
Sources: Michigan Geographic
Data Llibrary, MSU 2010 Aerial
and 1929 Sanborn Maps.

FIGURE 3
SOIL BORING SAMPLE LOCATIONS



0 75 150 300 Feet

N W E S

Traverse City Place Brownfield Plan Area
Grandview Parkway and Hall Street
Traverse City, MI 49684
T27N, R11W, Section 3
Garfield Township
Grand Traverse County
MIB000000180

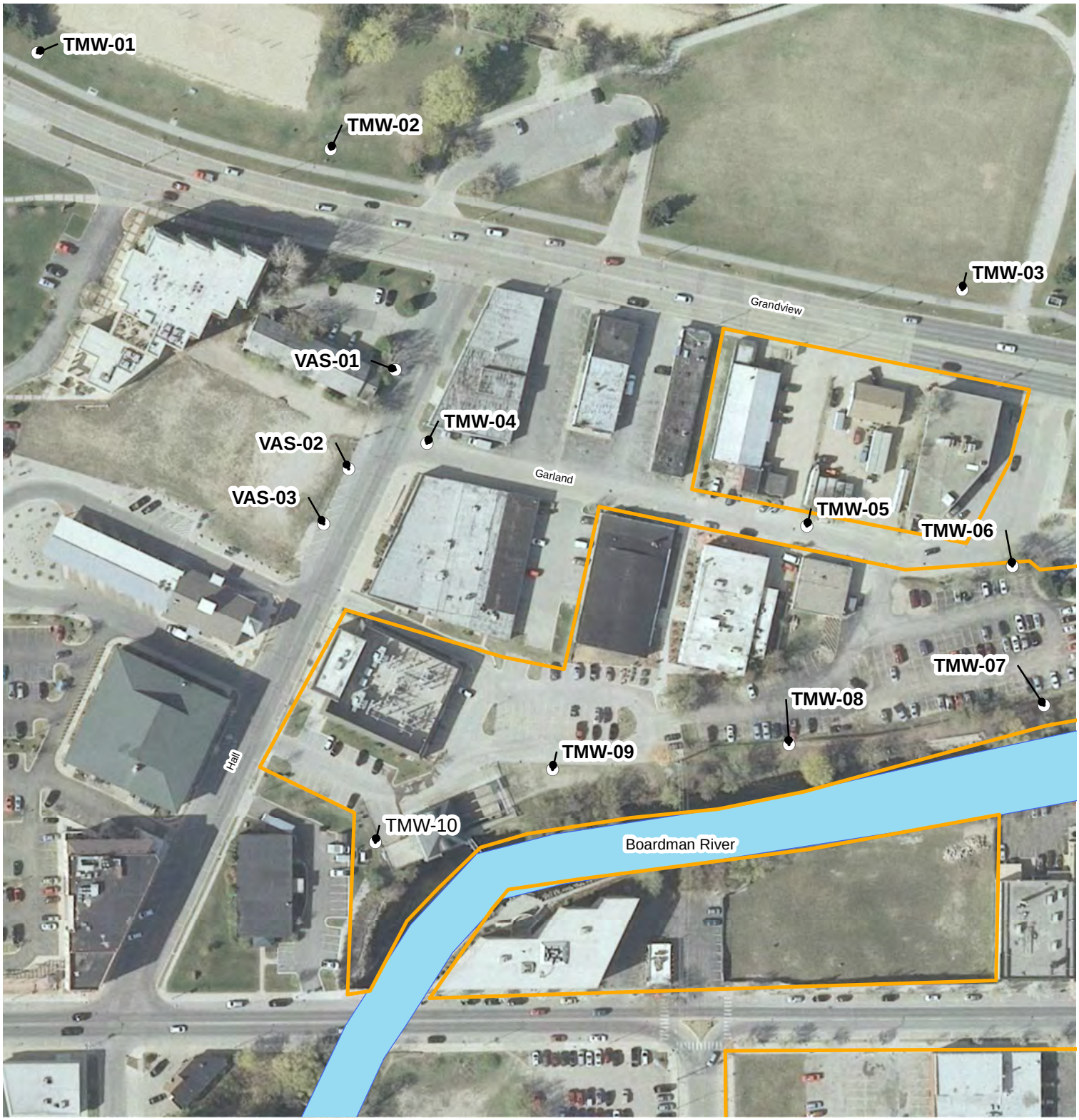
Legend

⊙ SB-01 - Soil Boring 01

- Property Boundary

Compiled by: Teresa Ducsay
July 2013
Projected Coordinate System:
Michigan GeoRef, NAD-83, meters
Sources: Michigan Geographic
Data Llibrary, MSU 2010 Aerial, and
Global Positioning System Data

FIGURE 4
TEMPORARY MONITORING WELL AND VERTICAL AQUIFER SAMPLE LOCATIONS



Feet
0 75 150 300

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Traverse City Place Brownfield Plan Area
Grandview Parkway and Hall Street
Traverse City, MI 49684
T27N, R11W, Section 3
Garfield Township
Grand Traverse County
MIB000000180

Legend

- TMW-01 - Temporary Monitoring Well 01
- VAS-01 - Vertical Aquifer Sample 01
- Property Boundary

Compiled by: Teresa Ducsay
July 2013
Projected Coordinate System:
Michigan GeoRef, NAD-83, meters
Sources: Michigan Geographic Data Llibrary, MSU 2010 Aerial, and Global Positioning System Data

FIGURE 5
PUSH-POINT SURVEY LOCATIONS

0 125 250 500 Feet

N W E S

Legend

⊙ PP-01 - Push-Point 01

- Property Boundary

Traverse City Place Brownfield Plan Area
Grandview Parkway and Hall Street
Traverse City, MI 49684
T27N, R11W, Section 3
Garfield Township
Grand Traverse County
MIB000000180

Compiled by: Teresa Ducsay
June 2013
Projected Coordinate System:
Michigan GeoRef, NAD-83, meters
Sources: Michigan Geographic
Data Llibrary, MSU 2010 Aerial and
Global Positioning System Data

Tables

TABLE 1

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE	LOCATION COORDINATES		CORE INTERVAL	RECOVERY	UNIT THICKNESS	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS
	Northing	Easting					
SB-01 (1-2) (9-10)	468284.1	529369.6	0-4 ft.	30 in.	0-4 in. 4-30 in.	Concrete. Moist, light brown, medium sand. PID = 0.0	Two grab samples. Volatile Organic Analysis (VOA) portion of sample SB-01 (1-2) collected at18 in. of 0-4 ft. core and remaining sample portion taken from 12-24 in. of 0-4 ft. core. VOA portion of sample SB-01 (9-10) collected at 18 in. of 8-11.5 ft. core and remaining sample portion taken from 12-24 in. of 8-11.5 ft. core. Additional sample collected from 1-8 ft. for the toxicity characteristic leaching procedure (TCLP).
			4-8 ft.	41 in.	0-41 in.	Moist, light brown, medium sand. PID = 0.0	
			8-11.5 ft.	46 in.	0-30 in. 30-40 in. 40-46 in.	Moist, light brown, medium sand. Wet, light brown, medium sand. Saturated, light brown, medium sand. PID =0.0	

TABLE 1

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE	LOCATION COORDINATES		CORE INTERVAL	RECOVERY	UNIT THICKNESS	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS
	Northing	Easting					
SB-02/ SB-02 DUP (1-2) (7-8)	468279.5	529391.9	0-4 ft.	30 in.	0-4 in. 4-30 in.	Concrete. Moist, light brown, medium sand. PID =0.0	Two grab samples. VOA portion of sample SB-02 (1-2) collected at 18 in. of 0-4 ft. core and remaining sample portion collected from 12-24 in. of 0-4 ft. core. VOA portion of sample SB-02 (7-8) collected at 6 in. of 8-11 ft. core and remaining sample portion collected from 0-12 in. of 8-11 ft. core. Duplicate sample collected from SB-02 (1-2).
			4-8 ft.	44 in.	0-44 in.	Moist, light brown, medium sand. PID =0.0	
			8-11 ft.	27 in.	0-12 in. 12-20 in. 22-27 in.	Moist, light brown, medium sand. Wet, light brown, medium sand. Saturated, light brown, medium sand. PID =0.0	

TABLE 1

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE	LOCATION COORDINATES		CORE INTERVAL	RECOVERY	UNIT THICKNESS	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS
	Northing	Easting					
SB-03 (1-2) (7-8)	468270.0	529437.0	0-4 ft.	48 in.	0-4 in. 4-48 in.	Concrete. Moist, light brown, medium sand. PID = 0.0	Two grab samples. VOA portion of sample SB-03 (1-2) collected at 20 in. of 0-4 ft. core and remaining sample portion collected from 12-24 in. of 0-4 ft. core. VOA portion of sample SB-03 (7-8) collected at 42 in. of 4-8 ft. core and remaining sample portion collected from 36-48 in. of 4-8 ft. core. Note: Hand auger to a depth of 5.5 ft. due to proximity to underground utilities.
			4-8 ft.	48 in.	0-48 in.	Moist, light brown, medium sand. PID = 0.0	
			8-11 ft.	48 in.	0-6 in. 6-24 in. 24-48 in.	Moist, light brown, medium sand. Wet, light brown, medium sand. Saturated, light brown, medium sand. PID =0.0	

TABLE 1

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE	LOCATION COORDINATES		CORE INTERVAL	RECOVERY	UNIT THICKNESS	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS
	Northing	Easting					
SB-04 (1-2) (8-9)	468256.0	529502.1	0-4 ft.	28 in.	0-4 in. 4-28 in.	Concrete. Moist, light brown, medium sand. PID = 0.0	Two grab samples. VOA portion of sample SB-04 (1-2) collected at 18 in. of 0-4 ft. core and remaining sample portion collected from 12-24 in. of 0-4 ft. core. VOA portion of sample SB-04 (8-9) collected at 6 in. of 8-11 ft. core and remaining sample portion collected from 0-12 in. of 8-11 ft. core.
			4-8 ft.	43 in.	0-43 in.	Moist, light brown, medium sand, trace gravel. PID = 0.0	
			8-11 ft.	42 in.	0-12 in. 12-24 in. 24-42 in.	Moist, light brown, medium sand. Wet, light brown, medium sand. Saturated, light brown, medium sand. PID =0.0	

TABLE 1

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE	LOCATION COORDINATES		CORE INTERVAL	RECOVERY	UNIT THICKNESS	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS
	Northing	Easting					
SB-05 (1-2) (7-8)	468251.8	529523.6	0-4 ft.	30 in.	0-8 in. 8-24 in. 24-30 in.	Moist, dark brown, fine sand with roots. Moist, dark brown, medium sand. Moist, light brown, medium sand. PID = 0.0	Two grab samples. VOA portion of sample SB-05 (1-2) collected at 20 in. of 0-4 ft. core and remaining sample portion collected from 12-24 in. of 0-4 ft. core. VOA portion of sample SB-05 (7-8) collected at 10 in. of 8-11 ft. core and remaining sample portion collected from 8-20 in. of 7-11 ft. core. Corresponding well, TMW-06.
			4-7 ft.	38 in.	0-12 in. 12-38 in.	Slough. Moist, light brown, medium sand. PID = 0.0	
			7-11 ft.	35 in.	0-20 in. 20-23 in. 23-35 in.	Moist, light brown, medium sand. Wet, light brown, medium sand. Saturated, light brown, medium sand. PID =0.0	

TABLE 1

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE	LOCATION COORDINATES		CORE INTERVAL	RECOVERY	UNIT THICKNESS	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS
	Northing	Easting					
SB-06 (1-2) (8-9)	468288.7	529530.2	0-4 ft.	29 in.	0-4 in. 4-12 in. 12-27 in. 27-29 in.	Concrete. Moist, dark brown, medium sand, trace fill. Moist, dark brown, medium sand. Moist, light brown, medium sand. PID = 0.0	Two grab samples. VOA portion of sample SB-06 (1-2) collected at 20 in. of 0-4 ft. core and remaining sample portion collected from 12-24 in. of 0-4 ft. core. VOA portion of sample SB-06 (8-9) collected at 6 in. of 8-11.5 ft. core and remaining sample portion collected from 0-12 in. of 8-11.5 ft. core.
			4-8 ft.	48 in.	0-12 in. 12-48 in.	Slough. Moist, light brown, medium sand. PID = 0.0	
			8-11.5 ft.	41 in.	0-12 in. 12-24 in. 24-41 in.	Moist, light brown, medium sand. Wet, light brown, medium sand. Saturated, light brown, medium sand. PID =0.0	

TABLE 1

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE	LOCATION COORDINATES		CORE INTERVAL	RECOVERY	UNIT THICKNESS	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS
	Northing	Easting					
SB-07 (1-2) (9-10)	468289.6	529344.7	0-4 ft.	48 in.	0-4 in. 4-48 in.	Concrete. Moist, light brown, medium sand. PID = 0.0	Two grab samples. VOA portion of sample SB-07 (1-2) collected at 18 in. of 0-4 ft. core and remaining sample portion collected from 12-24 in. of 0-4 ft. core. VOA portion of sample SB-07 (9-10) collected at 28 in. of 8-12 ft. core and remaining sample portion collected from 22-34 in. of 8-12 ft. core. Corresponding well, TMW-04.
			4-8 ft.	29 in.	0-29 in.	Moist, light brown, medium sand. PID = 0.0	
			8-12 ft.	48 in.	0-34 in. 34-36 in. 36-48 in.	Moist, light brown, medium sand. Wet, light brown, medium sand. Saturated, light brown, medium sand. PID =0.0	

TABLE 1

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE	LOCATION COORDINATES		CORE INTERVAL	RECOVERY	UNIT THICKNESS	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS
	Northing	Easting					
SB-08 (1-2) (6.5-7.5)	468264.3	529460.9	0-4 ft.	48 in.	0-4 in. 4-12 in. 12-48 in.	Concrete. Moist, dark brown, medium sand. Moist, light brown, medium sand. PID = 0.0	Two grab samples. VOA portion of sample SB-08 (1-2) collected at 20 in. of 0-4 ft. core and remaining sample portion collected from 12-24 in. of 0-4 ft. core. VOA portion of sample SB-08 (6.5-7.5) collected at 30 in. of 4-8 ft. core and remaining sample portion collected from 24-36 in. of 4-8 ft. core. Corresponding well, TMW-05. Note: Hand auger to a depth of 5.5 ft. due to proximity to underground utilities.
			4-8 ft.	41 in.	0-36 in. 36-41 in.	Moist, light brown, medium sand. Wet, light brown, medium sand. PID = 0.0	
			8-11.5 ft.	39 in.	0-39 in.	Saturated, light brown, medium sand. PID = 0.0	

TABLE 1

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE	LOCATION COORDINATES		CORE INTERVAL	RECOVERY	UNIT THICKNESS	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS
	Northing	Easting					
SB-09	468190.0	529383.0	0-4 ft.	31 in.	0-6 in. 6-17 in. 17-31 in.	Moist, dark brown, medium sand with roots. Moist, dark brown, medium sand. Moist, dark brown, medium sand with rocks, pebble size. PID = 0.0	No soil sample collected. Corresponding well, TMW-09. Geoprobe rod and screen were utilized for the well due to collapsing borehole material, which did not allow for PVC well casing installation
			4-6.5 ft.	24 in.	0-24 in.	Moist, dark brown, medium sand. PID = 0.0	
			6.5-8 ft.	18 in.	0-14 in. 14-18 in.	Moist, dark brown, medium sand. Saturated, dark brown, medium sand. PID = 0.0	

TABLE 1

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE	LOCATION COORDINATES		CORE INTERVAL	RECOVERY	UNIT THICKNESS	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS
	Northing	Easting					
SB-10	468167.5	529328.9	0-4 ft.	42 in.	0-23 in. 23-32 in. 32-36 in. 36-42 in.	Dry to slightly moist, light grayish-brown, silty, fine sand with trace gravel and coarse sand. Moist, brown to blackish-brown, fine to medium sand with some silt and trace gravel. Moist, black, silty, fine to medium sand with trace coarse sand. Moist, brown, medium sand with trace coarse sand. PID = 0.0	No soil sample collected. Corresponding well, TMW-10.
			4-7 ft.	45 in.	0-14 in. 14-32 in. 32-45 in.	Slough. Moist, brown, medium sand with trace coarse sand. Moist to very moist, grayish-brown, medium sand with trace coarse sand. PID = 0.0	
			5.5-9 ft.	44 in.	0-19 in. 19-24 in. 24-31 in. 31-35 in. 35-44 in.	Slough. Very moist, grayish-brown, medium sand with trace coarse sand. Wet, grayish-brown, medium sand with trace coarse sand and shell fragments. Wet, blackish-gray, medium sand. Wet, gray, medium sand with some black streaking. PID = 0.0	

TABLE 1

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE	LOCATION COORDINATES		CORE INTERVAL	RECOVERY	UNIT THICKNESS	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS
	Northing	Easting					
SB-11	468312.0	529335.0	Road Material	N/A	0-2 in. 2-10 in.	Asphalt. Concrete.	Deep grab sample.
			0-4 ft.	32 in.	0-6 in. 6-12 in. 12-32 in.	Moist, black, silty, fine sand with trace gravel and ½ inch seam of bluish waste material. PID =1.7 Moist, grayish-brown, fine sand with trace silt. PID= 0.0 Moist, tan to light brown, fine sand with trace silt. PID = 0.0	SB-11 analyzed for metals and cyanide only; collected from 10-16 in. of 0-4 ft. core. Corresponding well, VAS-01.
			4-8 ft.	43 in.	0-12 in. 12-43 in.	Slough. Light brown, fine sand with trace silt and occasional brown or greenish-brown fine lenses at 33-43 inches. PID = 0.0	

TABLE 1

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE	LOCATION COORDINATES		CORE INTERVAL	RECOVERY	UNIT THICKNESS	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS
	Northing	Easting					
SB-12	471395.8	528477.7	Road Material	N/A	0-2 in. 2-10 in.	Asphalt. Concrete.	No soil sample collected.
			0-4 ft.	30 in.	0-4 in. 4-30 in.	Moist, black streaked, brown, silty, fine to medium sand with trace gravel. Moist, brown, fine to medium sand with occasional tan and orange-brown lenses. PID = 0.0	Corresponding well, VAS-02.
			4-8 ft.	46 in.	0-6 in. 6-11 in. 11-46 in.	Slough. Moist, brown, fine to medium sand with occasional tan and orange-brown lenses. Moist, brown, medium sand with occasional tan/orange-brown/blackish-brown lenses. PID = 0.0	

TABLE 1

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE	LOCATION COORDINATES		CORE INTERVAL	RECOVERY	UNIT THICKNESS	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS
	Northing	Easting					
SB-13	468264.9	529313.0	Road Material	N/A	0-6 in.	Asphalt.	No soil sample collected. Corresponding well, VAS-03.
			0-4 ft.	36 in.	0-6 in. 12-36 in.	Dry, grayish-brown, fine to medium sand with trace silt and occasional black streaking. Dry to moist, brown, fine to medium sand with trace silt and occasional dark brown lenses. PID = 0.0	
			4-6 ft.	48 in.	0-8 in. 8-32 in. 32-48 in.	Slough. Dry to moist, brown, fine to medium sand with trace silt and occasional dark brown lenses. Moist, tan, medium sand with occasional brown lenses PID = 0.0	

Location Coordinates: Michigan GeoRef, North American Datum 1983, Meters
*PID reading units are parts per million (ppm)

TABLE 2
SOIL BORING SAMPLE DATA SUMMARY

					Groundwater Protection						Direct Contact	
Sample Number	**Hazardous Substance (Footnotes)**	**Sample Concentration**	**Qualifiers**	**Statewide Default Background Levels**	**Residential Drinking Water Protection Criteria**	**Footnotes**	**Nonresidential Drinking Water Protection Criteria**	**Footnotes**	**Groundwater Surface Water Interface Protection Criteria**	**Footnotes**	**Residential Direct Contact Criteria**	**Footnotes**
SB-01 1-2'	***VOLATILES***											
	No volatile organic compounds detected.											
	SEMI-VOLATILES											
	No semi-volatile organic compounds detected.											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Arsenic	0.57		5.8	4.6		4.6		4.6		7.6	
	Barium (B)	2.1		75	1,300		1,300		290,000	G	37,000	
	Zinc (B)	2.3		47	2,400		5,000		120,000	G	170,000	
SB-01 9-10'	***VOLATILES***											
	No volatile organic compounds detected.											
	SEMI-VOLATILES											
	No semi-volatile organic compounds detected.											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Arsenic	0.42		5.8	4.6		4.6		4.6		7.6	
	Barium (B)	2.6		75	1,300		1,300		290,000	G	37,000	
	Zinc (B)	1.5		47	2,400		5,000		120,000	G	170,000	

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TABLE 2
SOIL BORING SAMPLE DATA SUMMARY

					Groundwater Protection						Direct Contact	
Sample Number	**Hazardous Substance (Footnotes)**	**Sample Concentration**	**Qualifiers**	**Statewide Default Background Levels**	**Residential Drinking Water Protection Criteria**	**Footnotes**	**Nonresidential Drinking Water Protection Criteria**	**Footnotes**	**Groundwater Surface Water Interface Protection Criteria**	**Footnotes**	**Residential Direct Contact Criteria**	**Footnotes**
SB-02 1-2'	***VOLATILES***											
	No volatile organic compounds detected.											
	SEMI-VOLATILES											
	No semi-volatile organic compounds detected.											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Arsenic	0.48		5.8	4.6		4.6		4.6		7.6	
	Barium (B)	3.6		75	1,300		1,300		290,000	G	37,000	
	Zinc (B)	1.1		47	2,400		5,000		120,000	G	170,000	
SB-02 8-9'	***VOLATILES***											
	No volatile organic compounds detected.											
	SEMI-VOLATILES											
	No semi-volatile organic compounds detected.											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Arsenic	0.92		5.8	4.6		4.6		4.6		7.6	
	Barium (B)	14		75	1,300		1,300		290,000	G	37,000	
	Chromium [III] (B,H)	4.0		18	1,000,000	D	1,000,000	D	2,100,000,000	G,X	790,000	
	Copper (B)	1.3		32	5,800		5,800		52,000	G	20,000	
	Lead (B)	3.0		21	700		700		1,800,000	G,X	400	
	Zinc (B)	5.3		47	2,400		5,000		120,000	G	170,000	

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TABLE 2
SOIL BORING SAMPLE DATA SUMMARY

					Groundwater Protection						Direct Contact	
Sample Number	**Hazardous Substance (Footnotes)**	**Sample Concentration**	**Qualifiers**	**Statewide Default Background Levels**	**Residential Drinking Water Protection Criteria**	**Footnotes**	**Nonresidential Drinking Water Protection Criteria**	**Footnotes**	**Groundwater Surface Water Interface Protection Criteria**	**Footnotes**	**Residential Direct Contact Criteria**	**Footnotes**
SB-02 Dup-01	***VOLATILES***											
	No volatile organic compounds detected.											
	SEMI-VOLATILES											
	No semi-volatile organic compounds detected.											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Arsenic	0.52		5.8	4.6		4.6		4.6		7.6	
	Barium (B)	3.8		75	1,300		1,300		290,000	G	37,000	
SB-03 1-2'	***VOLATILES***											
	No volatile organic compounds detected.											
	SEMI-VOLATILES											
	No semi-volatile organic compounds detected.											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Arsenic	0.42		5.8	4.6		4.6		4.6		7.6	
	Barium (B)	6.1		75	1,300		1,300		290,000	G	37,000	
SB-03 7-8'	***VOLATILES***											
	No volatile organic compounds detected.											
	SEMI-VOLATILES											
	No semi-volatile organic compounds detected.											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Arsenic	0.80		5.8	4.6		4.6		4.6		7.6	
	Barium (B)	2.4		75	1,300		1,300		290,000	G	37,000	
	Zinc (B)	1.8		47	2,400		5,000		120,000	G	170,000	

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TABLE 2
SOIL BORING SAMPLE DATA SUMMARY

					Groundwater Protection						Direct Contact	
Sample Number	**Hazardous Substance (Footnotes)**	**Sample Concentration**	**Qualifiers**	**Statewide Default Background Levels**	**Residential Drinking Water Protection Criteria**	**Footnotes**	**Nonresidential Drinking Water Protection Criteria**	**Footnotes**	**Groundwater Surface Water Interface Protection Criteria**	**Footnotes**	**Residential Direct Contact Criteria**	**Footnotes**
SB-04 1-2'	***VOLATILES***											
	No volatile organic compounds detected.											
	SEMI-VOLATILES											
	No semi-volatile organic compounds detected.											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Arsenic	0.49		5.8	4.6		4.6		4.6		7.6	
	Barium (B)	1.7		75	1,300		1,300		290,000	G	37,000	
	Zinc (B)	1.2		47	2,400		5,000		120,000	G	170,000	
SB-04 8-9'	***VOLATILES***											
	No volatile organic compounds detected.											
	SEMI-VOLATILES											
	No semi-volatile organic compounds detected.											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Arsenic	0.46		5.8	4.6		4.6		4.6		7.6	
	Barium (B)	2.6		75	1,300		1,300		290,000	G	37,000	
	Chromium [III] (B,H)	3.3		18	1,000,000	D	1,000,000	D	2,100,000,000	G,X	790,000	
	Zinc (B)	2.0		47	2,400		5,000		120,000	G	170,000	

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TABLE 2
SOIL BORING SAMPLE DATA SUMMARY

					Groundwater Protection						Direct Contact	
Sample Number	**Hazardous Substance (Footnotes)**	**Sample Concentration**	**Qualifiers**	**Statewide Default Background Levels**	**Residential Drinking Water Protection Criteria**	**Footnotes**	**Nonresidential Drinking Water Protection Criteria**	**Footnotes**	**Groundwater Surface Water Interface Protection Criteria**	**Footnotes**	**Residential Direct Contact Criteria**	**Footnotes**
SB-05 1-2'	***VOLATILES***	*(µg/kg)*		*(µg/kg)*	*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*	
	No volatile organic compounds detected.											
	SEMI-VOLATILES	*(µg/kg)*		*(µg/kg)*	*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*	
	Fluoranthene	350			730,000		730,000		5,500		46,000,000	
	2-Methylnaphthalene	350			57,000		170,000		4,200		8,100,000	
	Naphthalene	330			35,000		100,000		730		16,000,000	
	Phenanthrene	360			56,000		160,000		2,100		1,600,000	
	Pyrene	340			480,000		480,000		ID		29,000,000	
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Arsenic	4.1		5.8	4.6		4.6		4.6		7.6	
	Barium (B)	33		75	1,300		1,300		290,000	G	37,000	
	Cadmium (B)	0.36		1.2	6.0		6.0		2,600	G,X	550	
	Chromium [III] (B,H)	3.1		18	1,000,000	D	1,000,000	D	2,100,000,000	G,X	790,000	
	Copper (B)	16		32	5,800		5,800		52,000	G	20,000	
	Lead (B)	88		21	700		700		1,800,000	G,X	400	
	Mercury [Total] (B,Z)	0.12		0.13	1.7		1.7		0.05	M	160	
	Selenium (B)	**0.55**		0.41	4.0		4.0		0.40		2,600	
	Zinc (B)	73		47	2,400		5,000		120,000	G	170,000	
SB-05 7-8'	***VOLATILES***											
	No volatile organic compounds detected.											
	SEMI-VOLATILES											
	No semi-volatile organic compounds detected.											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Arsenic	0.61		5.8	4.6		4.6		4.6		7.6	
	Barium (B)	2.1		75	1,300		1,300		290,000	G	37,000	
	Zinc (B)	1.7		47	2,400		5,000		120,000	G	170,000	

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SOIL BORING SAMPLE DATA SUMMARY

					Groundwater Protection						Direct Contact	
Sample Number	**Hazardous Substance (Footnotes)**	**Sample Concentration**	**Qualifiers**	**Statewide Default Background Levels**	**Residential Drinking Water Protection Criteria**	**Footnotes**	**Nonresidential Drinking Water Protection Criteria**	**Footnotes**	**Groundwater Surface Water Interface Protection Criteria**	**Footnotes**	**Residential Direct Contact Criteria**	**Footnotes**
SB-06 1-2'	***VOLATILES***											
	No volatile organic compounds detected.											
	SEMI-VOLATILES											
	No semi-volatile organic compounds detected.											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Arsenic	0.33		5.8	4.6		4.6		4.6		7.6	
	Barium (B)	29		75	1,300		1,300		290,000	G	37,000	
	Copper (B)	3.3		32	5,800		5,800		52,000	G	20,000	
	Lead (B)	21		21	700		700		1,800,000	G,X	400	
	Mercury [Total] (B,Z)	**0.32**		0.13	1.7		1.7		0.05	M	160	
	Zinc (B)	17		47	2,400		5,000		120,000	G	170,000	
SB-06 8-9'	***VOLATILES***											
	No volatile organic compounds detected.											
	SEMI-VOLATILES											
	No semi-volatile organic compounds detected.											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Arsenic	0.34		5.8	4.6		4.6		4.6		7.6	
	Barium (B)	7.3		75	1,300		1,300		290,000	G	37,000	
	Chromium [III] (B,H)	3.8		18	1,000,000	D	1,000,000	D	2,100,000,000	G,X	790,000	
	Copper (B)	1.5		32	5,800		5,800		52,000	G	20,000	
	Lead (B)	3.5		21	700		700		1,800,000	G,X	400	
	Zinc (B)	3.8		47	2,400		5,000		120,000	G	170,000	

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SOIL BORING SAMPLE DATA SUMMARY

					Groundwater Protection						Direct Contact	
Sample Number	**Hazardous Substance (Footnotes)**	**Sample Concentration**	**Qualifiers**	**Statewide Default Background Levels**	**Residential Drinking Water Protection Criteria**	**Footnotes**	**Nonresidential Drinking Water Protection Criteria**	**Footnotes**	**Groundwater Surface Water Interface Protection Criteria**	**Footnotes**	**Residential Direct Contact Criteria**	**Footnotes**
SB-07 1-2'	***VOLATILES***											
	No volatile organic compounds detected.											
	SEMI-VOLATILES											
	No semi-volatile organic compounds detected.											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Arsenic	0.83		5.8	4.6		4.6		4.6		7.6	
	Barium (B)	6.0		75	1,300		1,300		290,000	G	37,000	
	Lead (B)	1.3		21	700		700		1,800,000	G,X	400	
	Zinc (B)	3.3		47	2,400		5,000		120,000	G	170,000	
SB-07 9-10'	***VOLATILES***											
	No volatile organic compounds detected.											
	SEMI-VOLATILES											
	No semi-volatile organic compounds detected.											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Arsenic	0.87		5.8	4.6		4.6		4.6		7.6	
	Barium (B)	3.9		75	1,300		1,300		290,000	G	37,000	
	Zinc (B)	2.2		47	2,400		5,000		120,000	G	170,000	

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SOIL BORING SAMPLE DATA SUMMARY

					Groundwater Protection						Direct Contact	
Sample Number	**Hazardous Substance (Footnotes)**	**Sample Concentration**	**Qualifiers**	**Statewide Default Background Levels**	**Residential Drinking Water Protection Criteria**	**Footnotes**	**Nonresidential Drinking Water Protection Criteria**	**Footnotes**	**Groundwater Surface Water Interface Protection Criteria**	**Footnotes**	**Residential Direct Contact Criteria**	**Footnotes**
SB-08 1-2'	***VOLATILES***											
	No volatile organic compounds detected.											
	SEMI-VOLATILES											
	No semi-volatile organic compounds detected.											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Arsenic	0.57		5.8	4.6		4.6		4.6		7.6	
	Barium (B)	5.8		75	1,300		1,300		290,000	G	37,000	
	Lead (B)	3.1		21	700		700		1,800,000	G,X	400	
	Zinc (B)	1.8		47	2,400		5,000		120,000	G	170,000	
SB-08 6.8-7.5'	***VOLATILES***											
	No volatile organic compounds detected.											
	SEMI-VOLATILES											
	No semi-volatile organic compounds detected.											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Arsenic	0.56		5.8	4.6		4.6		4.6		7.6	
	Barium (B)	2.5		75	1,300		1,300		290,000	G	37,000	
	Zinc (B)	2.2		47	2,400		5,000		120,000	G	170,000	

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SOIL BORING SAMPLE DATA SUMMARY

					Groundwater Protection						Direct Contact	
Sample Number	**Hazardous Substance (Footnotes)**	**Sample Concentration**	**Qualifiers**	**Statewide Default Background Levels**	**Residential Drinking Water Protection Criteria**	**Footnotes**	**Nonresidential Drinking Water Protection Criteria**	**Footnotes**	**Groundwater Surface Water Interface Protection Criteria**	**Footnotes**	**Residential Direct Contact Criteria**	**Footnotes**
SB-09	***NO SAMPLE COLLECTED***											
SB-10	***NO SAMPLE COLLECTED***											
SB-11	***VOLATILES***											
	No volatile organic compounds detected.											
	SEMI-VOLATILES											
	No semi-volatile organic compounds detected.											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Arsenic	3.7		5.8	4.6		4.6		4.6		7.6	
	Barium (B)	36		75	1,300		1,300		290,000	G	37,000	
	Chromium [III] (B,H)	2.2		18	1,000,000	D	1,000,000	D	2,100,000,000	G,X	790,000	
	Copper (B)	9.3		32	5,800		5,800		52,000	G	20,000	
	Cyanide (P,R)	**240**		0.39	4.0		4.0		0.10		12	
	Lead (B)	49		21	700		700		1,800,000	G,X	400	
	Mercury [Total] (B,Z)	**0.3**		0.13	1.7		1.7		0.05	M	160	
	Selenium (B)	0.3		0.41	4.0		4.0		0.40		2,600	
	Zinc (B)	9.5		47	2,400		5,000		120,000	G	170,000	
SB-12	***NO SAMPLE COLLECTED***											
SB-13	***NO SAMPLE COLLECTED***											

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TABLE 3
GROUNDWATER SAMPLE DESCRIPTIONS

SAMPLE NUMBER	LOCATION COORDINATES		SAMPLE DESCRIPTION	PHYSICAL PARAMETERS	WELL CONSTRUCTION	COMMENTS
	Easting	Northing				
TMW-01	529225.5	468409.1	Clear	Cond = 3886 pH = 7.30 T = 12.0 ORP = -11 TDS = 2847	Screen: 1 in. polyvinyl chloride (PVC), #10 slot, 5 ft. Casing: 1 in. PVC.	CHEMetrics – CN 0.009 ppm
TMW-02 - DUP	529315.2	468379.4	Clear	Cond = 2552 pH = 7.18 T = 10.8 ORP = 170 TDS = 1804	Screen: 1 in. PVC, #10 slot, 5 ft. Casing: 1 in. PVC.	CHEMetrics – CN 0.038 ppm
TMW-03 - MS/MSD	529508.4	468336.6	Clear	Cond = 435 pH = 8.84 T = 12.2 ORP = -103 TDS = 279	Screen: 1 in. PVC, #10 slot, 5 ft. Casing: 1 in. PVC.	CHEMetrics – CN 0.038 ppm
TMW-04	529344.7	468289.6	Clear	Cond = 1812 pH = 7.42 T = 13.7 ORP = 175 TDS = 1234	Screen: 1 in. PVC, #10 slot, 5 ft. Casing: 1 in. PVC.	CHEMetrics – CN 0.052 ppm SB-07 corresponding boring
TMW-05	529460.9	468264.3	Clear	Cond = 795 pH = 8.12 T = 14.3 ORP = 132 TDS = 516	Screen: 1 in. PVC, #10 slot, 5 ft. Casing: 1 in. PVC.	CHEMetrics – CN 0.042 ppm SB-08 corresponding Boring

TABLE 3
GROUNDWATER SAMPLE DESCRIPTIONS

SAMPLE NUMBER	LOCATION COORDINATES		SAMPLE DESCRIPTION	PHYSICAL PARAMETERS	WELL CONSTRUCTION	COMMENTS
	Easting	Northing				
TMW-06	529523.7	468252.0	Clear	Cond = 719 pH = 7.34 T = 13.5 ORP = -100 TDS = 463	Screen: 1 in. PVC, #10 slot, 5 ft. Casing: 1 in. PVC.	CHEMetrics – CN 0.026 ppm SB-05 corresponding boring
TMW-07	529533.4	468209.5	Clear	Cond = 947 pH = 6.92 T = 9.2 ORP = -126 TDS = 636	Screen: 1 in. PVC, #10 slot, 5 ft. Casing: 1 in. PVC.	CHEMetrics – CN 0.041 ppm
TMW-08	529455.3	468197.6	Clear	Cond = 795 pH = 7.14 T = 13.8 ORP = -75 TDS = 524	Screen: 1 in. PVC, #10 slot, 5 ft. Casing: 1 in. PVC.	CHEMetrics – CN 0.024 ppm
TMW-09	529383.0	468190.0	Fines	Cond = 850 pH = 8.08 T = 14.6 ORP = 7 TDS = 554	Screen: 1 in. PVC, #10 slot, 5 ft. Casing: 1 in. PVC.	CHEMetrics – CN 0.109 ppm
TMW-10	529328.9	468167.5	Clear	Cond = 3994 pH = 6.69 T = 13.1 ORP = -174 TDS = 2927	Screen: 1 in. PVC, #10 slot, 5 ft. Casing: 1 in. PVC.	CHEMetrics – CN 0.157ppm SB-10 corresponding boring

TABLE 3
GROUNDWATER SAMPLE DESCRIPTIONS

SAMPLE NUMBER	LOCATION COORDINATES		SAMPLE DESCRIPTION	PHYSICAL PARAMETERS	WELL CONSTRUCTION	COMMENTS
	Easting	Northing				
VAS-01 (26-30)	529335.0	468312.0	Slightly silty	Cond = 1065 pH = 7.43 T = 14.3 ORP = -169 TDS = 704	Screen: SP16, 4 ft. Casing: 1.5 in. Geoprobe Rod.	CHEMetrics – CN 0.026 ppm Filtered SB-11 corresponding boring
VAS-01 (20-24)	529335.0	468312.0	Slightly silty	Cond = 1113 pH = 7.47 T = 13.6 ORP = -147 TDS = 737	Screen: SP16, 4 ft. Casing: 1.5 in. Geoprobe Rod.	CHEMetrics – CN 0.039 ppm Filtered SB-11 corresponding boring
VAS-01 (16-20)	529335.0	468312.0	Very, slightly silty	Cond = 1366 pH = 7.34 T = 13.5 ORP = -131 TDS = 912	Screen: SP16, 4 ft. Casing: 1.5 in. Geoprobe Rod.	CHEMetrics – CN 0.023 ppm Filtered SB-11 corresponding boring
VAS-01 (12-16)	529335.0	468312.0	Clear	Cond = 719 pH = 7.44 T = 13.7 ORP = -131 TDS = 466	Screen: SP16, 4 ft. Casing: 1.5 in. Geoprobe Rod.	CHEMetrics – CN 0.045 ppm SB-11 corresponding boring

TABLE 3
GROUNDWATER SAMPLE DESCRIPTIONS

SAMPLE NUMBER	LOCATION COORDINATES		SAMPLE DESCRIPTION	PHYSICAL PARAMETERS	WELL CONSTRUCTION	COMMENTS
	Easting	Northing				
VAS-02 (26-30)	529320.7	468281.8	Slightly cloudy	Cond = 1006 pH = 7.37 T = 13.9 ORP = -133 TDS = 662	Screen: SP16, 4 ft. Casing: 1.5 in. Geoprobe Rod.	CHEMetrics – CN 0.38 ppm Filtered SB-12 corresponding boring
VAS-02 (20-24)	529320.7	468281.8	Clear	Cond = 792 pH = 7.40 T = 15.5 ORP = -114 TDS = 514	Screen: SP16, 4 ft. Casing: 1.5 in. Geoprobe Rod.	CHEMetrics – CN 0.047 ppm SB-12 corresponding boring
VAS-02 (16-20)	529320.7	468281.8	Slightly Cloudy	Cond = 1215 pH = 7.26 T = 15.8 ORP = -121 TDS = 804	Screen: SP16, 4 ft. Casing: 1.5 in. Geoprobe Rod.	CHEMetrics – CN 0.037 ppm Filtered Only collected CN SB-12 corresponding boring
VAS-02 (12-16) -DUP	529320.7	468281.8	Clear	Cond = 575 pH = 7.54 T = 14.0 ORP = -123 TDS = 370	Screen: 1 in. PVC, #10 slot, 5 ft. Casing: 1 in. PVC.	CHEMetrics – CN 0.072 ppm SP16 Didn't deploy Used 1 in. PVC SB-12 corresponding boring

TABLE 3
GROUNDWATER SAMPLE DESCRIPTIONS

SAMPLE NUMBER	LOCATION COORDINATES		SAMPLE DESCRIPTION	PHYSICAL PARAMETERS	WELL CONSTRUCTION	COMMENTS
	Easting	Northing				
VAS-03 (26-30)	529313.0	468264.9	Medium cloudy	Cond = 879 pH = 7.08 T = 14.9 ORP = -106 TDS = 574	Screen: SP16, 4 ft. Casing: 1.5 in. Geoprobe Rod.	CHEMetrics – CN 0.027ppm Filtered SB-13 corresponding boring
VAS-03 (20-24)	529313.0	468264.9	Medium cloudy	Cond = 718 pH = 7.65 T = 14.3 ORP = -190 TDS = 465	Screen: SP16, 4 ft. Casing: 1.5 in. Geoprobe Rod.	CHEMetrics – CN 0.025 ppm Filtered SB-13 corresponding boring
VAS-03 (16-20)	529313.0	468264.9	Slightly cloudy	Cond = 826 pH = 7.35 T = 14.1 ORP = -161 TDS = 537	Screen: SP16, 4 ft. Casing: 1.5 in. Geoprobe Rod.	CHEMetrics – CN 0.026 ppm Filtered Matrix Spike/Matrix Sp Duplicate(MS/MSD) SB-13 corresponding boring
VAS-03 (12-16)	529313.0	468264.9	Slightly cloudy	Cond = 1016 pH = 7.20 T = 14.4 ORP = -127 TDS = 669	Screen: SP16, 4 ft. Casing: 1.5 in. Geoprobe Rod.	CHEMetrics – CN 0.034 ppm Filtered SB-13 corresponding boring

Location Coordinates: Michigan GeoRef, NAD 1983, Meters
Cond = Conductivity (s/cm)
pH = Hydrogen Ionization Potential
T = Temperature (C)
ORP = Oxidation Reduction Potential (millivolts)
TDS = Total Dissolved Solids (ppm – parts per million)

TABLE 4
GROUNDWATER SAMPLE DATA SUMMARY

Sample Number	Hazardous Substance (Footnotes)	Sample Concentration	Qualifiers	Residential Drinking Water Criteria	Footnotes	Nonresidential Drinking Water Criteria	Footnotes	Groundwater Surface Water Interface Criteria	Footnotes
TMW-01	***VOLATILES***								
	No volatile organic compounds detected.								
	SEMI-VOLATILES								
	No semi-volatile organic compounds detected.								
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Barium (B)	63		2,000	A	2,000	A	440	G
	Chromium [III] (B,H)	1.5		100	A	100	A	74	G,X
	Copper (B)	7.1		1,000	E	1,000	E	9	G
	Cyanide (P,R)	**9**		200	A	200	A	5.2	
TMW-02	***VOLATILES***								
	No volatile organic compounds detected.								
	SEMI-VOLATILES								
	No semi-volatile organic compounds detected.								
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Barium (B)	43		2,000	A	2,000	A	440	G
	Copper (B)	6.2		1,000	E	1,000	E	9	G
	Cyanide (P,R)	**63**		200	A	200	A	5.2	
	Selenium (B)	3.2		50	A	50	A	5.0	

µg/l = microgram/liter
Qualifier definitions in Appendix B. Footnote definitions in Appendix C.
Shaded Criteria indicate an exceedance.

TABLE 4
GROUNDWATER SAMPLE DATA SUMMARY

Sample Number	Hazardous Substance (Footnotes)	Sample Concentration	Qualifiers	Residential Drinking Water Criteria	Footnotes	Nonresidential Drinking Water Criteria	Footnotes	Groundwater Surface Water Interface Criteria	Footnotes
TMW-02 DUP	***VOLATILES***								
	No volatile organic compounds detected.								
	SEMI-VOLATILES								
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Barium (B)	41		2,000	A	2,000	A	440	G
	Copper (B)	5.7		1,000	E	1,000	E	9	G
	Cyanide (P,R)	**62**		200	A	200	A	5.2	
	Selenium (B)	2.7		50	A	50	A	5.0	
TMW-03	***VOLATILES***								
	No volatile organic compounds detected.								
	SEMI-VOLATILES								
	No semi-volatile organic compounds detected.								
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Barium (B)	29		2,000	A	2,000	A	440	G
	Chromium [III] (B,H)	1.0		100	A	100	A	74	G,X
	Copper (B)	1.9		1,000	E	1,000	E	9	G
	Cyanide (P,R)	**11**		200	A	200	A	5.2	
	Lead (B)	1.8		4.0	L	4.0	L	10	G,X
	Zinc (B)	6.2		2,400		5,000	E	120	G

µg/l = microgram/liter
Qualifier definitions in Appendix B. Footnote definitions in Appendix C.
Shaded Criteria indicate an exceedance.

TABLE 4
GROUNDWATER SAMPLE DATA SUMMARY

Sample Number	Hazardous Substance (Footnotes)	Sample Concentration	Qualifiers	Residential Drinking Water Criteria	Footnotes	Nonresidential Drinking Water Criteria	Footnotes	Groundwater Surface Water Interface Criteria	Footnotes
TMW-04	***VOLATILES***	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	1,2,3-Trimethylbenzene	3.0		NA		NA		NA	
	1,2,4-Trimethylbenzene (I)	5.9		63	E	63	E	17	
	1,3,5-Trimethylbenzene (I)	3.8		72	E	72	E	45	
	Xylenes (I)	1.2		280	E	280	E	41	
	SEMI-VOLATILES	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Acenaphthene	2.4		1,300		3,800		38	
	Acenaphthylene	3.8		52		150		ID	
	Carbazole	**11**		85		350		10	M
	Naphthalene	**180**		520		1,500		11	
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Barium (B)	46		2,000	A	2,000	A	440	G
	Copper (B)	3.7		1,000	E	1,000	E	9	G
	Cyanide (P,R)	**3,500**		200	A	200	A	5.2	
	Selenium (B)	2.4		50	A	50	A	5.0	
	Zinc (B)	10		2,400		5,000	E	120	G
TMW-05	***VOLATILES***								
	No volatile organic compounds detected.								
	SEMI-VOLATILES								
	No semi-volatile organic compounds detected.								
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Arsenic	2.4		10	A	10	A	10	
	Barium (B)	29		2,000	A	2,000	A	440	G
	Chromium [III] (B,H)	6.2		100	A	100	A	74	G,X
	Copper (B)	9.8		1,000	E	1,000	E	9	G
	Cyanide (P,R)	**9**		200	A	200	A	5.2	
	Selenium (B)	1.6		50	A	50	A	5.0	

µg/l = microgram/liter
Qualifier definitions in Appendix B. Footnote definitions in Appendix C.
Shaded Criteria indicate an exceedance.

TABLE 4
GROUNDWATER SAMPLE DATA SUMMARY

Sample Number	Hazardous Substance (Footnotes)	Sample Concentration	Qualifiers	Residential Drinking Water Criteria	Footnotes	Nonresidential Drinking Water Criteria	Footnotes	Groundwater Surface Water Interface Criteria	Footnotes
TMW-06	***VOLATILES***								
	No volatile organic compounds detected.								
	SEMI-VOLATILES								
	No semi-volatile organic compounds detected.								
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Arsenic	3.6		10	A	10	A	10	
	Barium (B)	24		2,000	A	2,000	A	440	G
	Copper (B)	2.0		1,000	E	1,000	E	9	G
	Cyanide (P,R)	**19**		200	A	200	A	5.2	
	Lead (B)	1.5		4.0	L	4.0	L	10	G,X
TMW-07	***VOLATILES***								
	No volatile organic compounds detected.								
	SEMI-VOLATILES								
	No semi-volatile organic compounds detected.								
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Barium (B)	22		2,000	A	2,000	A	440	G
	Chromium [III] (B,H)	1.2		100	A	100	A	74	G,X
	Cyanide (P,R)	**21**		200	A	200	A	5.2	

µg/l = microgram/liter
Qualifier definitions in Appendix B. Footnote definitions in Appendix C.
Shaded Criteria indicate an exceedance.

TABLE 4
GROUNDWATER SAMPLE DATA SUMMARY

Sample Number	Hazardous Substance (Footnotes)	Sample Concentration	Qualifiers	Residential Drinking Water Criteria	Footnotes	Nonresidential Drinking Water Criteria	Footnotes	Groundwater Surface Water Interface Criteria	Footnotes
TMW-08	***VOLATILES***								
	No volatile organic compounds detected.								
	SEMI-VOLATILES								
	No semi-volatile organic compounds detected.								
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Arsenic	1.8		10	A	10	A	10	
	Barium (B)	25		2,000	A	2,000	A	440	G
	Chromium [III] (B,H)	1.2		100	A	100	A	74	G,X
	Copper (B)	1.8		1,000	E	1,000	E	9	G
TMW-09	***VOLATILES***								
	No volatile organic compounds detected.								
	SEMI-VOLATILES								
	No semi-volatile organic compounds detected.								
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Arsenic	7.2		10	A	10	A	10	
	Barium (B)	89		2,000	A	2,000	A	440	G
	Chromium [III] (B,H)	13		100	A	100	A	74	G,X
	Copper (B)	43		1,000	E	1,000	E	9	G
	Cyanide (P,R)	**21**		200	A	200	A	5.2	
	Lead (B)	**160**		4.0	L	4.0	L	10	G,X
	Mercury [Total] (B,Z)	**0.2**		2.0	A	2.0	A	0.0013	
	Selenium (B)	1.6		50	A	50	A	5.0	
	Silver (B)	**0.3**		34		98		0.20	M
	Zinc (B)	150		2,400		5,000	E	120	G

µg/l = microgram/liter
Qualifier definitions in Appendix B. Footnote definitions in Appendix C.
Shaded Criteria indicate an exceedance.

TABLE 4
GROUNDWATER SAMPLE DATA SUMMARY

Sample Number	Hazardous Substance (Footnotes)	Sample Concentration	Qualifiers	Residential Drinking Water Criteria	Footnotes	Nonresidential Drinking Water Criteria	Footnotes	Groundwater Surface Water Interface Criteria	Footnotes
TMW-10	***VOLATILES***								
	No volatile organic compounds detected.								
	SEMI-VOLATILES								
	No semi-volatile organic compounds detected.								
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Barium (B)	270		2,000	A	2,000	A	440	G
	Copper (B)	2.6		1,000	E	1,000	E	9	G
	Cyanide (P,R)	**18**		200	A	200	A	5.2	
VAS-01 (26-30)	***VOLATILES***	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Trichloroethylene	1.0		5.0	A	5.0	A	200	X
	SEMI-VOLATILES	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Diethyl phthalate	11		5,500		16,000		110	
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Arsenic	2.0		10	A	10	A	10	
	Barium (B)	59		2,000	A	2,000	A	440	G

µg/l = microgram/liter
Qualifier definitions in Appendix B. Footnote definitions in Appendix C.
Shaded Criteria indicate an exceedance.

TABLE 4
GROUNDWATER SAMPLE DATA SUMMARY

Sample Number	Hazardous Substance (Footnotes)	Sample Concentration	Qualifiers	Residential Drinking Water Criteria	Footnotes	Nonresidential Drinking Water Criteria	Footnotes	Groundwater Surface Water Interface Criteria	Footnotes
VAS-01 (20-24)	***VOLATILES***								
	No volatile organic compounds detected.								
	SEMI-VOLATILES								
	No semi-volatile organic compounds detected.								
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Arsenic	2.7		10	A	10	A	10	
	Barium (B)	51		2,000	A	2,000	A	440	G
	Cyanide (P,R)	**27**		200	A	200	A	5.2	
VAS-01 (16-20)	***VOLATILES***								
	No volatile organic compounds detected.								
	SEMI-VOLATILES								
	No semi-volatile organic compounds detected.								
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Barium (B)	76		2,000	A	2,000	A	440	G
	Copper (B)	1.1		1,000	E	1,000	E	9	G
	Cyanide (P,R)	**360**		200	A	200	A	5.2	
	Selenium (B)	2.5		50	A	50	A	5.0	
	Zinc (B)	5.0		2,400		5,000	E	120	G

µg/l = microgram/liter
Qualifier definitions in Appendix B. Footnote definitions in Appendix C.
Shaded Criteria indicate an exceedance.

TABLE 4
GROUNDWATER SAMPLE DATA SUMMARY

Sample Number	Hazardous Substance (Footnotes)	Sample Concentration	Qualifiers	Residential Drinking Water Criteria	Footnotes	Nonresidential Drinking Water Criteria	Footnotes	Groundwater Surface Water Interface Criteria	Footnotes
VAS-01 (12-16)	***VOLATILES***								
	No volatile organic compounds detected.								
	SEMI-VOLATILES								
	No semi-volatile organic compounds detected.								
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Arsenic	1.1		10	A	10	A	10	
	Barium (B)	49		2,000	A	2,000	A	440	G
	Chromium [III] (B,H)	2.6		100	A	100	A	74	G,X
	Copper (B)	2.8		1,000	E	1,000	E	9	G
	Cyanide (P,R)	**1,900**		200	A	200	A	5.2	
	Selenium (B)	**6.4**		50	A	50	A	5.0	
VAS-02 (26-30)	***VOLATILES***	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Trichloroethylene	1.0		5.0	A	5.0	A	200	X
	SEMI-VOLATILES								
	No semi-volatile organic compounds detected.								
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Arsenic	1.5		10	A	10	A	10	
	Barium (B)	49		2,000	A	2,000	A	440	G
	Cyanide (P,R)	**11**		200	A	200	A	5.2	
	Zinc (B)	6.0		2,400		5,000	E	120	G

µg/l = microgram/liter
Qualifier definitions in Appendix B. Footnote definitions in Appendix C.
Shaded Criteria indicate an exceedance.

TABLE 4
GROUNDWATER SAMPLE DATA SUMMARY

Sample Number	Hazardous Substance (Footnotes)	Sample Concentration	Qualifiers	Residential Drinking Water Criteria	Footnotes	Nonresidential Drinking Water Criteria	Footnotes	Groundwater Surface Water Interface Criteria	Footnotes
VAS-02 (20-24)	***VOLATILES***								
	No volatile organic compounds detected.								
	SEMI-VOLATILES								
	No semi-volatile organic compounds detected.								
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Barium (B)	59		2,000	A	2,000	A	440	G
	Chromium [III] (B,H)	1.2		100	A	100	A	74	G,X
	Copper (B)	1.4		1,000	E	1,000	E	9	G
	Cyanide (P,R)	**12**		200	A	200	A	5.2	
VAS-02 (16-20)	***VOLATILES***								
	No volatile organic compounds sample collected.								
	SEMI-VOLATILES								
	No semi-volatile organic compounds sample collected.								
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Only Cyanide Sample Collected								
	Cyanide (P,R)	**38**		200	A	200	A	5.2	

µg/l = microgram/liter
Qualifier definitions in Appendix B. Footnote definitions in Appendix C.
Shaded Criteria indicate an exceedance.

TABLE 4
GROUNDWATER SAMPLE DATA SUMMARY

Sample Number	Hazardous Substance (Footnotes)	Sample Concentration	Qualifiers	Residential Drinking Water Criteria	Footnotes	Nonresidential Drinking Water Criteria	Footnotes	Groundwater Surface Water Interface Criteria	Footnotes
VAS-02 (12-16)	***VOLATILES***	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Isopropyl benzene	1.4		800		2,300		28	
	p-Isopropyltoluene	1.1		NA		NA		NA	
	Toluene (I)	2.7		790	E	790	E	270	
	1,2,3-Trimethylbenzene	15		NA		NA		NA	
	1,2,4-Trimethylbenzene (I)	**23**		63	E	63	E	17	
	1,3,5-Trimethylbenzene (I)	10		72	E	72	E	45	
	Xylenes (I)	**60**		280	E	280	E	41	
	SEMI-VOLATILES	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Acenaphthene	2.2		1,300		3,800		38	
	Acenaphthylene	22		52		150		ID	
	Carbazole	7.4		85		350		10	M
	Fluorene	1.4		880		2,000	S	12	
	2-Methylnaphthalene	**30**		260		750		19	
	Naphthalene	**480**		520		1,500		11	
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Arsenic	1.0		10	A	10	A	10	
	Barium (B)	19		2,000	A	2,000	A	440	G
	Chromium [III] (B,H)	8.8		100	A	100	A	74	G,X
	Copper (B)	13		1,000	E	1,000	E	9	G
	Cyanide (P,R)	**1,800**		200	A	200	A	5.2	
	Selenium (B)	2.0		50	A	50	A	5.0	

µg/l = microgram/liter
Qualifier definitions in Appendix B. Footnote definitions in Appendix C.
Shaded Criteria indicate an exceedance.

TABLE 4
GROUNDWATER SAMPLE DATA SUMMARY

Sample Number	Hazardous Substance (Footnotes)	Sample Concentration	Qualifiers	Residential Drinking Water Criteria	Footnotes	Nonresidential Drinking Water Criteria	Footnotes	Groundwater Surface Water Interface Criteria	Footnotes
VAS-02 (12-16) DUP	***VOLATILES***	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Isopropyl benzene	1.3		800		2,300		28	
	p-Isopropyltoluene	1.1		NA		NA		NA	
	Toluene (I)	2.8		790	E	790	E	270	
	1,2,3-Trimethylbenzene	14		NA		NA		NA	
	1,2,4-Trimethylbenzene (I)	**22**		63	E	63	E	17	
	1,3,5-Trimethylbenzene (I)	10		72	E	72	E	45	
	Xylenes (I)	**59**		280	E	280	E	41	
	SEMI-VOLATILES	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Acenaphthene	2.4		1,300		3,800		38	
	Acenaphthylene	24		52		150		ID	
	Carbazole	7.0		85		350		10	M
	Fluorene	1.4		880		2,000	S	12	
	2-Methylnaphthalene	**28**		260		750		19	
	Naphthalene	**490**		520		1,500		11	
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Barium (B)	18		2,000	A	2,000	A	440	G
	Chromium [III] (B,H)	1.6		100	A	100	A	74	G,X
	Copper (B)	5.0		1,000	E	1,000	E	9	G
	Cyanide (P,R)	**1,800**		200	A	200	A	5.2	
	Selenium (B)	2.1		50	A	50	A	5.0	

µg/l = microgram/liter
Qualifier definitions in Appendix B. Footnote definitions in Appendix C.
Shaded Criteria indicate an exceedance.

TABLE 4
GROUNDWATER SAMPLE DATA SUMMARY

Sample Number	Hazardous Substance (Footnotes)	Sample Concentration	Qualifiers	Residential Drinking Water Criteria	Footnotes	Nonresidential Drinking Water Criteria	Footnotes	Groundwater Surface Water Interface Criteria	Footnotes
VAS-03 (26-30)	***VOLATILES***								
	No volatile organic compounds detected.								
	SEMI-VOLATILES	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Diethyl phthalate	8.5		5,500		16,000		110	
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Barium (B)	78		2,000	A	2,000	A	440	G
	Zinc (B)	40		2,400		5,000	E	120	G
VAS-03 (20-24)	***VOLATILES***								
	No volatile organic compounds detected.								
	SEMI-VOLATILES								
	No semi-volatile organic compounds detected.								
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Barium (B)	50		2,000	A	2,000	A	440	G

µg/l = microgram/liter
Qualifier definitions in Appendix B. Footnote definitions in Appendix C.
Shaded Criteria indicate an exceedance.

TABLE 4
GROUNDWATER SAMPLE DATA SUMMARY

Sample Number	Hazardous Substance (Footnotes)	Sample Concentration	Qualifiers	Residential Drinking Water Criteria	Footnotes	Nonresidential Drinking Water Criteria	Footnotes	Groundwater Surface Water Interface Criteria	Footnotes
VAS-03 (16-20)	***VOLATILES***								
	No volatile organic compounds detected.								
	SEMI-VOLATILES								
	No semi-volatile organic compounds detected.								
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Barium (B)	44		2,000	A	2,000	A	440	G
	Selenium (B)	1.7		50	A	50	A	5.0	
	Zinc (B)	68		2,400		5,000	E	120	G
VAS-03 (12-16)	***VOLATILES***								
	No volatile organic compounds detected.								
	SEMI-VOLATILES								
	No semi-volatile organic compounds detected.								
	INORGANICS	*(µg/l)*		*(µg/l)*		*(µg/l)*		*(µg/l)*	
	Barium (B)	35		2,000	A	2,000	A	440	G
	Cyanide (P,R)	**960**		200	A	200	A	5.2	
	Selenium (B)	1.6		50	A	50	A	5.0	
	Zinc (B)	36		2,400		5,000	E	120	G

µg/l = microgram/liter
Qualifier definitions in Appendix B. Footnote definitions in Appendix C.
Shaded Criteria indicate an exceedance.

TABLE 5
GROUNDWATER ELEVATION DATA*

TEMPRARY MONITORING WELL	LOCATION COORDINATES		GROUND ELEVATION	TOP OF CASING (TOC) ELEVATION	DEPTH TO WATER (from TOC)	WATER TABLE ELEVATION	DEPTH OF WELL (from TOC)	SCREEN LENGTH	SCREENED INTERVAL ELEVATION
	Easting	Northing							
TMW-01	529225.5	468409.1	95.95	97.37	9.75	87.62	12.90	5 ft.	87.47-82.47
TMW-02	529315.2	468379.4	96.90	98.90	12.12	86.78	14.65	5 ft.	87.72-82.72
TMW-03	529508.4	468336.6	97.43	100.00	11.60	88.40	14.60	5 ft.	90.40-85.40
TMW-04	529344.7	468289.6	97.31	97.31	11.25	86.06	14.40	5 ft.	87.91-82.91
TMW-05	529460.9	468264.3	95.09	95.09	8.30	86.79	12.10	5 ft.	87.99-82.99
TMW-06	529523.7	468252.0	96.81	97.58	10.77	86.81	14.70	5 ft.	87.88-82.88
TMW-07	529533.4	468209.5	Did Not Survey	Sample Point Only	6.45	------	14.60	5 ft.	------
TMW-08	529455.3	468197.6	Did Not Survey	Sample Point Only	7.05	------	14.10	5 ft.	------
TMW-09	529383.0	468190.0	94.76	96.89	9.66	87.23	14.66	5 ft.	87.23-82.23
TMW-10	529328.9	468167.5	Did Not Survey	Sample Point Only	6.30	------	9.50	5 ft.	------

Location Coordinates: Michigan GeoRef, NAD 1983, Meters

* - All elevations in feet, referenced to an arbitrary elevation of 100.00 feet.

Table 6
Push-Point Sampling Summary

Traverse City Place Brownfield Plan Area
May 23rd-24th 2013

Push-Point	pH	Temperature °C	ORP mV	Conductivity µS	TDS ppm	CHEMetrics Cyanide ppm	Easting	Northing
PP-01	6.94	9.0	68	745	497	0.030	529253.3	468489.9
PP-02	7.30	9.1	58	768	513	0.030	529263.0	468486.6
PP-03	7.48	8.9	34	992	670	0.026	529271.2	468484.3
PP-04	7.56	9.0	7	746	492	0.022	529279.3	468482.2
PP-05	7.63	9.0	54	748	500	0.021	529287.9	468478.4
PP-06	7.44	9.0	28	1323	904	0.017	529295.1	468476.1
PP-07	7.55	9.0	17	732	488	0.026	529302.8	468473.1
PP-08	7.49	8.8	-15	702	458	0.019	529311.1	468470.2
PP-09	7.52	8.8	-87	712	475	0.026	529318.5	468468.0
PP-10	7.47	9.1	-111	1104	750	0.035	529326.5	468465.8
PP-11	7.39	9.0	-143	1200	818	0.023	529335.0	468463.5
PP-12	7.53	8.9	-140	781	523	0.020	529343.7	468460.5
PP-13	7.58	9.0	-133	752	502	0.023	529352.5	468457.7
PP-14	7.56	8.8	-131	757	506	0.023	529359.7	468454.9
PP-15	7.60	9.0	-89	829	556	0.026	529368.1	468452.7
PP-16	7.72	9.0	-157	794	532	0.032	529376.2	468451.1
PP-17	7.57	8.8	-151	1001	677	0.021	529384.4	468448.8
PP-18	7.31	8.7	-127	1467	1007	0.028	529391.9	468446.8
PP-19	7.24	8.8	-145	1840	1293	0.030	529401.8	468444.1
PP-20	7.51	9.0	-136	938	632	0.024	529407.8	468442.2
PP-21	7.52	9.0	-122	1273	869	0.028	529417.7	468439.0
PP-22	7.50	9.1	-76	1590	1105	0.024	529424.8	468436.9
PP-23	7.32	9.3	-70	1668	1156	0.026	529434.7	468434.9
PP-24	7.51	9.2	-61	1546	1065	0.028	529442.4	468432.5
PP-25	7.22	8.5	-58	1460	1015	0.034	529258.1	468490.2
PP-26	7.48	8.4	91	813	552	0.033	529266.2	468487.0
PP-27	7.51	8.2	-90	750	507	0.039	529272.7	468484.5
PP-28	7.61	8.1	-122	738	500	0.028	529281.8	468481.9
PP-29	7.37	8.3	-73	1475	1026	0.038	529289.5	468478.9
PP-30	7.32	8.4	-74	1994	1420	0.108	529296.4	468476.7
PP-31	7.49	8.5	-132	878	598	0.037	529304.4	468473.9
PP-32	7.67	8.4	-131	712	480	0.033	529312.6	468471.9
PP-33	7.60	8.4	-170	1449	1006	0.041	529321.3	468469.2
PP-34	7.38	8.3	-121	1271	880	0.042	529328.3	468466.8
PP-35	7.46	8.4	-131	969	662	0.042	529336.4	468463.7
PP-36	7.49	8.3	-126	741	501	0.041	529344.4	468461.5
PP-37	7.47	8.4	-117	860	586	0.040	529352.3	468459.3
PP-38	7.50	8.4	-130	756	511	0.038	529360.3	468456.7
PP-39	7.50	8.4	-122	992	680	0.032	529368.6	468455.1
PP-40	7.64	8.5	-126	897	611	0.035	529376.6	468452.8
PP-41	7.50	8.4	-118	1040	714	0.032	529384.8	468451.1
PP-42	7.23	8.3	-103	1930	1373	0.021	529392.3	468448.9
PP-43	7.41	8.4	-109	910	620	0.035	529400.6	468445.7
PP-44	7.45	8.6	-124	1231	849	0.032	529410.5	468443.2
PP-45	7.46	8.6	-113	1317	911	0.041	529418.4	468440.9
PP-46	7.45	8.5	-116	1447	1005	0.041	529425.4	468438.9
PP-47	7.47	8.9	-108	1367	946	0.044	529434.2	468436.7
PP-48	7.50	8.9	-129	1124	773	0.043	529443.2	468434.6

Appendix A

BFRA Property Photographs

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: Traverse City Place Brownfield Plan Area PAGE: 1 OF: 8
U.S. EPA ID #: MIB000000180

DATE: 6/25/13

DIRECTION OF PHOTOGRAPH: East

PHOTOGRAPH BY: TAD

DESCRIPTION: View along Grandview Parkway with Warehouse District sign, located west of Hall Street.

DATE: 6/25/13

DIRECTION OF PHOTOGRAPH: South

PHOTOGRAPH BY: TAD

DESCRIPTION: View along Hall Street with Warehouse District sign.

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: Traverse City Place Brownfield Plan Area PAGE: 2 OF: 8
U.S. EPA ID #: MIB000000180

DATE: 6/25/13

DIRECTION OF PHOTOGRAPH: East

PHOTOGRAPH BY: TAD

DESCRIPTION: View along Garland Street from Hall Street.

DATE: 6/25/13

DIRECTION OF PHOTOGRAPH: North

PHOTOGRAPH BY: TAD

DESCRIPTION: View toward Grandview Parkway from Garland Street as it turns from east-west to north-south.

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: Traverse City Place Brownfield Plan Area PAGE: 3 OF: 8
U.S. EPA ID #: MIB000000180

DATE: 6/25/13

DIRECTION OF PHOTOGRAPH: North

PHOTOGRAPH BY: TAD

DESCRIPTION: View towards Grand Traverse Bay from the intersection of Hall Street and Garland Streets, with Hotel Indigo construction site on right.

DATE: 6/25/13

DIRECTION OF PHOTOGRAPH: West

PHOTOGRAPH BY: TAD

DESCRIPTION: View along Grandview Parkway from Garland Street.

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: Traverse City Place Brownfield Plan Area PAGE: 4 OF: 8
U.S. EPA ID #: MIB000000180

DATE: 6/25/13

DIRECTION OF PHOTOGRAPH: Northeast

PHOTOGRAPH BY: TAD

DESCRIPTION: View of Hotel Indigo construction area from the intersection of Garland Street and Hall Street.

DATE: 6/25/13

DIRECTION OF PHOTOGRAPH: Down

PHOTOGRAPH BY: TAD

DESCRIPTION: Dewatering system at Hotel Indigo construction site.

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: Traverse City Place Brownfield Plan Area PAGE: 5 OF: 8
U.S. EPA ID #: MIB000000180

DATE: 5/24/13

DIRECTION OF PHOTOGRAPH: North

PHOTOGRAPH BY: TAD

DESCRIPTION: Former Traverse City Gas Company Building on southwest corner of Grandview Parkway and Hall Street.

DATE: 6/25/13

DIRECTION OF PHOTOGRAPH: North

PHOTOGRAPH BY: TAD

DESCRIPTION: View of Candle Factory from Grandview Parkway.

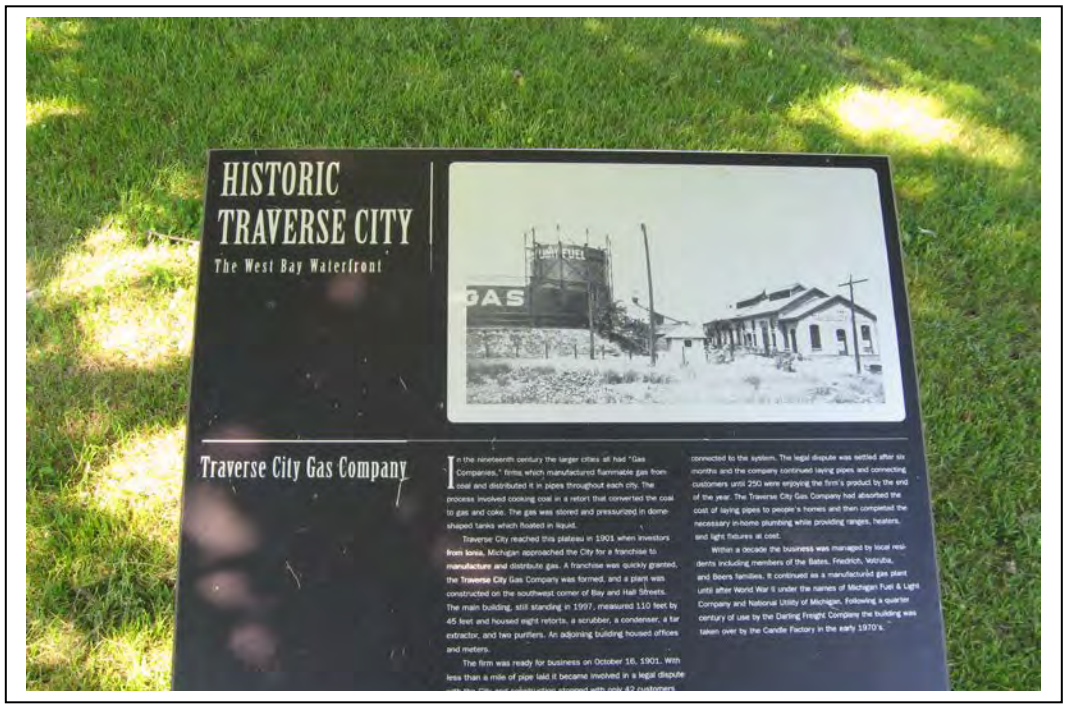
FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: Traverse City Place Brownfield Plan Area PAGE: 6 OF: 8
U.S. EPA ID #: MIB000000180

DATE: 6/19/13

DIRECTION OF PHOTOGRAPH: Down

PHOTOGRAPH BY: TAD

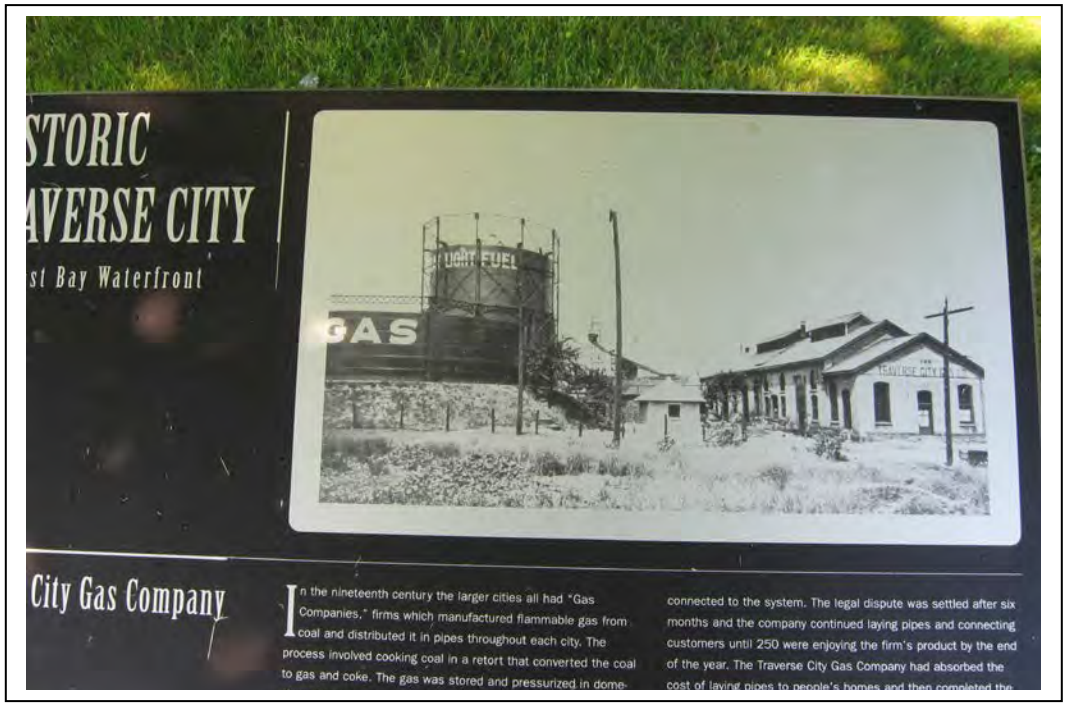


DESCRIPTION: Marker for Traverse City Gas Company.

DATE: 6/19/13

DIRECTION OF PHOTOGRAPH: Down

PHOTOGRAPH BY: TAD



DESCRIPTION: Close-up view of original Traverse City Gas Company, presently Candle Factory.

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: Traverse City Place Brownfield Plan Area PAGE: 7 OF: 8
U.S. EPA ID #: MIB000000180

DATE: 6/25/13

DIRECTION OF PHOTOGRAPH: Southwest

PHOTOGRAPH BY: TAD

DESCRIPTION: Track-mounted Geoprobe used to install TMW-07 and TMW-08 along the bank of the Boardman River east of Hall Street.

DATE: 6/25/13

DIRECTION OF PHOTOGRAPH: Northeast

PHOTOGRAPH BY: TAD

DESCRIPTION: Close-up view of area along bank of the Boardman River where TMW-07 and TMW-08 were installed with the Geoprobe 6620DT.

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: Traverse City Place Brownfield Plan Area PAGE: 8 OF: 8
U.S. EPA ID #: MIB000000180

DATE: 5/24/13

DIRECTION OF PHOTOGRAPH: North

PHOTOGRAPH BY: TAD

DESCRIPTION: Push-point survey in Grand Traverse Bay.

DATE: 5/24/13

DIRECTION OF PHOTOGRAPH: West

PHOTOGRAPH BY: TAD

DESCRIPTION: Chemetrics screening kit for push-point survey in Grand Traverse Bay.

Appendix B

Chemical Analysis of BFRA Data

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

18 July 2013

Work Order: 1306226

Price: $5,410.00

Teresa Ducsay
MDEQ-RRD-LANSING
525 W. Allegan Street
Lansing, MI 48909

RE: TCPBPA-TRAVERSE CITY PLACE BROWNFIELD I

I certify that the analyses performed by the MDEQ Environmental Laboratory were conducted by methods approved by the U.S. Environmental Protection Agency and other appropriate regulatory agencies.

Sincerely,

George Krisztian
Laboratory Director

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

MDEQ-RRD-LANSING	Project: TCPBPA-TRAVERSE CITY PLACE BROWNFIELD PLAN AREA	
525 W. Allegan Street	Site Code: MIB000000180	**Reported:**
Lansing MI, 48909	Project Manager: Teresa Ducsay	07/18/2013

Analytical Report for Samples

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Qualifier
TMW-01	1306226-01	Water	06/19/2013	06/24/2013	
TMW-02	1306226-02	Water	06/20/2013	06/24/2013	
TMW-02 DUP	1306226-03	Water	06/20/2013	06/24/2013	
TMW-03	1306226-04	Water	06/19/2013	06/24/2013	
TMW-03 MS	1306226-05	Water	06/19/2013	06/24/2013	
TMW-03 MSD	1306226-06	Water	06/19/2013	06/24/2013	
TMW-04	1306226-07	Water	06/20/2013	06/24/2013	
TMW-05	1306226-08	Water	06/20/2013	06/24/2013	
TMW-06	1306226-09	Water	06/20/2013	06/24/2013	
TMW-09	1306226-10	Water	06/21/2013	06/24/2013	

Notes and Definitions

X	Methods 8260 & 624 are used to analyze volatile organics that have boiling points below 200 ºC. 2-Methylnaphthalene & naphthalene have boiling points above 200 ºC and are better suited to analysis by methods 8270 & 625 as semivolatile organics.
T	Reported value is less than the reporting limit (RL). Result is estimated.
A11	Result is estimated due to high initial verification standard criteria failure.
A09	Result is estimated due to high recovery of batch quality control.
A08	Result(s) and reporting limits(s) are estimated due to low recovery of batch QC.
A07	Result(s) and reporting limit(s) are estimated due to poor precision.
A06	Result is estimated due to high continuing calibration standard criteria failure.
A05	Result and reporting limit are estimated due to low continuing calibration standard criteria failure.
A04	Result is estimated due to high matrix spike recovery.
ND	Indicates compound analyzed for but not detected
RL	Reporting Limit
NA	Not Applicable

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

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ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-01

Lab ID: 1306226-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/28/13	B3F2813	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-01
Lab ID: 1306226-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/28/13	B3F2813	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/28/13	B3F2813	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
Surrogate: Bromofluorobenzene			*101 %*	*85-115*		*06/28/13*	B3F2813	*8260*	
Surrogate: Dibromofluoromethane			*101 %*	*82.7-115*		*06/28/13*	B3F2813	*8260*	
Surrogate: Toluene-d8			*98.8 %*	*85-115*		*06/28/13*	B3F2813	*8260*	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-01

Lab ID: 1306226-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	ug/L	1	07/03/13	B3F2415	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/03/13	B3F2415	8270	
105-67-9	2,4-Dimethylphenol	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
51-28-5	2,4-Dinitrophenol	ND	25	ug/L	1	07/03/13	B3F2415	8270	A05
121-14-2	2,4-Dinitrotoluene	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
95-51-2	2-Chloroaniline	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
91-58-7	2-Chloronaphthalene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/03/13	B3F2415	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	20	ug/L	1	07/03/13	B3F2415	8270	
91-57-6	2-Methylnaphthalene	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/03/13	B3F2415	8270	
88-74-4	2-Nitroaniline	ND	20	ug/L	1	07/03/13	B3F2415	8270	
88-75-5	2-Nitrophenol	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
108394,106445	3 & 4-Methylphenol	ND	20	ug/L	1	07/03/13	B3F2415	8270	
99-09-2	3-Nitroaniline	ND	20	ug/L	1	07/03/13	B3F2415	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/03/13	B3F2415	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
100-01-6	4-Nitroaniline	ND	20	ug/L	1	07/03/13	B3F2415	8270	
100-02-7	4-Nitrophenol	ND	25	ug/L	1	07/03/13	B3F2415	8270	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
62-53-3	Aniline	ND	4.0	ug/L	1	07/03/13	B3F2415	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
103-33-3	Azobenzene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
100-51-6	Benzyl Alcohol	ND	51	ug/L	1	07/03/13	B3F2415	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
85-68-7	Butyl benzyl phthalate	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
86-74-8	Carbazole	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	

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TEL: (517) 335-9800
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Client ID: TMW-01

Lab ID: 1306226-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
132-64-9	Dibenzofuran	ND	4.0	ug/L	1	07/03/13	B3F2415	8270	
84-66-2	Diethylphthalate	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
131-11-3	Dimethyl phthalate	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
84-74-2	Di-n-butyl phthalate	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
117-84-0	Di-n-octyl phthalate	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
86-73-7	Fluorene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/03/13	B3F2415	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
121-69-7	N,N-dimethylaniline	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
91-20-3	Naphthalene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
98-95-3	Nitrobenzene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
87-86-5	Pentachlorophenol	ND	20	ug/L	1	07/03/13	B3F2415	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
108-95-2	Phenol	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
110-86-1	Pyridine	ND	20	ug/L	1	07/03/13	B3F2415	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
Surrogate: 2,4,6-Tribromophenol			*67.7 %*	*33.8-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: 2-Fluorobiphenyl			*48.5 %*	*24.1-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: 2-Fluorophenol			*19.8 %*	*10-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: Nitrobenzene-d5			*48.5 %*	*17.8-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: Phenol-d6			*19.1 %*	*10-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: p-Terphenyl-d14			*65.6 %*	*41.8-115*		*07/03/13*	B3F2415	*8270*	

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Client ID: TMW-01

Lab ID: 1306226-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	Available Cyanide	ND	0.002	mg/L	1	06/25/13	B3F2508	OIA-1677	
57-12-5	**Total Cyanide**	**0.009**	0.005	mg/L	1	06/25/13	B3F2507	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	Arsenic	ND	1.0	ug/L	1	07/01/13	B3F2614	6020/200.8	
7440-39-3	**Barium**	**63**	5.0	ug/L	1	07/01/13	B3F2614	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/01/13	B3F2614	6020/200.8	
7440-47-3	**Chromium**	**1.5**	1.0	ug/L	1	07/01/13	B3F2614	6020/200.8	
7440-50-8	**Copper**	**7.1**	1.0	ug/L	1	07/01/13	B3F2614	6020/200.8	
7439-92-1	Lead	ND	1.0	ug/L	1	07/01/13	B3F2614	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	06/26/13	B3F2412	7470/245.1	
7782-49-2	Selenium	ND	1.0	ug/L	1	07/01/13	B3F2614	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/01/13	B3F2614	6020/200.8	
7440-66-6	Zinc	ND	5.0	ug/L	1	07/01/13	B3F2614	6020/200.8	

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TEL: (517) 335-9800
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Client ID: TMW-02

Lab ID: 1306226-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/28/13	B3F2813	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	

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Client ID: TMW-02

Lab ID: 1306226-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/28/13	B3F2813	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/28/13	B3F2813	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
Surrogate: Bromofluorobenzene			*103 %*	*85-115*		*06/28/13*	B3F2813	*8260*	
Surrogate: Dibromofluoromethane			*102 %*	*82.7-115*		*06/28/13*	B3F2813	*8260*	
Surrogate: Toluene-d8			*98.4 %*	*85-115*		*06/28/13*	B3F2813	*8260*	

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Client ID: TMW-02
Lab ID: 1306226-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.1	ug/L	1	07/08/13	B3F2612	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.1	ug/L	1	07/08/13	B3F2612	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/08/13	B3F2612	8270	
105-67-9	2,4-Dimethylphenol	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
51-28-5	2,4-Dinitrophenol	ND	26	ug/L	1	07/08/13	B3F2612	8270	
121-14-2	2,4-Dinitrotoluene	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
95-51-2	2-Chloroaniline	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
91-58-7	2-Chloronaphthalene	ND	2.1	ug/L	1	07/08/13	B3F2612	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/08/13	B3F2612	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	21	ug/L	1	07/08/13	B3F2612	8270	
91-57-6	2-Methylnaphthalene	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/08/13	B3F2612	8270	
88-74-4	2-Nitroaniline	ND	21	ug/L	1	07/08/13	B3F2612	8270	
88-75-5	2-Nitrophenol	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
108394,106445	3 & 4-Methylphenol	ND	21	ug/L	1	07/08/13	B3F2612	8270	
99-09-2	3-Nitroaniline	ND	21	ug/L	1	07/08/13	B3F2612	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.1	ug/L	1	07/08/13	B3F2612	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/08/13	B3F2612	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
100-01-6	4-Nitroaniline	ND	21	ug/L	1	07/08/13	B3F2612	8270	
100-02-7	4-Nitrophenol	ND	26	ug/L	1	07/08/13	B3F2612	8270	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
62-53-3	Aniline	ND	4.1	ug/L	1	07/08/13	B3F2612	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
103-33-3	Azobenzene	ND	2.1	ug/L	1	07/08/13	B3F2612	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
100-51-6	Benzyl Alcohol	ND	52	ug/L	1	07/08/13	B3F2612	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.1	ug/L	1	07/08/13	B3F2612	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
85-68-7	Butyl benzyl phthalate	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
86-74-8	Carbazole	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	

STATE OF MICHIGAN
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ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-02

Lab ID: 1306226-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.1	ug/L	1	07/08/13	B3F2612	8270	
132-64-9	Dibenzofuran	ND	4.1	ug/L	1	07/08/13	B3F2612	8270	
84-66-2	Diethylphthalate	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
131-11-3	Dimethyl phthalate	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
84-74-2	Di-n-butyl phthalate	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
117-84-0	Di-n-octyl phthalate	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
86-73-7	Fluorene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/08/13	B3F2612	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.1	ug/L	1	07/08/13	B3F2612	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
121-69-7	N,N-dimethylaniline	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
91-20-3	Naphthalene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
98-95-3	Nitrobenzene	ND	2.1	ug/L	1	07/08/13	B3F2612	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.1	ug/L	1	07/08/13	B3F2612	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.1	ug/L	1	07/08/13	B3F2612	8270	
87-86-5	Pentachlorophenol	ND	21	ug/L	1	07/08/13	B3F2612	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
108-95-2	Phenol	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
110-86-1	Pyridine	ND	21	ug/L	1	07/08/13	B3F2612	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
Surrogate: 2,4,6-Tribromophenol			*80.6 %*	*33.8-115*		*07/08/13*	B3F2612	*8270*	
Surrogate: 2-Fluorobiphenyl			*53.8 %*	*24.1-115*		*07/08/13*	B3F2612	*8270*	
Surrogate: 2-Fluorophenol			*17.1 %*	*10-115*		*07/08/13*	B3F2612	*8270*	
Surrogate: Nitrobenzene-d5			*53.0 %*	*17.8-115*		*07/08/13*	B3F2612	*8270*	
Surrogate: Phenol-d6			*14.1 %*	*10-115*		*07/08/13*	B3F2612	*8270*	
Surrogate: p-Terphenyl-d14			*78.9 %*	*41.8-115*		*07/08/13*	B3F2612	*8270*	

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Client ID: TMW-02

Lab ID: 1306226-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	**Available Cyanide**	**0.010**	0.002	mg/L	1	06/25/13	B3F2508	OIA-1677	
57-12-5	**Total Cyanide**	**0.063**	0.005	mg/L	1	06/25/13	B3F2507	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	Arsenic	ND	1.0	ug/L	1	07/01/13	B3F2614	6020/200.8	
7440-39-3	**Barium**	**43**	5.0	ug/L	1	07/01/13	B3F2614	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/01/13	B3F2614	6020/200.8	
7440-47-3	Chromium	ND	1.0	ug/L	1	07/01/13	B3F2614	6020/200.8	
7440-50-8	**Copper**	**6.2**	1.0	ug/L	1	07/01/13	B3F2614	6020/200.8	
7439-92-1	Lead	ND	1.0	ug/L	1	07/01/13	B3F2614	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	06/26/13	B3F2412	7470/245.1	
7782-49-2	**Selenium**	**3.2**	1.0	ug/L	1	07/01/13	B3F2614	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/01/13	B3F2614	6020/200.8	
7440-66-6	Zinc	ND	5.0	ug/L	1	07/01/13	B3F2614	6020/200.8	

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Client ID: TMW-02 DUP

Lab ID: 1306226-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/28/13	B3F2813	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	

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Client ID: TMW-02 DUP

Lab ID: 1306226-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/28/13	B3F2813	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/28/13	B3F2813	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
Surrogate: Bromofluorobenzene			*101 %*	*85-115*		*06/28/13*	B3F2813	*8260*	
Surrogate: Dibromofluoromethane			*102 %*	*82.7-115*		*06/28/13*	B3F2813	*8260*	
Surrogate: Toluene-d8			*98.4 %*	*85-115*		*06/28/13*	B3F2813	*8260*	

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Lab ID: 1306226-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.1	ug/L	1	07/08/13	B3F2612	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.1	ug/L	1	07/08/13	B3F2612	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/08/13	B3F2612	8270	
105-67-9	2,4-Dimethylphenol	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
51-28-5	2,4-Dinitrophenol	ND	26	ug/L	1	07/08/13	B3F2612	8270	
121-14-2	2,4-Dinitrotoluene	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
95-51-2	2-Chloroaniline	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
91-58-7	2-Chloronaphthalene	ND	2.1	ug/L	1	07/08/13	B3F2612	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/08/13	B3F2612	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	21	ug/L	1	07/08/13	B3F2612	8270	
91-57-6	2-Methylnaphthalene	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/08/13	B3F2612	8270	
88-74-4	2-Nitroaniline	ND	21	ug/L	1	07/08/13	B3F2612	8270	
88-75-5	2-Nitrophenol	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
108394,106445	3 & 4-Methylphenol	ND	21	ug/L	1	07/08/13	B3F2612	8270	
99-09-2	3-Nitroaniline	ND	21	ug/L	1	07/08/13	B3F2612	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.1	ug/L	1	07/08/13	B3F2612	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/08/13	B3F2612	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
100-01-6	4-Nitroaniline	ND	21	ug/L	1	07/08/13	B3F2612	8270	
100-02-7	4-Nitrophenol	ND	26	ug/L	1	07/08/13	B3F2612	8270	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
62-53-3	Aniline	ND	4.1	ug/L	1	07/08/13	B3F2612	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
103-33-3	Azobenzene	ND	2.1	ug/L	1	07/08/13	B3F2612	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
100-51-6	Benzyl Alcohol	ND	52	ug/L	1	07/08/13	B3F2612	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.1	ug/L	1	07/08/13	B3F2612	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
85-68-7	Butyl benzyl phthalate	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
86-74-8	Carbazole	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	

STATE OF MICHIGAN
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MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-02 DUP

Lab ID: 1306226-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.1	ug/L	1	07/08/13	B3F2612	8270	
132-64-9	Dibenzofuran	ND	4.1	ug/L	1	07/08/13	B3F2612	8270	
84-66-2	Diethylphthalate	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
131-11-3	Dimethyl phthalate	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
84-74-2	Di-n-butyl phthalate	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
117-84-0	Di-n-octyl phthalate	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
86-73-7	Fluorene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/08/13	B3F2612	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.1	ug/L	1	07/08/13	B3F2612	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
121-69-7	N,N-dimethylaniline	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
91-20-3	Naphthalene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
98-95-3	Nitrobenzene	ND	2.1	ug/L	1	07/08/13	B3F2612	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.1	ug/L	1	07/08/13	B3F2612	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.1	ug/L	1	07/08/13	B3F2612	8270	
87-86-5	Pentachlorophenol	ND	21	ug/L	1	07/08/13	B3F2612	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
108-95-2	Phenol	ND	5.2	ug/L	1	07/08/13	B3F2612	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
110-86-1	Pyridine	ND	21	ug/L	1	07/08/13	B3F2612	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/08/13	B3F2612	8270	
Surrogate: 2,4,6-Tribromophenol			*94.2 %*	*33.8-115*		*07/08/13*	B3F2612	*8270*	
Surrogate: 2-Fluorobiphenyl			*82.9 %*	*24.1-115*		*07/08/13*	B3F2612	*8270*	
Surrogate: 2-Fluorophenol			*32.9 %*	*10-115*		*07/08/13*	B3F2612	*8270*	
Surrogate: Nitrobenzene-d5			*76.3 %*	*17.8-115*		*07/08/13*	B3F2612	*8270*	
Surrogate: Phenol-d6			*20.1 %*	*10-115*		*07/08/13*	B3F2612	*8270*	
Surrogate: p-Terphenyl-d14			*90.9 %*	*41.8-115*		*07/08/13*	B3F2612	*8270*	

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ENVIRONMENTAL LABORATORY

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TEL: (517) 335-9800
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Client ID: TMW-02 DUP

Lab ID: 1306226-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	**Available Cyanide**	**0.008**	0.002	mg/L	1	06/25/13	B3F2508	OIA-1677	
57-12-5	**Total Cyanide**	**0.062**	0.005	mg/L	1	06/25/13	B3F2507	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	Arsenic	ND	1.0	ug/L	1	07/01/13	B3F2614	6020/200.8	
7440-39-3	**Barium**	**41**	5.0	ug/L	1	07/01/13	B3F2614	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/01/13	B3F2614	6020/200.8	
7440-47-3	Chromium	ND	1.0	ug/L	1	07/01/13	B3F2614	6020/200.8	
7440-50-8	**Copper**	**5.7**	1.0	ug/L	1	07/01/13	B3F2614	6020/200.8	
7439-92-1	Lead	ND	1.0	ug/L	1	07/01/13	B3F2614	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	06/26/13	B3F2412	7470/245.1	
7782-49-2	**Selenium**	**2.7**	1.0	ug/L	1	07/01/13	B3F2614	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/01/13	B3F2614	6020/200.8	
7440-66-6	Zinc	ND	5.0	ug/L	1	07/01/13	B3F2614	6020/200.8	

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Client ID: TMW-03

Lab ID: 1306226-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/28/13	B3F2813	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	

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TEL: (517) 335-9800
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Client ID: TMW-03

Lab ID: 1306226-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/28/13	B3F2813	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/28/13	B3F2813	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
Surrogate: Bromofluorobenzene			*102 %*	*85-115*		*06/28/13*	B3F2813	*8260*	
Surrogate: Dibromofluoromethane			*101 %*	*82.7-115*		*06/28/13*	B3F2813	*8260*	
Surrogate: Toluene-d8			*94.6 %*	*85-115*		*06/28/13*	B3F2813	*8260*	

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Client ID: TMW-03
Lab ID: 1306226-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ug/L	1	07/02/13	B3F2415	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	ug/L	1	07/02/13	B3F2415	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	ug/L	1	07/02/13	B3F2415	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/02/13	B3F2415	8270	
105-67-9	2,4-Dimethylphenol	ND	5.0	ug/L	1	07/02/13	B3F2415	8270	
51-28-5	2,4-Dinitrophenol	ND	25	ug/L	1	07/02/13	B3F2415	8270	
121-14-2	2,4-Dinitrotoluene	ND	5.0	ug/L	1	07/02/13	B3F2415	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.0	ug/L	1	07/02/13	B3F2415	8270	
95-51-2	2-Chloroaniline	ND	5.0	ug/L	1	07/02/13	B3F2415	8270	
91-58-7	2-Chloronaphthalene	ND	2.0	ug/L	1	07/02/13	B3F2415	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/02/13	B3F2415	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	20	ug/L	1	07/02/13	B3F2415	8270	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/02/13	B3F2415	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/02/13	B3F2415	8270	
88-74-4	2-Nitroaniline	ND	20	ug/L	1	07/02/13	B3F2415	8270	
88-75-5	2-Nitrophenol	ND	5.0	ug/L	1	07/02/13	B3F2415	8270	
108394,106445	3 & 4-Methylphenol	ND	20	ug/L	1	07/02/13	B3F2415	8270	
99-09-2	3-Nitroaniline	ND	20	ug/L	1	07/02/13	B3F2415	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	ug/L	1	07/02/13	B3F2415	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.0	ug/L	1	07/02/13	B3F2415	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/02/13	B3F2415	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
100-01-6	4-Nitroaniline	ND	20	ug/L	1	07/02/13	B3F2415	8270	
100-02-7	4-Nitrophenol	ND	25	ug/L	1	07/02/13	B3F2415	8270	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
62-53-3	Aniline	ND	4.0	ug/L	1	07/02/13	B3F2415	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
103-33-3	Azobenzene	ND	2.0	ug/L	1	07/02/13	B3F2415	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
100-51-6	Benzyl Alcohol	ND	50	ug/L	1	07/02/13	B3F2415	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.0	ug/L	1	07/02/13	B3F2415	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.0	ug/L	1	07/02/13	B3F2415	8270	
85-68-7	Butyl benzyl phthalate	ND	5.0	ug/L	1	07/02/13	B3F2415	8270	
86-74-8	Carbazole	ND	5.0	ug/L	1	07/02/13	B3F2415	8270	

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Client ID: TMW-03
Lab ID: 1306226-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	07/02/13	B3F2415	8270	
132-64-9	Dibenzofuran	ND	4.0	ug/L	1	07/02/13	B3F2415	8270	
84-66-2	Diethylphthalate	ND	5.0	ug/L	1	07/02/13	B3F2415	8270	
131-11-3	Dimethyl phthalate	ND	5.0	ug/L	1	07/02/13	B3F2415	8270	
84-74-2	Di-n-butyl phthalate	ND	5.0	ug/L	1	07/02/13	B3F2415	8270	
117-84-0	Di-n-octyl phthalate	ND	5.0	ug/L	1	07/02/13	B3F2415	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
86-73-7	Fluorene	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/02/13	B3F2415	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	07/02/13	B3F2415	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
121-69-7	N,N-dimethylaniline	ND	5.0	ug/L	1	07/02/13	B3F2415	8270	
91-20-3	Naphthalene	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
98-95-3	Nitrobenzene	ND	2.0	ug/L	1	07/02/13	B3F2415	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.0	ug/L	1	07/02/13	B3F2415	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.0	ug/L	1	07/02/13	B3F2415	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.0	ug/L	1	07/02/13	B3F2415	8270	
87-86-5	Pentachlorophenol	ND	20	ug/L	1	07/02/13	B3F2415	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
108-95-2	Phenol	ND	5.0	ug/L	1	07/02/13	B3F2415	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
110-86-1	Pyridine	ND	20	ug/L	1	07/02/13	B3F2415	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/02/13	B3F2415	8270	
Surrogate: 2,4,6-Tribromophenol			*97.3 %*	*33.8-115*		*07/02/13*	B3F2415	*8270*	
Surrogate: 2-Fluorobiphenyl			*67.4 %*	*24.1-115*		*07/02/13*	B3F2415	*8270*	
Surrogate: 2-Fluorophenol			*24.0 %*	*10-115*		*07/02/13*	B3F2415	*8270*	
Surrogate: Nitrobenzene-d5			*64.0 %*	*17.8-115*		*07/02/13*	B3F2415	*8270*	
Surrogate: Phenol-d6			*15.4 %*	*10-115*		*07/02/13*	B3F2415	*8270*	
Surrogate: p-Terphenyl-d14			*77.2 %*	*41.8-115*		*07/02/13*	B3F2415	*8270*	

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Client ID: TMW-03

Lab ID: 1306226-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	Available Cyanide	ND	0.002	mg/L	1	06/25/13	B3F2508	OIA-1677	
57-12-5	**Total Cyanide**	**0.011**	0.005	mg/L	1	06/25/13	B3F2507	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	Arsenic	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-39-3	**Barium**	**29**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-47-3	**Chromium**	**1.0**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-50-8	**Copper**	**1.9**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-92-1	**Lead**	**1.8**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	06/26/13	B3F2412	7470/245.1	
7782-49-2	Selenium	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-66-6	**Zinc**	**6.2**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	**1,1,1,2-Tetrachloroethane**	**48**	1.0	ug/L	1	06/28/13	B3F2813	8260	
71-55-6	**1,1,1-Trichloroethane**	**48**	1.0	ug/L	1	06/28/13	B3F2813	8260	
79-34-5	**1,1,2,2-Tetrachloroethane**	**48**	1.0	ug/L	1	06/28/13	B3F2813	8260	
79-00-5	**1,1,2-Trichloroethane**	**51**	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-34-3	**1,1-Dichloroethane**	**49**	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-35-4	**1,1-Dichloroethylene**	**51**	1.0	ug/L	1	06/28/13	B3F2813	8260	
87-61-6	**1,2,3-Trichlorobenzene**	**50**	5.0	ug/L	1	06/28/13	B3F2813	8260	
96-18-4	**1,2,3-Trichloropropane**	**48**	1.0	ug/L	1	06/28/13	B3F2813	8260	
526-73-8	**1,2,3-Trimethylbenzene**	**50**	1.0	ug/L	1	06/28/13	B3F2813	8260	
120-82-1	**1,2,4-Trichlorobenzene**	**49**	5.0	ug/L	1	06/28/13	B3F2813	8260	
95-63-6	**1,2,4-Trimethylbenzene**	**50**	1.0	ug/L	1	06/28/13	B3F2813	8260	
96-12-8	**1,2-Dibromo-3-chloropropane**	**44**	5.0	ug/L	1	06/28/13	B3F2813	8260	
106-93-4	**1,2-Dibromoethane**	**50**	1.0	ug/L	1	06/28/13	B3F2813	8260	
95-50-1	**1,2-Dichlorobenzene**	**48**	1.0	ug/L	1	06/28/13	B3F2813	8260	
107-06-2	**1,2-Dichloroethane**	**52**	1.0	ug/L	1	06/28/13	B3F2813	8260	
78-87-5	**1,2-Dichloropropane**	**48**	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-67-8	**1,3,5-Trimethylbenzene**	**49**	1.0	ug/L	1	06/28/13	B3F2813	8260	
541-73-1	**1,3-Dichlorobenzene**	**46**	1.0	ug/L	1	06/28/13	B3F2813	8260	
106-46-7	**1,4-Dichlorobenzene**	**47**	1.0	ug/L	1	06/28/13	B3F2813	8260	
78-93-3	**2-Butanone (MEK)**	**52**	5.0	ug/L	1	06/28/13	B3F2813	8260	
591-78-6	**2-Hexanone**	**55**	5.0	ug/L	1	06/28/13	B3F2813	8260	
91-57-6	**2-Methylnaphthalene**	**48**	5.0	ug/L	1	06/28/13	B3F2813	8260	X
67-64-1	**2-Propanone (acetone)**	**59**	20	ug/L	1	06/28/13	B3F2813	8260	A06
108-10-1	**4-Methyl-2-pentanone (MIBK)**	**55**	5.0	ug/L	1	06/28/13	B3F2813	8260	
107-13-1	**Acrylonitrile**	**51**	5.0	ug/L	1	06/28/13	B3F2813	8260	
71-43-2	**Benzene**	**50**	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-86-1	**Bromobenzene**	**46**	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-97-5	**Bromochloromethane**	**51**	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-27-4	**Bromodichloromethane**	**47**	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-25-2	**Bromoform**	**42**	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-83-9	**Bromomethane**	**41**	5.0	ug/L	1	06/28/13	B3F2813	8260	
75-15-0	**Carbon disulfide**	**49**	1.0	ug/L	1	06/28/13	B3F2813	8260	
56-23-5	**Carbon tetrachloride**	**47**	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-90-7	**Chlorobenzene**	**48**	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-00-3	**Chloroethane**	**53**	5.0	ug/L	1	06/28/13	B3F2813	8260	
67-66-3	**Chloroform**	**50**	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-87-3	**Chloromethane**	**67**	5.0	ug/L	1	06/28/13	B3F2813	8260	A04, A06, A11

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Lab ID: 1306226-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
156-59-2	**cis-1,2-Dichloroethylene**	**48**	1.0	ug/L	1	06/28/13	B3F2813	8260	
10061-01-5	**cis-1,3-Dichloropropylene**	**49**	1.0	ug/L	1	06/28/13	B3F2813	8260	
110-82-7	**Cyclohexane**	**47**	5.0	ug/L	1	06/28/13	B3F2813	8260	
124-48-1	**Dibromochloromethane**	**46**	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-95-3	**Dibromomethane**	**50**	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-71-8	**Dichlorodifluoromethane**	**86**	5.0	ug/L	1	06/28/13	B3F2813	8260	A04, A06, A11
60-29-7	**Diethyl ether**	**51**	5.0	ug/L	1	06/28/13	B3F2813	8260	
108-20-3	**Diisopropyl Ether**	**51**	5.0	ug/L	1	06/28/13	B3F2813	8260	
100-41-4	**Ethylbenzene**	**51**	1.0	ug/L	1	06/28/13	B3F2813	8260	
637-92-3	**Ethyltertiarybutylether**	**50**	5.0	ug/L	1	06/28/13	B3F2813	8260	
67-72-1	**Hexachloroethane**	**39**	5.0	ug/L	1	06/28/13	B3F2813	8260	
98-82-8	**Isopropylbenzene**	**50**	1.0	ug/L	1	06/28/13	B3F2813	8260	
1330-20-7	**m & p - Xylene**	**100**	2.0	ug/L	1	06/28/13	B3F2813	8260	
74-88-4	**Methyl iodide**	**61**	1.0	ug/L	1	06/28/13	B3F2813	8260	A06
75-09-2	**Methylene chloride**	**57**	5.0	ug/L	1	06/28/13	B3F2813	8260	
1634-04-4	**Methyltertiarybutylether**	**49**	1.0	ug/L	1	06/28/13	B3F2813	8260	
91-20-3	**Naphthalene**	**51**	5.0	ug/L	1	06/28/13	B3F2813	8260	X
104-51-8	**n-Butylbenzene**	**51**	1.0	ug/L	1	06/28/13	B3F2813	8260	
103-65-1	**n-Propylbenzene**	**49**	1.0	ug/L	1	06/28/13	B3F2813	8260	
95-47-6	**o-Xylene**	**52**	1.0	ug/L	1	06/28/13	B3F2813	8260	
99-87-6	**p-Isopropyl toluene**	**50**	1.0	ug/L	1	06/28/13	B3F2813	8260	
135-98-8	**sec-Butylbenzene**	**50**	1.0	ug/L	1	06/28/13	B3F2813	8260	
100-42-5	**Styrene**	**57**	1.0	ug/L	1	06/28/13	B3F2813	8260	
98-06-6	**tert-Butylbenzene**	**50**	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-65-0	**tertiary Butyl Alcohol**	**240**	50	ug/L	1	06/28/13	B3F2813	8260	
994-05-8	**tertiaryAmylmethylether**	**52**	5.0	ug/L	1	06/28/13	B3F2813	8260	
127-18-4	**Tetrachloroethylene**	**48**	1.0	ug/L	1	06/28/13	B3F2813	8260	
109-99-9	**Tetrahydrofuran**	**52**	5.0	ug/L	1	06/28/13	B3F2813	8260	
108-88-3	**Toluene**	**49**	1.0	ug/L	1	06/28/13	B3F2813	8260	
156-60-5	**trans-1,2-Dichloroethylene**	**52**	1.0	ug/L	1	06/28/13	B3F2813	8260	
10061-02-6	**trans-1,3-Dichloropropylene**	**50**	1.0	ug/L	1	06/28/13	B3F2813	8260	
110-57-6	**trans-1,4-Dichloro-2-butene**	**52**	5.0	ug/L	1	06/28/13	B3F2813	8260	
79-01-6	**Trichloroethylene**	**49**	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-69-4	**Trichlorofluoromethane**	**51**	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-01-4	**Vinyl chloride**	**55**	1.0	ug/L	1	06/28/13	B3F2813	8260	
Surrogate: Bromofluorobenzene			*96.1 %*	*85-115*		*06/28/13*	B3F2813	*8260*	
Surrogate: Dibromofluoromethane			*102 %*	*82.7-115*		*06/28/13*	B3F2813	*8260*	

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Organics-Volatiles									
Surrogate: Toluene-d8			*101 %*	*85-115*		*06/28/13*	B3F2813	*8260*	
Organics-Semivolatiles									
120-82-1	**1,2,4-Trichlorobenzene**	**27**	2.0	ug/L	1	07/02/13	B3F2415	8270	
95-95-4	**2,4,5-Trichlorophenol**	**78**	5.1	ug/L	1	07/02/13	B3F2415	8270	
88-06-2	**2,4,6-Trichlorophenol**	**76**	4.1	ug/L	1	07/02/13	B3F2415	8270	
120-83-2	**2,4-Dichlorophenol**	**68**	10	ug/L	1	07/02/13	B3F2415	8270	
105-67-9	**2,4-Dimethylphenol**	**64**	5.1	ug/L	1	07/02/13	B3F2415	8270	
51-28-5	**2,4-Dinitrophenol**	**64**	26	ug/L	1	07/02/13	B3F2415	8270	
121-14-2	**2,4-Dinitrotoluene**	**40**	5.1	ug/L	1	07/02/13	B3F2415	8270	
606-20-2	**2,6-Dinitrotoluene**	**39**	5.1	ug/L	1	07/02/13	B3F2415	8270	
95-51-2	**2-Chloroaniline**	**31**	5.1	ug/L	1	07/02/13	B3F2415	8270	
91-58-7	**2-Chloronaphthalene**	**32**	2.0	ug/L	1	07/02/13	B3F2415	8270	
95-57-8	**2-Chlorophenol**	**50**	10	ug/L	1	07/02/13	B3F2415	8270	
534-52-1	**2-Methyl-4,6-dinitrophenol**	**78**	20	ug/L	1	07/02/13	B3F2415	8270	
91-57-6	**2-Methylnaphthalene**	**31**	5.1	ug/L	1	07/02/13	B3F2415	8270	
95-48-7	**2-Methylphenol (o-Cresol)**	**45**	10	ug/L	1	07/02/13	B3F2415	8270	
88-74-4	**2-Nitroaniline**	**36**	20	ug/L	1	07/02/13	B3F2415	8270	
88-75-5	**2-Nitrophenol**	**67**	5.1	ug/L	1	07/02/13	B3F2415	8270	
108394,106445	**3 & 4-Methylphenol**	**40**	20	ug/L	1	07/02/13	B3F2415	8270	
99-09-2	**3-Nitroaniline**	**35**	20	ug/L	1	07/02/13	B3F2415	8270	
101-55-3	**4-Bromophenyl phenyl ether**	**37**	2.0	ug/L	1	07/02/13	B3F2415	8270	
59-50-7	**4-Chloro-3-methyl-phenol**	**69**	5.1	ug/L	1	07/02/13	B3F2415	8270	
106-47-8	**4-Chloroaniline**	**32**	10	ug/L	1	07/02/13	B3F2415	8270	
7005-72-3	**4-Chlorodiphenylether**	**36**	1.0	ug/L	1	07/02/13	B3F2415	8270	
100-01-6	**4-Nitroaniline**	**38**	20	ug/L	1	07/02/13	B3F2415	8270	
100-02-7	**4-Nitrophenol**	**20**	26	ug/L	1	07/02/13	B3F2415	8270	T
83-32-9	**Acenaphthene**	**35**	1.0	ug/L	1	07/02/13	B3F2415	8270	
208-96-8	**Acenaphthylene**	**36**	1.0	ug/L	1	07/02/13	B3F2415	8270	
62-53-3	**Aniline**	**22**	4.1	ug/L	1	07/02/13	B3F2415	8270	
120-12-7	**Anthracene**	**39**	1.0	ug/L	1	07/02/13	B3F2415	8270	
103-33-3	**Azobenzene**	**36**	2.0	ug/L	1	07/02/13	B3F2415	8270	
56-55-3	**Benz[a]anthracene**	**30**	1.0	ug/L	1	07/02/13	B3F2415	8270	
50-32-8	**Benzo[a]pyrene**	**26**	1.0	ug/L	1	07/02/13	B3F2415	8270	
205-99-2	**Benzo[b]fluoranthene**	**32**	1.0	ug/L	1	07/02/13	B3F2415	8270	
191-24-2	**Benzo[g,h,i]perylene**	**21**	1.0	ug/L	1	07/02/13	B3F2415	8270	
207-08-9	**Benzo[k]fluoranthene**	**30**	1.0	ug/L	1	07/02/13	B3F2415	8270	
100-51-6	**Benzyl Alcohol**	**44**	51	ug/L	1	07/02/13	B3F2415	8270	T
111-91-1	**Bis(2-chloroethoxy)methane**	**31**	2.0	ug/L	1	07/02/13	B3F2415	8270	

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P.O. Box 30270
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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-03 MS

Lab ID: 1306226-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
111-44-4	**Bis(2-chloroethyl)ether**	**29**	1.0	ug/L	1	07/02/13	B3F2415	8270	
108-60-1	**Bis(2-chloroisopropyl)ether**	**29**	1.0	ug/L	1	07/02/13	B3F2415	8270	
117-81-7	**Bis(2-ethylhexyl)phthalate**	**25**	5.1	ug/L	1	07/02/13	B3F2415	8270	
85-68-7	**Butyl benzyl phthalate**	**35**	5.1	ug/L	1	07/02/13	B3F2415	8270	
86-74-8	**Carbazole**	**39**	5.1	ug/L	1	07/02/13	B3F2415	8270	
218-01-9	**Chrysene**	**28**	1.0	ug/L	1	07/02/13	B3F2415	8270	
53-70-3	**Dibenz[a,h]anthracene**	**23**	2.0	ug/L	1	07/02/13	B3F2415	8270	
132-64-9	**Dibenzofuran**	**34**	4.1	ug/L	1	07/02/13	B3F2415	8270	
84-66-2	**Diethylphthalate**	**43**	5.1	ug/L	1	07/02/13	B3F2415	8270	
131-11-3	**Dimethyl phthalate**	**38**	5.1	ug/L	1	07/02/13	B3F2415	8270	
84-74-2	**Di-n-butyl phthalate**	**37**	5.1	ug/L	1	07/02/13	B3F2415	8270	
117-84-0	**Di-n-octyl phthalate**	**22**	5.1	ug/L	1	07/02/13	B3F2415	8270	
206-44-0	**Fluoranthene**	**37**	1.0	ug/L	1	07/02/13	B3F2415	8270	
86-73-7	**Fluorene**	**37**	1.0	ug/L	1	07/02/13	B3F2415	8270	
118-74-1	**Hexachlorobenzene**	**34**	1.0	ug/L	1	07/02/13	B3F2415	8270	
87-68-3	**Hexachlorobutadiene**	**26**	1.0	ug/L	1	07/02/13	B3F2415	8270	
77-47-4	**Hexachlorocyclopentadiene**	**21**	10	ug/L	1	07/02/13	B3F2415	8270	
67-72-1	**Hexachloroethane**	**21**	1.0	ug/L	1	07/02/13	B3F2415	8270	
193-39-5	**Indeno(1,2,3-c,d)pyrene**	**18**	2.0	ug/L	1	07/02/13	B3F2415	8270	
78-59-1	**Isophorone**	**31**	1.0	ug/L	1	07/02/13	B3F2415	8270	
121-69-7	**N,N-dimethylaniline**	**28**	5.1	ug/L	1	07/02/13	B3F2415	8270	
91-20-3	**Naphthalene**	**29**	1.0	ug/L	1	07/02/13	B3F2415	8270	
98-95-3	**Nitrobenzene**	**32**	2.0	ug/L	1	07/02/13	B3F2415	8270	
100-61-8	**N-methylaniline**	**30**	1.0	ug/L	1	07/02/13	B3F2415	8270	
67-75-9	**N-Nitrosodimethylamine**	**13**	5.1	ug/L	1	07/02/13	B3F2415	8270	
621-64-7	**N-Nitrosodi-n-propylamine**	**36**	2.0	ug/L	1	07/02/13	B3F2415	8270	
86-30-6	**N-Nitrosodiphenylamine**	**40**	2.0	ug/L	1	07/02/13	B3F2415	8270	
87-86-5	**Pentachlorophenol**	**82**	20	ug/L	1	07/02/13	B3F2415	8270	
85-01-8	**Phenanthrene**	**38**	1.0	ug/L	1	07/02/13	B3F2415	8270	
108-95-2	**Phenol**	**18**	5.1	ug/L	1	07/02/13	B3F2415	8270	
129-00-0	**Pyrene**	**35**	1.0	ug/L	1	07/02/13	B3F2415	8270	
110-86-1	**Pyridine**	**9.9**	20	ug/L	1	07/02/13	B3F2415	8270	T
632-22-4	**Tetramethylurea**	**21**	1.0	ug/L	1	07/02/13	B3F2415	8270	
Surrogate: 2,4,6-Tribromophenol			*94.7 %*	*33.8-115*		*07/02/13*	B3F2415	*8270*	
Surrogate: 2-Fluorobiphenyl			*61.8 %*	*24.1-115*		*07/02/13*	B3F2415	*8270*	
Surrogate: 2-Fluorophenol			*22.6 %*	*10-115*		*07/02/13*	B3F2415	*8270*	
Surrogate: Nitrobenzene-d5			*60.5 %*	*17.8-115*		*07/02/13*	B3F2415	*8270*	
Surrogate: Phenol-d6			*20.0 %*	*10-115*		*07/02/13*	B3F2415	*8270*	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
Surrogate: p-Terphenyl-d14			*58.1 %*	*41.8-115*		*07/02/13*	B3F2415	*8270*	
Inorganics-General Chemistry									
57-12-5	**Available Cyanide**	**0.052**	0.002	mg/L	1	06/25/13	B3F2508	OIA-1677	
57-12-5	**Total Cyanide**	**0.11**	0.005	mg/L	1	06/25/13	B3F2507	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	**Arsenic**	**43**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-39-3	**Barium**	**78**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-43-9	**Cadmium**	**49**	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-47-3	**Chromium**	**51**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-50-8	**Copper**	**50**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-92-1	**Lead**	**51**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-97-6	**Mercury**	**4.1**	0.2	ug/L	1	06/26/13	B3F2412	7470/245.1	
7782-49-2	**Selenium**	**42**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-22-4	**Silver**	**49**	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-66-6	**Zinc**	**52**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	**1,1,1,2-Tetrachloroethane**	**46**	1.0	ug/L	1	06/28/13	B3F2813	8260	
71-55-6	**1,1,1-Trichloroethane**	**47**	1.0	ug/L	1	06/28/13	B3F2813	8260	
79-34-5	**1,1,2,2-Tetrachloroethane**	**49**	1.0	ug/L	1	06/28/13	B3F2813	8260	
79-00-5	**1,1,2-Trichloroethane**	**50**	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-34-3	**1,1-Dichloroethane**	**48**	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-35-4	**1,1-Dichloroethylene**	**49**	1.0	ug/L	1	06/28/13	B3F2813	8260	
87-61-6	**1,2,3-Trichlorobenzene**	**51**	5.0	ug/L	1	06/28/13	B3F2813	8260	
96-18-4	**1,2,3-Trichloropropane**	**48**	1.0	ug/L	1	06/28/13	B3F2813	8260	
526-73-8	**1,2,3-Trimethylbenzene**	**49**	1.0	ug/L	1	06/28/13	B3F2813	8260	
120-82-1	**1,2,4-Trichlorobenzene**	**51**	5.0	ug/L	1	06/28/13	B3F2813	8260	
95-63-6	**1,2,4-Trimethylbenzene**	**50**	1.0	ug/L	1	06/28/13	B3F2813	8260	
96-12-8	**1,2-Dibromo-3-chloropropane**	**46**	5.0	ug/L	1	06/28/13	B3F2813	8260	
106-93-4	**1,2-Dibromoethane**	**49**	1.0	ug/L	1	06/28/13	B3F2813	8260	
95-50-1	**1,2-Dichlorobenzene**	**46**	1.0	ug/L	1	06/28/13	B3F2813	8260	
107-06-2	**1,2-Dichloroethane**	**50**	1.0	ug/L	1	06/28/13	B3F2813	8260	
78-87-5	**1,2-Dichloropropane**	**47**	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-67-8	**1,3,5-Trimethylbenzene**	**49**	1.0	ug/L	1	06/28/13	B3F2813	8260	
541-73-1	**1,3-Dichlorobenzene**	**47**	1.0	ug/L	1	06/28/13	B3F2813	8260	
106-46-7	**1,4-Dichlorobenzene**	**46**	1.0	ug/L	1	06/28/13	B3F2813	8260	
78-93-3	**2-Butanone (MEK)**	**53**	5.0	ug/L	1	06/28/13	B3F2813	8260	
591-78-6	**2-Hexanone**	**54**	5.0	ug/L	1	06/28/13	B3F2813	8260	
91-57-6	**2-Methylnaphthalene**	**54**	5.0	ug/L	1	06/28/13	B3F2813	8260	X
67-64-1	**2-Propanone (acetone)**	**61**	20	ug/L	1	06/28/13	B3F2813	8260	A06
108-10-1	**4-Methyl-2-pentanone (MIBK)**	**55**	5.0	ug/L	1	06/28/13	B3F2813	8260	
107-13-1	**Acrylonitrile**	**52**	5.0	ug/L	1	06/28/13	B3F2813	8260	
71-43-2	**Benzene**	**48**	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-86-1	**Bromobenzene**	**45**	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-97-5	**Bromochloromethane**	**47**	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-27-4	**Bromodichloromethane**	**45**	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-25-2	**Bromoform**	**43**	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-83-9	**Bromomethane**	**52**	5.0	ug/L	1	06/28/13	B3F2813	8260	
75-15-0	**Carbon disulfide**	**47**	1.0	ug/L	1	06/28/13	B3F2813	8260	
56-23-5	**Carbon tetrachloride**	**45**	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-90-7	**Chlorobenzene**	**47**	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-00-3	**Chloroethane**	**54**	5.0	ug/L	1	06/28/13	B3F2813	8260	
67-66-3	**Chloroform**	**48**	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-87-3	**Chloromethane**	**68**	5.0	ug/L	1	06/28/13	B3F2813	8260	A04, A06, A11

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
156-59-2	**cis-1,2-Dichloroethylene**	**47**	1.0	ug/L	1	06/28/13	B3F2813	8260	
10061-01-5	**cis-1,3-Dichloropropylene**	**49**	1.0	ug/L	1	06/28/13	B3F2813	8260	
110-82-7	**Cyclohexane**	**46**	5.0	ug/L	1	06/28/13	B3F2813	8260	
124-48-1	**Dibromochloromethane**	**45**	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-95-3	**Dibromomethane**	**48**	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-71-8	**Dichlorodifluoromethane**	**90**	5.0	ug/L	1	06/28/13	B3F2813	8260	A04, A06, A11
60-29-7	**Diethyl ether**	**51**	5.0	ug/L	1	06/28/13	B3F2813	8260	
108-20-3	**Diisopropyl Ether**	**51**	5.0	ug/L	1	06/28/13	B3F2813	8260	
100-41-4	**Ethylbenzene**	**49**	1.0	ug/L	1	06/28/13	B3F2813	8260	
637-92-3	**Ethyltertiarybutylether**	**51**	5.0	ug/L	1	06/28/13	B3F2813	8260	
67-72-1	**Hexachloroethane**	**39**	5.0	ug/L	1	06/28/13	B3F2813	8260	
98-82-8	**Isopropylbenzene**	**49**	1.0	ug/L	1	06/28/13	B3F2813	8260	
1330-20-7	**m & p - Xylene**	**96**	2.0	ug/L	1	06/28/13	B3F2813	8260	
74-88-4	**Methyl iodide**	**69**	1.0	ug/L	1	06/28/13	B3F2813	8260	A04, A06
75-09-2	**Methylene chloride**	**56**	5.0	ug/L	1	06/28/13	B3F2813	8260	
1634-04-4	**Methyltertiarybutylether**	**50**	1.0	ug/L	1	06/28/13	B3F2813	8260	
91-20-3	**Naphthalene**	**53**	5.0	ug/L	1	06/28/13	B3F2813	8260	X
104-51-8	**n-Butylbenzene**	**50**	1.0	ug/L	1	06/28/13	B3F2813	8260	
103-65-1	**n-Propylbenzene**	**49**	1.0	ug/L	1	06/28/13	B3F2813	8260	
95-47-6	**o-Xylene**	**50**	1.0	ug/L	1	06/28/13	B3F2813	8260	
99-87-6	**p-Isopropyl toluene**	**50**	1.0	ug/L	1	06/28/13	B3F2813	8260	
135-98-8	**sec-Butylbenzene**	**50**	1.0	ug/L	1	06/28/13	B3F2813	8260	
100-42-5	**Styrene**	**53**	1.0	ug/L	1	06/28/13	B3F2813	8260	
98-06-6	**tert-Butylbenzene**	**49**	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-65-0	**tertiary Butyl Alcohol**	**260**	50	ug/L	1	06/28/13	B3F2813	8260	
994-05-8	**tertiaryAmylmethylether**	**50**	5.0	ug/L	1	06/28/13	B3F2813	8260	
127-18-4	**Tetrachloroethylene**	**47**	1.0	ug/L	1	06/28/13	B3F2813	8260	
109-99-9	**Tetrahydrofuran**	**52**	5.0	ug/L	1	06/28/13	B3F2813	8260	
108-88-3	**Toluene**	**47**	1.0	ug/L	1	06/28/13	B3F2813	8260	
156-60-5	**trans-1,2-Dichloroethylene**	**51**	1.0	ug/L	1	06/28/13	B3F2813	8260	
10061-02-6	**trans-1,3-Dichloropropylene**	**50**	1.0	ug/L	1	06/28/13	B3F2813	8260	
110-57-6	**trans-1,4-Dichloro-2-butene**	**51**	5.0	ug/L	1	06/28/13	B3F2813	8260	
79-01-6	**Trichloroethylene**	**47**	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-69-4	**Trichlorofluoromethane**	**52**	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-01-4	**Vinyl chloride**	**58**	1.0	ug/L	1	06/28/13	B3F2813	8260	
Surrogate: Bromofluorobenzene			*95.8 %*	*85-115*		*06/28/13*	B3F2813	*8260*	
Surrogate: Dibromofluoromethane			*102 %*	*82.7-115*		*06/28/13*	B3F2813	*8260*	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
Surrogate: Toluene-d8			*98.4 %*	*85-115*		*06/28/13*	B3F2813	*8260*	
Organics-Semivolatiles									
120-82-1	**1,2,4-Trichlorobenzene**	**26**	2.0	ug/L	1	07/02/13	B3F2415	8270	
95-95-4	**2,4,5-Trichlorophenol**	**76**	5.1	ug/L	1	07/02/13	B3F2415	8270	
88-06-2	**2,4,6-Trichlorophenol**	**73**	4.1	ug/L	1	07/02/13	B3F2415	8270	
120-83-2	**2,4-Dichlorophenol**	**66**	10	ug/L	1	07/02/13	B3F2415	8270	
105-67-9	**2,4-Dimethylphenol**	**62**	5.1	ug/L	1	07/02/13	B3F2415	8270	
51-28-5	**2,4-Dinitrophenol**	**61**	26	ug/L	1	07/02/13	B3F2415	8270	
121-14-2	**2,4-Dinitrotoluene**	**39**	5.1	ug/L	1	07/02/13	B3F2415	8270	
606-20-2	**2,6-Dinitrotoluene**	**38**	5.1	ug/L	1	07/02/13	B3F2415	8270	
95-51-2	**2-Chloroaniline**	**30**	5.1	ug/L	1	07/02/13	B3F2415	8270	
91-58-7	**2-Chloronaphthalene**	**31**	2.0	ug/L	1	07/02/13	B3F2415	8270	
95-57-8	**2-Chlorophenol**	**44**	10	ug/L	1	07/02/13	B3F2415	8270	
534-52-1	**2-Methyl-4,6-dinitrophenol**	**74**	20	ug/L	1	07/02/13	B3F2415	8270	
91-57-6	**2-Methylnaphthalene**	**30**	5.1	ug/L	1	07/02/13	B3F2415	8270	
95-48-7	**2-Methylphenol (o-Cresol)**	**42**	10	ug/L	1	07/02/13	B3F2415	8270	
88-74-4	**2-Nitroaniline**	**36**	20	ug/L	1	07/02/13	B3F2415	8270	
88-75-5	**2-Nitrophenol**	**64**	5.1	ug/L	1	07/02/13	B3F2415	8270	
108394,106445	**3 & 4-Methylphenol**	**38**	20	ug/L	1	07/02/13	B3F2415	8270	
99-09-2	**3-Nitroaniline**	**36**	20	ug/L	1	07/02/13	B3F2415	8270	
101-55-3	**4-Bromophenyl phenyl ether**	**36**	2.0	ug/L	1	07/02/13	B3F2415	8270	
59-50-7	**4-Chloro-3-methyl-phenol**	**66**	5.1	ug/L	1	07/02/13	B3F2415	8270	
106-47-8	**4-Chloroaniline**	**31**	10	ug/L	1	07/02/13	B3F2415	8270	
7005-72-3	**4-Chlorodiphenylether**	**37**	1.0	ug/L	1	07/02/13	B3F2415	8270	
100-01-6	**4-Nitroaniline**	**39**	20	ug/L	1	07/02/13	B3F2415	8270	
100-02-7	**4-Nitrophenol**	**21**	26	ug/L	1	07/02/13	B3F2415	8270	T
83-32-9	**Acenaphthene**	**35**	1.0	ug/L	1	07/02/13	B3F2415	8270	
208-96-8	**Acenaphthylene**	**37**	1.0	ug/L	1	07/02/13	B3F2415	8270	
62-53-3	**Aniline**	**20**	4.1	ug/L	1	07/02/13	B3F2415	8270	
120-12-7	**Anthracene**	**39**	1.0	ug/L	1	07/02/13	B3F2415	8270	
103-33-3	**Azobenzene**	**34**	2.0	ug/L	1	07/02/13	B3F2415	8270	
56-55-3	**Benz[a]anthracene**	**34**	1.0	ug/L	1	07/02/13	B3F2415	8270	
50-32-8	**Benzo[a]pyrene**	**31**	1.0	ug/L	1	07/02/13	B3F2415	8270	
205-99-2	**Benzo[b]fluoranthene**	**36**	1.0	ug/L	1	07/02/13	B3F2415	8270	
191-24-2	**Benzo[g,h,i]perylene**	**25**	1.0	ug/L	1	07/02/13	B3F2415	8270	
207-08-9	**Benzo[k]fluoranthene**	**33**	1.0	ug/L	1	07/02/13	B3F2415	8270	
100-51-6	**Benzyl Alcohol**	**40**	51	ug/L	1	07/02/13	B3F2415	8270	T
111-91-1	**Bis(2-chloroethoxy)methane**	**31**	2.0	ug/L	1	07/02/13	B3F2415	8270	

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ENVIRONMENTAL LABORATORY

P.O. Box 30270
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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-03 MSD

Lab ID: 1306226-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
111-44-4	**Bis(2-chloroethyl)ether**	**27**	1.0	ug/L	1	07/02/13	B3F2415	8270	
108-60-1	**Bis(2-chloroisopropyl)ether**	**27**	1.0	ug/L	1	07/02/13	B3F2415	8270	
117-81-7	**Bis(2-ethylhexyl)phthalate**	**30**	5.1	ug/L	1	07/02/13	B3F2415	8270	
85-68-7	**Butyl benzyl phthalate**	**37**	5.1	ug/L	1	07/02/13	B3F2415	8270	
86-74-8	**Carbazole**	**38**	5.1	ug/L	1	07/02/13	B3F2415	8270	
218-01-9	**Chrysene**	**33**	1.0	ug/L	1	07/02/13	B3F2415	8270	
53-70-3	**Dibenz[a,h]anthracene**	**27**	2.0	ug/L	1	07/02/13	B3F2415	8270	
132-64-9	**Dibenzofuran**	**35**	4.1	ug/L	1	07/02/13	B3F2415	8270	
84-66-2	**Diethylphthalate**	**44**	5.1	ug/L	1	07/02/13	B3F2415	8270	
131-11-3	**Dimethyl phthalate**	**38**	5.1	ug/L	1	07/02/13	B3F2415	8270	
84-74-2	**Di-n-butyl phthalate**	**39**	5.1	ug/L	1	07/02/13	B3F2415	8270	
117-84-0	**Di-n-octyl phthalate**	**26**	5.1	ug/L	1	07/02/13	B3F2415	8270	
206-44-0	**Fluoranthene**	**39**	1.0	ug/L	1	07/02/13	B3F2415	8270	
86-73-7	**Fluorene**	**38**	1.0	ug/L	1	07/02/13	B3F2415	8270	
118-74-1	**Hexachlorobenzene**	**36**	1.0	ug/L	1	07/02/13	B3F2415	8270	
87-68-3	**Hexachlorobutadiene**	**25**	1.0	ug/L	1	07/02/13	B3F2415	8270	
77-47-4	**Hexachlorocyclopentadiene**	**20**	10	ug/L	1	07/02/13	B3F2415	8270	
67-72-1	**Hexachloroethane**	**20**	1.0	ug/L	1	07/02/13	B3F2415	8270	
193-39-5	**Indeno(1,2,3-c,d)pyrene**	**21**	2.0	ug/L	1	07/02/13	B3F2415	8270	
78-59-1	**Isophorone**	**30**	1.0	ug/L	1	07/02/13	B3F2415	8270	
121-69-7	**N,N-dimethylaniline**	**27**	5.1	ug/L	1	07/02/13	B3F2415	8270	
91-20-3	**Naphthalene**	**28**	1.0	ug/L	1	07/02/13	B3F2415	8270	
98-95-3	**Nitrobenzene**	**31**	2.0	ug/L	1	07/02/13	B3F2415	8270	
100-61-8	**N-methylaniline**	**28**	1.0	ug/L	1	07/02/13	B3F2415	8270	
67-75-9	**N-Nitrosodimethylamine**	**12**	5.1	ug/L	1	07/02/13	B3F2415	8270	
621-64-7	**N-Nitrosodi-n-propylamine**	**34**	2.0	ug/L	1	07/02/13	B3F2415	8270	
86-30-6	**N-Nitrosodiphenylamine**	**38**	2.0	ug/L	1	07/02/13	B3F2415	8270	
87-86-5	**Pentachlorophenol**	**79**	20	ug/L	1	07/02/13	B3F2415	8270	
85-01-8	**Phenanthrene**	**38**	1.0	ug/L	1	07/02/13	B3F2415	8270	
108-95-2	**Phenol**	**17**	5.1	ug/L	1	07/02/13	B3F2415	8270	
129-00-0	**Pyrene**	**36**	1.0	ug/L	1	07/02/13	B3F2415	8270	
110-86-1	**Pyridine**	**9.5**	20	ug/L	1	07/02/13	B3F2415	8270	T
632-22-4	**Tetramethylurea**	**19**	1.0	ug/L	1	07/02/13	B3F2415	8270	
Surrogate: 2,4,6-Tribromophenol			*88.8 %*	*33.8-115*		*07/02/13*	B3F2415	*8270*	
Surrogate: 2-Fluorobiphenyl			*60.3 %*	*24.1-115*		*07/02/13*	B3F2415	*8270*	
Surrogate: 2-Fluorophenol			*24.0 %*	*10-115*		*07/02/13*	B3F2415	*8270*	
Surrogate: Nitrobenzene-d5			*57.4 %*	*17.8-115*		*07/02/13*	B3F2415	*8270*	
Surrogate: Phenol-d6			*18.7 %*	*10-115*		*07/02/13*	B3F2415	*8270*	

Lab Work Order # 1306226

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Client ID: TMW-03 MSD

Lab ID: 1306226-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
Surrogate: p-Terphenyl-d14			*64.5 %*	*41.8-115*		*07/02/13*	B3F2415	*8270*	
Inorganics-General Chemistry									
57-12-5	**Available Cyanide**	**0.054**	0.002	mg/L	1	06/25/13	B3F2508	OIA-1677	
57-12-5	**Total Cyanide**	**0.11**	0.005	mg/L	1	06/25/13	B3F2507	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	**Arsenic**	**43**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-39-3	**Barium**	**79**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-43-9	**Cadmium**	**49**	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-47-3	**Chromium**	**49**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-50-8	**Copper**	**48**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-92-1	**Lead**	**50**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-97-6	**Mercury**	**4.1**	0.2	ug/L	1	06/26/13	B3F2412	7470/245.1	
7782-49-2	**Selenium**	**42**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-22-4	**Silver**	**48**	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-66-6	**Zinc**	**50**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	

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Client ID: TMW-04

Lab ID: 1306226-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
526-73-8	**1,2,3-Trimethylbenzene**	**3.0**	1.0	ug/L	1	06/28/13	B3F2813	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
95-63-6	**1,2,4-Trimethylbenzene**	**5.9**	1.0	ug/L	1	06/28/13	B3F2813	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-67-8	**1,3,5-Trimethylbenzene**	**3.8**	1.0	ug/L	1	06/28/13	B3F2813	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/28/13	B3F2813	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	

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Client ID: TMW-04
Lab ID: 1306226-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/28/13	B3F2813	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
91-20-3	**Naphthalene**	**180**	50	ug/L	10	06/30/13	B3F2813	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
95-47-6	**o-Xylene**	**1.2**	1.0	ug/L	1	06/28/13	B3F2813	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/28/13	B3F2813	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
Surrogate: Bromofluorobenzene			*96.8 %*	*85-115*		*06/28/13*	B3F2813	*8260*	
Surrogate: Dibromofluoromethane			*103 %*	*82.7-115*		*06/28/13*	B3F2813	*8260*	
Surrogate: Toluene-d8			*99.4 %*	*85-115*		*06/28/13*	B3F2813	*8260*	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	ug/L	1	07/03/13	B3F2415	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/03/13	B3F2415	8270	
105-67-9	2,4-Dimethylphenol	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
51-28-5	2,4-Dinitrophenol	ND	25	ug/L	1	07/03/13	B3F2415	8270	A05
121-14-2	2,4-Dinitrotoluene	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
95-51-2	2-Chloroaniline	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
91-58-7	2-Chloronaphthalene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/03/13	B3F2415	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	20	ug/L	1	07/03/13	B3F2415	8270	
91-57-6	2-Methylnaphthalene	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/03/13	B3F2415	8270	
88-74-4	2-Nitroaniline	ND	20	ug/L	1	07/03/13	B3F2415	8270	
88-75-5	2-Nitrophenol	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
108394,106445	3 & 4-Methylphenol	ND	20	ug/L	1	07/03/13	B3F2415	8270	
99-09-2	3-Nitroaniline	ND	20	ug/L	1	07/03/13	B3F2415	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/03/13	B3F2415	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
100-01-6	4-Nitroaniline	ND	20	ug/L	1	07/03/13	B3F2415	8270	
100-02-7	4-Nitrophenol	ND	25	ug/L	1	07/03/13	B3F2415	8270	
83-32-9	**Acenaphthene**	**2.4**	1.0	ug/L	1	07/03/13	B3F2415	8270	
208-96-8	**Acenaphthylene**	**3.8**	1.0	ug/L	1	07/03/13	B3F2415	8270	
62-53-3	Aniline	ND	4.0	ug/L	1	07/03/13	B3F2415	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
103-33-3	Azobenzene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
100-51-6	Benzyl Alcohol	ND	51	ug/L	1	07/03/13	B3F2415	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
85-68-7	Butyl benzyl phthalate	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
86-74-8	**Carbazole**	**11**	5.1	ug/L	1	07/03/13	B3F2415	8270	

STATE OF MICHIGAN
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ENVIRONMENTAL LABORATORY

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-04

Lab ID: 1306226-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
132-64-9	Dibenzofuran	ND	4.0	ug/L	1	07/03/13	B3F2415	8270	
84-66-2	Diethylphthalate	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
131-11-3	Dimethyl phthalate	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
84-74-2	Di-n-butyl phthalate	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
117-84-0	Di-n-octyl phthalate	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
86-73-7	Fluorene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/03/13	B3F2415	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
121-69-7	N,N-dimethylaniline	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
91-20-3	**Naphthalene**	**71**	1.0	ug/L	1	07/03/13	B3F2415	8270	
98-95-3	Nitrobenzene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
87-86-5	Pentachlorophenol	ND	20	ug/L	1	07/03/13	B3F2415	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
108-95-2	Phenol	ND	5.1	ug/L	1	07/03/13	B3F2415	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
110-86-1	Pyridine	ND	20	ug/L	1	07/03/13	B3F2415	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
Surrogate: 2,4,6-Tribromophenol			*99.9 %*	*33.8-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: 2-Fluorobiphenyl			*45.6 %*	*24.1-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: 2-Fluorophenol			*17.7 %*	*10-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: Nitrobenzene-d5			*45.0 %*	*17.8-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: Phenol-d6			*11.6 %*	*10-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: p-Terphenyl-d14			*72.7 %*	*41.8-115*		*07/03/13*	B3F2415	*8270*	

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Client ID: TMW-04

Lab ID: 1306226-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	**Available Cyanide**	**0.12**	0.002	mg/L	1	06/25/13	B3F2508	OIA-1677	
57-12-5	**Total Cyanide**	**3.5**	0.10	mg/L	20	06/25/13	B3F2507	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	Arsenic	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-39-3	**Barium**	**46**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-47-3	Chromium	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-50-8	**Copper**	**3.7**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-92-1	Lead	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	06/26/13	B3F2412	7470/245.1	
7782-49-2	**Selenium**	**2.4**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-66-6	**Zinc**	**10**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	

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Client ID: TMW-05
Lab ID: 1306226-08

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/28/13	B3F2813	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	

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Client ID: TMW-05
Lab ID: 1306226-08

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/28/13	B3F2813	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/28/13	B3F2813	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
Surrogate: Bromofluorobenzene			*102 %*	*85-115*		*06/28/13*	B3F2813	*8260*	
Surrogate: Dibromofluoromethane			*100 %*	*82.7-115*		*06/28/13*	B3F2813	*8260*	
Surrogate: Toluene-d8			*98.8 %*	*85-115*		*06/28/13*	B3F2813	*8260*	

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Lab ID: 1306226-08

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	ug/L	1	07/03/13	B3F2415	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/03/13	B3F2415	8270	
105-67-9	2,4-Dimethylphenol	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
51-28-5	2,4-Dinitrophenol	ND	25	ug/L	1	07/03/13	B3F2415	8270	A05
121-14-2	2,4-Dinitrotoluene	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
95-51-2	2-Chloroaniline	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
91-58-7	2-Chloronaphthalene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/03/13	B3F2415	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	20	ug/L	1	07/03/13	B3F2415	8270	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/03/13	B3F2415	8270	
88-74-4	2-Nitroaniline	ND	20	ug/L	1	07/03/13	B3F2415	8270	
88-75-5	2-Nitrophenol	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
108394,106445	3 & 4-Methylphenol	ND	20	ug/L	1	07/03/13	B3F2415	8270	
99-09-2	3-Nitroaniline	ND	20	ug/L	1	07/03/13	B3F2415	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/03/13	B3F2415	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
100-01-6	4-Nitroaniline	ND	20	ug/L	1	07/03/13	B3F2415	8270	
100-02-7	4-Nitrophenol	ND	25	ug/L	1	07/03/13	B3F2415	8270	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
62-53-3	Aniline	ND	4.0	ug/L	1	07/03/13	B3F2415	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
103-33-3	Azobenzene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
100-51-6	Benzyl Alcohol	ND	50	ug/L	1	07/03/13	B3F2415	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
85-68-7	Butyl benzyl phthalate	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
86-74-8	Carbazole	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-05

Lab ID: 1306226-08

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
132-64-9	Dibenzofuran	ND	4.0	ug/L	1	07/03/13	B3F2415	8270	
84-66-2	Diethylphthalate	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
131-11-3	Dimethyl phthalate	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
84-74-2	Di-n-butyl phthalate	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
117-84-0	Di-n-octyl phthalate	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
86-73-7	Fluorene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/03/13	B3F2415	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
121-69-7	N,N-dimethylaniline	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
91-20-3	Naphthalene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
98-95-3	Nitrobenzene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
87-86-5	Pentachlorophenol	ND	20	ug/L	1	07/03/13	B3F2415	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
108-95-2	Phenol	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
110-86-1	Pyridine	ND	20	ug/L	1	07/03/13	B3F2415	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
Surrogate: 2,4,6-Tribromophenol			*89.4 %*	*33.8-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: 2-Fluorobiphenyl			*51.5 %*	*24.1-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: 2-Fluorophenol			*17.5 %*	*10-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: Nitrobenzene-d5			*53.1 %*	*17.8-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: Phenol-d6			*12.1 %*	*10-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: p-Terphenyl-d14			*82.5 %*	*41.8-115*		*07/03/13*	B3F2415	*8270*	

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ENVIRONMENTAL LABORATORY

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-05

Lab ID: 1306226-08

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	Available Cyanide	ND	0.002	mg/L	1	06/25/13	B3F2508	OIA-1677	
57-12-5	**Total Cyanide**	**0.009**	0.005	mg/L	1	06/25/13	B3F2507	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	**Arsenic**	**2.4**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-39-3	**Barium**	**29**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-47-3	**Chromium**	**6.2**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-50-8	**Copper**	**9.8**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-92-1	Lead	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	06/26/13	B3F2412	7470/245.1	
7782-49-2	**Selenium**	**1.6**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-66-6	Zinc	ND	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	

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TEL: (517) 335-9800
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Client ID: TMW-06

Lab ID: 1306226-09

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/28/13	B3F2813	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	

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ENVIRONMENTAL LABORATORY

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-06
Lab ID: 1306226-09

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/28/13	B3F2813	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/28/13	B3F2813	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
Surrogate: Bromofluorobenzene			*101 %*	*85-115*		*06/28/13*	B3F2813	*8260*	
Surrogate: Dibromofluoromethane			*102 %*	*82.7-115*		*06/28/13*	B3F2813	*8260*	
Surrogate: Toluene-d8			*98.5 %*	*85-115*		*06/28/13*	B3F2813	*8260*	

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ENVIRONMENTAL LABORATORY

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Client ID: TMW-06
Lab ID: 1306226-09

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	ug/L	1	07/03/13	B3F2415	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/03/13	B3F2415	8270	
105-67-9	2,4-Dimethylphenol	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
51-28-5	2,4-Dinitrophenol	ND	25	ug/L	1	07/03/13	B3F2415	8270	A05
121-14-2	2,4-Dinitrotoluene	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
95-51-2	2-Chloroaniline	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
91-58-7	2-Chloronaphthalene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/03/13	B3F2415	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	20	ug/L	1	07/03/13	B3F2415	8270	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/03/13	B3F2415	8270	
88-74-4	2-Nitroaniline	ND	20	ug/L	1	07/03/13	B3F2415	8270	
88-75-5	2-Nitrophenol	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
108394,106445	3 & 4-Methylphenol	ND	20	ug/L	1	07/03/13	B3F2415	8270	
99-09-2	3-Nitroaniline	ND	20	ug/L	1	07/03/13	B3F2415	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/03/13	B3F2415	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
100-01-6	4-Nitroaniline	ND	20	ug/L	1	07/03/13	B3F2415	8270	
100-02-7	4-Nitrophenol	ND	25	ug/L	1	07/03/13	B3F2415	8270	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
62-53-3	Aniline	ND	4.0	ug/L	1	07/03/13	B3F2415	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
103-33-3	Azobenzene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
100-51-6	Benzyl Alcohol	ND	50	ug/L	1	07/03/13	B3F2415	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
85-68-7	Butyl benzyl phthalate	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
86-74-8	Carbazole	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-06

Lab ID: 1306226-09

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
132-64-9	Dibenzofuran	ND	4.0	ug/L	1	07/03/13	B3F2415	8270	
84-66-2	Diethylphthalate	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
131-11-3	Dimethyl phthalate	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
84-74-2	Di-n-butyl phthalate	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
117-84-0	Di-n-octyl phthalate	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
86-73-7	Fluorene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/03/13	B3F2415	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
121-69-7	N,N-dimethylaniline	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
91-20-3	Naphthalene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
98-95-3	Nitrobenzene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
87-86-5	Pentachlorophenol	ND	20	ug/L	1	07/03/13	B3F2415	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
108-95-2	Phenol	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
110-86-1	Pyridine	ND	20	ug/L	1	07/03/13	B3F2415	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
Surrogate: 2,4,6-Tribromophenol			*84.2 %*	*33.8-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: 2-Fluorobiphenyl			*53.3 %*	*24.1-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: 2-Fluorophenol			*21.1 %*	*10-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: Nitrobenzene-d5			*51.7 %*	*17.8-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: Phenol-d6			*11.9 %*	*10-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: p-Terphenyl-d14			*84.8 %*	*41.8-115*		*07/03/13*	B3F2415	*8270*	

STATE OF MICHIGAN
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ENVIRONMENTAL LABORATORY

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-06

Lab ID: 1306226-09

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	Available Cyanide	ND	0.002	mg/L	1	06/25/13	B3F2508	OIA-1677	
57-12-5	**Total Cyanide**	**0.019**	0.005	mg/L	1	06/25/13	B3F2507	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	**Arsenic**	**3.6**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-39-3	**Barium**	**24**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-47-3	Chromium	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-50-8	**Copper**	**2.0**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-92-1	**Lead**	**1.5**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	06/26/13	B3F2412	7470/245.1	
7782-49-2	Selenium	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-66-6	Zinc	ND	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	

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Client ID: TMW-09
Lab ID: 1306226-10

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/28/13	B3F2813	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	

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ENVIRONMENTAL LABORATORY

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-09
Lab ID: 1306226-10

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/28/13	B3F2813	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/28/13	B3F2813	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/28/13	B3F2813	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/28/13	B3F2813	8260	
Surrogate: Bromofluorobenzene			*100 %*	*85-115*		*06/28/13*	B3F2813	*8260*	
Surrogate: Dibromofluoromethane			*104 %*	*82.7-115*		*06/28/13*	B3F2813	*8260*	
Surrogate: Toluene-d8			*98.6 %*	*85-115*		*06/28/13*	B3F2813	*8260*	

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TEL: (517) 335-9800
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Client ID: TMW-09
Lab ID: 1306226-10

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	ug/L	1	07/03/13	B3F2415	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/03/13	B3F2415	8270	
105-67-9	2,4-Dimethylphenol	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
51-28-5	2,4-Dinitrophenol	ND	25	ug/L	1	07/03/13	B3F2415	8270	A05
121-14-2	2,4-Dinitrotoluene	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
95-51-2	2-Chloroaniline	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
91-58-7	2-Chloronaphthalene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/03/13	B3F2415	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	20	ug/L	1	07/03/13	B3F2415	8270	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/03/13	B3F2415	8270	
88-74-4	2-Nitroaniline	ND	20	ug/L	1	07/03/13	B3F2415	8270	
88-75-5	2-Nitrophenol	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
108394,106445	3 & 4-Methylphenol	ND	20	ug/L	1	07/03/13	B3F2415	8270	
99-09-2	3-Nitroaniline	ND	20	ug/L	1	07/03/13	B3F2415	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/03/13	B3F2415	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
100-01-6	4-Nitroaniline	ND	20	ug/L	1	07/03/13	B3F2415	8270	
100-02-7	4-Nitrophenol	ND	25	ug/L	1	07/03/13	B3F2415	8270	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
62-53-3	Aniline	ND	4.0	ug/L	1	07/03/13	B3F2415	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
103-33-3	Azobenzene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
100-51-6	Benzyl Alcohol	ND	50	ug/L	1	07/03/13	B3F2415	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
85-68-7	Butyl benzyl phthalate	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
86-74-8	Carbazole	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	

STATE OF MICHIGAN
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ENVIRONMENTAL LABORATORY

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Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-09
Lab ID: 1306226-10

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
132-64-9	Dibenzofuran	ND	4.0	ug/L	1	07/03/13	B3F2415	8270	
84-66-2	Diethylphthalate	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
131-11-3	Dimethyl phthalate	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
84-74-2	Di-n-butyl phthalate	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
117-84-0	Di-n-octyl phthalate	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
86-73-7	Fluorene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/03/13	B3F2415	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
121-69-7	N,N-dimethylaniline	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
91-20-3	Naphthalene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
98-95-3	Nitrobenzene	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.0	ug/L	1	07/03/13	B3F2415	8270	
87-86-5	Pentachlorophenol	ND	20	ug/L	1	07/03/13	B3F2415	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
108-95-2	Phenol	ND	5.0	ug/L	1	07/03/13	B3F2415	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
110-86-1	Pyridine	ND	20	ug/L	1	07/03/13	B3F2415	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/03/13	B3F2415	8270	
Surrogate: 2,4,6-Tribromophenol			*93.9 %*	*33.8-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: 2-Fluorobiphenyl			*54.8 %*	*24.1-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: 2-Fluorophenol			*19.4 %*	*10-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: Nitrobenzene-d5			*52.0 %*	*17.8-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: Phenol-d6			*13.1 %*	*10-115*		*07/03/13*	B3F2415	*8270*	
Surrogate: p-Terphenyl-d14			*75.5 %*	*41.8-115*		*07/03/13*	B3F2415	*8270*	

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Client ID: TMW-09

Lab ID: 1306226-10

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	Available Cyanide	ND	0.002	mg/L	1	06/25/13	B3F2508	OIA-1677	
57-12-5	**Total Cyanide**	**0.021**	0.005	mg/L	1	06/25/13	B3F2507	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	**Arsenic**	**7.2**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-39-3	**Barium**	**89**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-47-3	**Chromium**	**13**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-50-8	**Copper**	**43**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-92-1	**Lead**	**160**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-97-6	**Mercury**	**0.2**	0.2	ug/L	1	06/26/13	B3F2412	7470/245.1	
7782-49-2	**Selenium**	**1.6**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-22-4	**Silver**	**0.3**	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-66-6	**Zinc**	**150**	25	ug/L	5	07/02/13	B3F2716	6020/200.8	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2813 - Method: 5030				**Prepared: 06/28/2013**							
Blank (B3F2813-BLK1)											
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							06/28/2013	
1,1,1-Trichloroethane	ND	1.0	ug/L							06/28/2013	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							06/28/2013	
1,1,2-Trichloroethane	ND	1.0	ug/L							06/28/2013	
1,1-Dichloroethane	ND	1.0	ug/L							06/28/2013	
1,1-Dichloroethylene	ND	1.0	ug/L							06/28/2013	
1,2,3-Trichlorobenzene	ND	5.0	ug/L							06/28/2013	
1,2,3-Trichloropropane	ND	1.0	ug/L							06/28/2013	
1,2,3-Trimethylbenzene	ND	1.0	ug/L							06/28/2013	
1,2,4-Trichlorobenzene	ND	5.0	ug/L							06/28/2013	
1,2,4-Trimethylbenzene	ND	1.0	ug/L							06/28/2013	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L							06/28/2013	
1,2-Dibromoethane	ND	1.0	ug/L							06/28/2013	
1,2-Dichlorobenzene	ND	1.0	ug/L							06/28/2013	
1,2-Dichloroethane	ND	1.0	ug/L							06/28/2013	
1,2-Dichloropropane	ND	1.0	ug/L							06/28/2013	
1,3,5-Trimethylbenzene	ND	1.0	ug/L							06/28/2013	
1,3-Dichlorobenzene	ND	1.0	ug/L							06/28/2013	
1,4-Dichlorobenzene	ND	1.0	ug/L							06/28/2013	
2-Butanone (MEK)	ND	5.0	ug/L							06/28/2013	
2-Hexanone	ND	5.0	ug/L							06/28/2013	
2-Methylnaphthalene	ND	5.0	ug/L							06/28/2013	X
2-Propanone (acetone)	ND	20	ug/L							06/28/2013	
4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L							06/28/2013	
Acrylonitrile	ND	5.0	ug/L							06/28/2013	
Benzene	ND	1.0	ug/L							06/28/2013	
Bromobenzene	ND	1.0	ug/L							06/28/2013	
Bromochloromethane	ND	1.0	ug/L							06/28/2013	
Bromodichloromethane	ND	1.0	ug/L							06/28/2013	
Bromoform	ND	1.0	ug/L							06/28/2013	
Bromomethane	ND	5.0	ug/L							06/28/2013	
Carbon disulfide	ND	1.0	ug/L							06/28/2013	
Carbon tetrachloride	ND	1.0	ug/L							06/28/2013	
Chlorobenzene	ND	1.0	ug/L							06/28/2013	
Chloroethane	ND	5.0	ug/L							06/28/2013	
Chloroform	ND	1.0	ug/L							06/28/2013	
Chloromethane	ND	5.0	ug/L							06/28/2013	
cis-1,2-Dichloroethylene	ND	1.0	ug/L							06/28/2013	
cis-1,3-Dichloropropylene	ND	1.0	ug/L							06/28/2013	
Cyclohexane	ND	5.0	ug/L							06/28/2013	
Dibromochloromethane	ND	1.0	ug/L							06/28/2013	
Dibromomethane	ND	1.0	ug/L							06/28/2013	
Dichlorodifluoromethane	ND	5.0	ug/L							06/28/2013	
Diethyl ether	ND	5.0	ug/L							06/28/2013	
Diisopropyl Ether	ND	5.0	ug/L							06/28/2013	
Ethylbenzene	ND	1.0	ug/L							06/28/2013	
Ethyltertiarybutylether	ND	5.0	ug/L							06/28/2013	
Hexachloroethane	ND	5.0	ug/L							06/28/2013	

Lab Work Order # 1306226

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TEL: (517) 335-9800
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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2813 - Method: 5030				**Prepared: 06/28/2013**							
Blank (B3F2813-BLK1)											
Isopropylbenzene	ND	1.0	ug/L							06/28/2013	
m & p - Xylene	ND	2.0	ug/L							06/28/2013	
Methyl iodide	ND	1.0	ug/L							06/28/2013	
Methylene chloride	ND	5.0	ug/L							06/28/2013	
Methyltertiarybutylether	ND	1.0	ug/L							06/28/2013	
Naphthalene	ND	5.0	ug/L							06/28/2013	X
n-Butylbenzene	ND	1.0	ug/L							06/28/2013	
n-Propylbenzene	ND	1.0	ug/L							06/28/2013	
o-Xylene	ND	1.0	ug/L							06/28/2013	
p-Isopropyl toluene	ND	1.0	ug/L							06/28/2013	
sec-Butylbenzene	ND	1.0	ug/L							06/28/2013	
Styrene	ND	1.0	ug/L							06/28/2013	
tert-Butylbenzene	ND	1.0	ug/L							06/28/2013	
tertiary Butyl Alcohol	ND	50	ug/L							06/28/2013	
tertiaryAmylmethylether	ND	5.0	ug/L							06/28/2013	
Tetrachloroethylene	ND	1.0	ug/L							06/28/2013	
Tetrahydrofuran	ND	5.0	ug/L							06/28/2013	
Toluene	ND	1.0	ug/L							06/28/2013	
trans-1,2-Dichloroethylene	ND	1.0	ug/L							06/28/2013	
trans-1,3-Dichloropropylene	ND	1.0	ug/L							06/28/2013	
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L							06/28/2013	
Trichloroethylene	ND	1.0	ug/L							06/28/2013	
Trichlorofluoromethane	ND	1.0	ug/L							06/28/2013	
Vinyl chloride	ND	1.0	ug/L							06/28/2013	
Surrogate: Bromofluorobenzene	*50.2*		ug/L	*50.00*		*100*	*85-115*			06/28/2013	
Surrogate: Dibromofluoromethane	*51.6*		ug/L	*50.00*		*103*	*82.7-115*			06/28/2013	
Surrogate: Toluene-d8	*48.4*		ug/L	*50.00*		*96.8*	*85-115*			06/28/2013	
LCS (B3F2813-BS1)											
1,1,1,2-Tetrachloroethane	47.1	1.0	ug/L	50.00		94.1	70-130			06/28/2013	
1,1,1-Trichloroethane	47.9	1.0	ug/L	50.00		95.8	70-130			06/28/2013	
1,1,2,2-Tetrachloroethane	46.8	1.0	ug/L	50.00		93.6	70-130			06/28/2013	
1,1,2-Trichloroethane	49.1	1.0	ug/L	50.00		98.3	70-130			06/28/2013	
1,1-Dichloroethane	48.7	1.0	ug/L	50.00		97.5	70-130			06/28/2013	
1,1-Dichloroethylene	48.8	1.0	ug/L	50.00		97.6	70-130			06/28/2013	
1,2,3-Trichlorobenzene	50.6	5.0	ug/L	50.00		101	70-130			06/28/2013	
1,2,3-Trichloropropane	47.5	1.0	ug/L	50.00		95.0	70-130			06/28/2013	
1,2,3-Trimethylbenzene	47.8	1.0	ug/L	50.00		95.5	70-130			06/28/2013	
1,2,4-Trichlorobenzene	50.7	5.0	ug/L	50.00		101	70-130			06/28/2013	
1,2,4-Trimethylbenzene	48.5	1.0	ug/L	50.00		97.0	70-130			06/28/2013	
1,2-Dibromo-3-chloropropane	45.5	5.0	ug/L	50.00		91.1	70-130			06/28/2013	
1,2-Dibromoethane	49.5	1.0	ug/L	50.00		99.0	70-130			06/28/2013	
1,2-Dichlorobenzene	46.4	1.0	ug/L	50.00		92.8	70-130			06/28/2013	
1,2-Dichloroethane	50.1	1.0	ug/L	50.00		100	70-130			06/28/2013	
1,2-Dichloropropane	47.5	1.0	ug/L	50.00		95.0	70-130			06/28/2013	
1,3,5-Trimethylbenzene	48.0	1.0	ug/L	50.00		95.9	70-130			06/28/2013	
1,3-Dichlorobenzene	46.8	1.0	ug/L	50.00		93.6	70-130			06/28/2013	
1,4-Dichlorobenzene	46.1	1.0	ug/L	50.00		92.1	70-130			06/28/2013	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2813 - Method: 5030				**Prepared: 06/28/2013**							
LCS (B3F2813-BS1)											
2-Butanone (MEK)	52.2	5.0	ug/L	50.00		104	70-130			06/28/2013	
2-Hexanone	53.4	5.0	ug/L	50.00		107	70-130			06/28/2013	
2-Methylnaphthalene	53.8	5.0	ug/L	50.00		108	70-130			06/28/2013	X
2-Propanone (acetone)	61.9	20	ug/L	50.00		124	70-130			06/28/2013	A06
4-Methyl-2-pentanone (MIBK)	52.7	5.0	ug/L	50.00		105	70-130			06/28/2013	
Acrylonitrile	52.1	5.0	ug/L	50.00		104	70-130			06/28/2013	
Benzene	47.1	1.0	ug/L	50.00		94.3	70-130			06/28/2013	
Bromobenzene	43.8	1.0	ug/L	50.00		87.6	70-130			06/28/2013	
Bromochloromethane	46.8	1.0	ug/L	50.00		93.7	70-130			06/28/2013	
Bromodichloromethane	46.1	1.0	ug/L	50.00		92.1	70-130			06/28/2013	
Bromoform	43.3	1.0	ug/L	50.00		86.7	70-130			06/28/2013	
Bromomethane	58.2	5.0	ug/L	50.00		116	70-130			06/28/2013	
Carbon disulfide	47.2	1.0	ug/L	50.00		94.5	70-130			06/28/2013	
Carbon tetrachloride	46.0	1.0	ug/L	50.00		91.9	70-130			06/28/2013	
Chlorobenzene	46.4	1.0	ug/L	50.00		92.7	70-130			06/28/2013	
Chloroethane	51.9	5.0	ug/L	50.00		104	70-130			06/28/2013	
Chloroform	48.2	1.0	ug/L	50.00		96.5	70-130			06/28/2013	
Chloromethane	69.3	5.0	ug/L	50.00		139	70-130			06/28/2013	A06, A09, A11
cis-1,2-Dichloroethylene	46.7	1.0	ug/L	50.00		93.3	70-130			06/28/2013	
cis-1,3-Dichloropropylene	49.2	1.0	ug/L	50.00		98.3	70-130			06/28/2013	
Cyclohexane	45.4	5.0	ug/L	50.00		90.7	70-130			06/28/2013	
Dibromochloromethane	45.8	1.0	ug/L	50.00		91.6	70-130			06/28/2013	
Dibromomethane	48.0	1.0	ug/L	50.00		96.0	70-130			06/28/2013	
Dichlorodifluoromethane	90.2	5.0	ug/L	50.00		180	70-130			06/28/2013	A06, A09, A11
Diethyl ether	51.9	5.0	ug/L	50.00		104	70-130			06/28/2013	
Diisopropyl Ether	49.8	5.0	ug/L	50.00		99.7	70-130			06/28/2013	
Ethylbenzene	48.7	1.0	ug/L	50.00		97.3	70-130			06/28/2013	
Ethyltertiarybutylether	49.6	5.0	ug/L	50.00		99.3	70-130			06/28/2013	
Hexachloroethane	39.9	5.0	ug/L	50.00		79.8	70-130			06/28/2013	
Isopropylbenzene	49.2	1.0	ug/L	50.00		98.3	70-130			06/28/2013	
m & p - Xylene	95.1	2.0	ug/L	100.0		95.1	70-130			06/28/2013	
Methyl iodide	68.1	1.0	ug/L	50.00		136	70-130			06/28/2013	A06, A09
Methylene chloride	53.7	5.0	ug/L	50.00		107	70-130			06/28/2013	
Methyltertiarybutylether	49.6	1.0	ug/L	50.00		99.2	70-130			06/28/2013	
Naphthalene	51.1	5.0	ug/L	50.00		102	70-130			06/28/2013	X
n-Butylbenzene	50.5	1.0	ug/L	50.00		101	70-130			06/28/2013	
n-Propylbenzene	48.2	1.0	ug/L	50.00		96.3	70-130			06/28/2013	
o-Xylene	49.3	1.0	ug/L	50.00		98.7	70-130			06/28/2013	
p-Isopropyl toluene	49.1	1.0	ug/L	50.00		98.1	70-130			06/28/2013	
sec-Butylbenzene	49.2	1.0	ug/L	50.00		98.5	70-130			06/28/2013	
Styrene	53.4	1.0	ug/L	50.00		107	70-130			06/28/2013	
tert-Butylbenzene	48.6	1.0	ug/L	50.00		97.3	70-130			06/28/2013	
tertiary Butyl Alcohol	262	50	ug/L	250.0		105	70-130			06/28/2013	
tertiaryAmylmethylether	49.4	5.0	ug/L	50.00		98.8	70-130			06/28/2013	
Tetrachloroethylene	48.0	1.0	ug/L	50.00		95.9	70-130			06/28/2013	
Tetrahydrofuran	50.7	5.0	ug/L	50.00		101	70-130			06/28/2013	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2813 - Method: 5030				**Prepared: 06/28/2013**							
LCS (B3F2813-BS1)											
Toluene	47.3	1.0	ug/L	50.00		94.6	70-130			06/28/2013	
trans-1,2-Dichloroethylene	51.5	1.0	ug/L	50.00		103	70-130			06/28/2013	
trans-1,3-Dichloropropylene	51.4	1.0	ug/L	50.00		103	70-130			06/28/2013	
trans-1,4-Dichloro-2-butene	51.0	5.0	ug/L	50.00		102	70-130			06/28/2013	
Trichloroethylene	47.4	1.0	ug/L	50.00		94.8	70-130			06/28/2013	
Trichlorofluoromethane	52.0	1.0	ug/L	50.00		104	70-130			06/28/2013	
Vinyl chloride	57.4	1.0	ug/L	50.00		115	70-130			06/28/2013	
Surrogate: Bromofluorobenzene	*48.1*		ug/L	*50.00*		*96.2*	*85-115*			06/28/2013	
Surrogate: Dibromofluoromethane	*51.9*		ug/L	*50.00*		*104*	*82.7-115*			06/28/2013	
Surrogate: Toluene-d8	*50.3*		ug/L	*50.00*		*101*	*85-115*			06/28/2013	
Matrix Spike (B3F2813-MS1)	**Source: 1306226-04**										
1,1,1,2-Tetrachloroethane	48.5	1.0	ug/L	50.00	ND	96.9	70-130			06/28/2013	
1,1,1-Trichloroethane	48.3	1.0	ug/L	50.00	ND	96.5	70-130			06/28/2013	
1,1,2,2-Tetrachloroethane	48.2	1.0	ug/L	50.00	ND	96.4	70-130			06/28/2013	
1,1,2-Trichloroethane	51.1	1.0	ug/L	50.00	ND	102	70-130			06/28/2013	
1,1-Dichloroethane	49.5	1.0	ug/L	50.00	ND	99.0	70-130			06/28/2013	
1,1-Dichloroethylene	50.6	1.0	ug/L	50.00	ND	101	70-130			06/28/2013	
1,2,3-Trichlorobenzene	49.6	5.0	ug/L	50.00	ND	99.2	70-130			06/28/2013	
1,2,3-Trichloropropane	48.2	1.0	ug/L	50.00	ND	96.4	70-130			06/28/2013	
1,2,3-Trimethylbenzene	49.7	1.0	ug/L	50.00	ND	99.3	70-130			06/28/2013	
1,2,4-Trichlorobenzene	49.3	5.0	ug/L	50.00	ND	98.6	70-130			06/28/2013	
1,2,4-Trimethylbenzene	50.0	1.0	ug/L	50.00	ND	100	70-130			06/28/2013	
1,2-Dibromo-3-chloropropane	44.2	5.0	ug/L	50.00	ND	88.4	70-130			06/28/2013	
1,2-Dibromoethane	50.5	1.0	ug/L	50.00	ND	101	70-130			06/28/2013	
1,2-Dichlorobenzene	47.6	1.0	ug/L	50.00	ND	95.2	70-130			06/28/2013	
1,2-Dichloroethane	52.3	1.0	ug/L	50.00	ND	105	70-130			06/28/2013	
1,2-Dichloropropane	48.4	1.0	ug/L	50.00	ND	96.7	70-130			06/28/2013	
1,3,5-Trimethylbenzene	49.3	1.0	ug/L	50.00	ND	98.6	70-130			06/28/2013	
1,3-Dichlorobenzene	46.4	1.0	ug/L	50.00	ND	92.9	70-130			06/28/2013	
1,4-Dichlorobenzene	46.8	1.0	ug/L	50.00	ND	93.6	70-130			06/28/2013	
2-Butanone (MEK)	52.3	5.0	ug/L	50.00	ND	105	70-130			06/28/2013	
2-Hexanone	55.3	5.0	ug/L	50.00	ND	111	70-130			06/28/2013	
2-Methylnaphthalene	48.2	5.0	ug/L	50.00	ND	96.4	70-130			06/28/2013	X
2-Propanone (acetone)	58.7	20	ug/L	50.00	ND	117	70-130			06/28/2013	A06
4-Methyl-2-pentanone (MIBK)	54.9	5.0	ug/L	50.00	ND	110	70-130			06/28/2013	
Acrylonitrile	51.3	5.0	ug/L	50.00	ND	103	70-130			06/28/2013	
Benzene	49.8	1.0	ug/L	50.00	ND	99.6	70-130			06/28/2013	
Bromobenzene	45.6	1.0	ug/L	50.00	ND	91.1	70-130			06/28/2013	
Bromochloromethane	50.6	1.0	ug/L	50.00	ND	101	70-130			06/28/2013	
Bromodichloromethane	46.9	1.0	ug/L	50.00	ND	93.8	70-130			06/28/2013	
Bromoform	42.4	1.0	ug/L	50.00	ND	84.8	70-130			06/28/2013	
Bromomethane	40.9	5.0	ug/L	50.00	ND	81.9	70-130			06/28/2013	
Carbon disulfide	48.9	1.0	ug/L	50.00	ND	97.8	70-130			06/28/2013	
Carbon tetrachloride	46.8	1.0	ug/L	50.00	ND	93.6	70-130			06/28/2013	
Chlorobenzene	47.8	1.0	ug/L	50.00	ND	95.6	70-130			06/28/2013	
Chloroethane	53.4	5.0	ug/L	50.00	ND	107	70-130			06/28/2013	
Chloroform	50.0	1.0	ug/L	50.00	ND	100	70-130			06/28/2013	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2813 - Method: 5030				**Prepared: 06/28/2013**							
Matrix Spike (B3F2813-MS1)	**Source: 1306226-04**										
Chloromethane	66.8	5.0	ug/L	50.00	ND	134	70-130			06/28/2013	A04, A06, A11
cis-1,2-Dichloroethylene	47.9	1.0	ug/L	50.00	ND	95.8	70-130			06/28/2013	
cis-1,3-Dichloropropylene	49.5	1.0	ug/L	50.00	ND	99.0	70-130			06/28/2013	
Cyclohexane	46.9	5.0	ug/L	50.00	ND	93.8	70-130			06/28/2013	
Dibromochloromethane	45.5	1.0	ug/L	50.00	ND	91.1	70-130			06/28/2013	
Dibromomethane	49.7	1.0	ug/L	50.00	ND	99.4	70-130			06/28/2013	
Dichlorodifluoromethane	85.9	5.0	ug/L	50.00	ND	172	70-130			06/28/2013	A06, A11, A04
Diethyl ether	50.8	5.0	ug/L	50.00	ND	102	70-130			06/28/2013	
Diisopropyl Ether	51.4	5.0	ug/L	50.00	ND	103	70-130			06/28/2013	
Ethylbenzene	50.6	1.0	ug/L	50.00	ND	101	70-130			06/28/2013	
Ethyltertiarybutylether	49.9	5.0	ug/L	50.00	ND	99.8	70-130			06/28/2013	
Hexachloroethane	39.0	5.0	ug/L	50.00	ND	77.9	70-130			06/28/2013	
Isopropylbenzene	49.5	1.0	ug/L	50.00	ND	99.0	70-130			06/28/2013	
m & p - Xylene	100	2.0	ug/L	100.0	ND	100	70-130			06/28/2013	
Methyl iodide	61.2	1.0	ug/L	50.00	ND	122	70-130			06/28/2013	A06
Methylene chloride	57.3	5.0	ug/L	50.00	ND	115	70-130			06/28/2013	
Methyltertiarybutylether	49.3	1.0	ug/L	50.00	ND	98.6	70-130			06/28/2013	
Naphthalene	51.1	5.0	ug/L	50.00	ND	102	70-130			06/28/2013	X
n-Butylbenzene	51.2	1.0	ug/L	50.00	ND	102	70-130			06/28/2013	
n-Propylbenzene	49.3	1.0	ug/L	50.00	ND	98.6	70-130			06/28/2013	
o-Xylene	51.9	1.0	ug/L	50.00	ND	104	70-130			06/28/2013	
p-Isopropyl toluene	50.3	1.0	ug/L	50.00	ND	101	70-130			06/28/2013	
sec-Butylbenzene	50.0	1.0	ug/L	50.00	ND	100	70-130			06/28/2013	
Styrene	56.7	1.0	ug/L	50.00	ND	113	70-130			06/28/2013	
tert-Butylbenzene	49.7	1.0	ug/L	50.00	ND	99.3	70-130			06/28/2013	
tertiary Butyl Alcohol	241	50	ug/L	250.0	ND	96.5	70-130			06/28/2013	
tertiaryAmylmethylether	51.8	5.0	ug/L	50.00	ND	104	70-130			06/28/2013	
Tetrachloroethylene	48.3	1.0	ug/L	50.00	ND	96.6	70-130			06/28/2013	
Tetrahydrofuran	52.3	5.0	ug/L	50.00	ND	105	70-130			06/28/2013	
Toluene	48.9	1.0	ug/L	50.00	ND	97.8	70-130			06/28/2013	
trans-1,2-Dichloroethylene	52.1	1.0	ug/L	50.00	ND	104	70-130			06/28/2013	
trans-1,3-Dichloropropylene	50.1	1.0	ug/L	50.00	ND	100	70-130			06/28/2013	
trans-1,4-Dichloro-2-butene	51.9	5.0	ug/L	50.00	ND	104	70-130			06/28/2013	
Trichloroethylene	49.1	1.0	ug/L	50.00	ND	98.3	70-130			06/28/2013	
Trichlorofluoromethane	50.5	1.0	ug/L	50.00	ND	101	70-130			06/28/2013	
Vinyl chloride	54.6	1.0	ug/L	50.00	ND	109	70-130			06/28/2013	
Surrogate: Bromofluorobenzene	*48.0*		ug/L	*50.00*		*96.1*	*85-115*			06/28/2013	
Surrogate: Dibromofluoromethane	*51.1*		ug/L	*50.00*		*102*	*82.7-115*			06/28/2013	
Surrogate: Toluene-d8	*50.6*		ug/L	*50.00*		*101*	*85-115*			06/28/2013	
Matrix Spike Dup (B3F2813-MSD1)	**Source: 1306226-04**										
1,1,1,2-Tetrachloroethane	46.5	1.0	ug/L	50.00	ND	93.0	70-130	4.16	30	06/28/2013	
1,1,1-Trichloroethane	46.7	1.0	ug/L	50.00	ND	93.4	70-130	3.28	30	06/28/2013	
1,1,2,2-Tetrachloroethane	48.8	1.0	ug/L	50.00	ND	97.7	70-130	1.26	30	06/28/2013	
1,1,2-Trichloroethane	49.7	1.0	ug/L	50.00	ND	99.4	70-130	2.84	30	06/28/2013	
1,1-Dichloroethane	47.8	1.0	ug/L	50.00	ND	95.7	70-130	3.41	30	06/28/2013	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2813 - Method: 5030				**Prepared: 06/28/2013**							
Matrix Spike Dup (B3F2813-MSD1)	**Source: 1306226-04**										
1,1-Dichloroethylene	49.4	1.0	ug/L	50.00	ND	98.8	70-130	2.50	30	06/28/2013	
1,2,3-Trichlorobenzene	50.9	5.0	ug/L	50.00	ND	102	70-130	2.56	30	06/28/2013	
1,2,3-Trichloropropane	47.7	1.0	ug/L	50.00	ND	95.4	70-130	1.06	30	06/28/2013	
1,2,3-Trimethylbenzene	49.3	1.0	ug/L	50.00	ND	98.7	70-130	0.638	30	06/28/2013	
1,2,4-Trichlorobenzene	50.5	5.0	ug/L	50.00	ND	101	70-130	2.41	30	06/28/2013	
1,2,4-Trimethylbenzene	49.9	1.0	ug/L	50.00	ND	99.8	70-130	0.235	30	06/28/2013	
1,2-Dibromo-3-chloropropane	46.2	5.0	ug/L	50.00	ND	92.4	70-130	4.37	30	06/28/2013	
1,2-Dibromoethane	49.0	1.0	ug/L	50.00	ND	98.0	70-130	3.01	30	06/28/2013	
1,2-Dichlorobenzene	46.3	1.0	ug/L	50.00	ND	92.7	70-130	2.75	30	06/28/2013	
1,2-Dichloroethane	50.4	1.0	ug/L	50.00	ND	101	70-130	3.71	30	06/28/2013	
1,2-Dichloropropane	47.2	1.0	ug/L	50.00	ND	94.4	70-130	2.48	30	06/28/2013	
1,3,5-Trimethylbenzene	48.6	1.0	ug/L	50.00	ND	97.2	70-130	1.48	30	06/28/2013	
1,3-Dichlorobenzene	47.2	1.0	ug/L	50.00	ND	94.5	70-130	1.71	30	06/28/2013	
1,4-Dichlorobenzene	46.2	1.0	ug/L	50.00	ND	92.4	70-130	1.25	30	06/28/2013	
2-Butanone (MEK)	52.9	5.0	ug/L	50.00	ND	106	70-130	1.12	30	06/28/2013	
2-Hexanone	54.5	5.0	ug/L	50.00	ND	109	70-130	1.60	30	06/28/2013	
2-Methylnaphthalene	53.9	5.0	ug/L	50.00	ND	108	70-130	11.1	30	06/28/2013	X
2-Propanone (acetone)	61.3	20	ug/L	50.00	ND	123	70-130	4.35	30	06/28/2013	A06
4-Methyl-2-pentanone (MIBK)	54.5	5.0	ug/L	50.00	ND	109	70-130	0.687	30	06/28/2013	
Acrylonitrile	52.1	5.0	ug/L	50.00	ND	104	70-130	1.46	30	06/28/2013	
Benzene	47.8	1.0	ug/L	50.00	ND	95.6	70-130	4.10	30	06/28/2013	
Bromobenzene	45.4	1.0	ug/L	50.00	ND	90.9	70-130	0.234	30	06/28/2013	
Bromochloromethane	47.1	1.0	ug/L	50.00	ND	94.2	70-130	7.19	30	06/28/2013	
Bromodichloromethane	45.2	1.0	ug/L	50.00	ND	90.4	70-130	3.72	30	06/28/2013	
Bromoform	42.8	1.0	ug/L	50.00	ND	85.5	70-130	0.910	30	06/28/2013	
Bromomethane	51.6	5.0	ug/L	50.00	ND	103	70-130	23.0	30	06/28/2013	
Carbon disulfide	47.1	1.0	ug/L	50.00	ND	94.1	70-130	3.84	30	06/28/2013	
Carbon tetrachloride	45.4	1.0	ug/L	50.00	ND	90.9	70-130	2.93	30	06/28/2013	
Chlorobenzene	46.5	1.0	ug/L	50.00	ND	93.0	70-130	2.69	30	06/28/2013	
Chloroethane	53.8	5.0	ug/L	50.00	ND	108	70-130	0.901	30	06/28/2013	
Chloroform	48.1	1.0	ug/L	50.00	ND	96.3	70-130	3.82	30	06/28/2013	
Chloromethane	68.4	5.0	ug/L	50.00	ND	137	70-130	2.44	30	06/28/2013	A04, A06, A11
cis-1,2-Dichloroethylene	46.6	1.0	ug/L	50.00	ND	93.2	70-130	2.78	30	06/28/2013	
cis-1,3-Dichloropropylene	49.1	1.0	ug/L	50.00	ND	98.1	70-130	0.868	30	06/28/2013	
Cyclohexane	45.7	5.0	ug/L	50.00	ND	91.4	70-130	2.68	30	06/28/2013	
Dibromochloromethane	45.0	1.0	ug/L	50.00	ND	90.0	70-130	1.15	30	06/28/2013	
Dibromomethane	47.8	1.0	ug/L	50.00	ND	95.7	70-130	3.85	30	06/28/2013	
Dichlorodifluoromethane	89.9	5.0	ug/L	50.00	ND	180	70-130	4.60	30	06/28/2013	A04, A06, A11
Diethyl ether	51.0	5.0	ug/L	50.00	ND	102	70-130	0.356	30	06/28/2013	
Diisopropyl Ether	51.0	5.0	ug/L	50.00	ND	102	70-130	0.859	30	06/28/2013	
Ethylbenzene	49.2	1.0	ug/L	50.00	ND	98.4	70-130	2.72	30	06/28/2013	
Ethyltertiarybutylether	50.5	5.0	ug/L	50.00	ND	101	70-130	1.31	30	06/28/2013	
Hexachloroethane	38.8	5.0	ug/L	50.00	ND	77.5	70-130	0.499	30	06/28/2013	
Isopropylbenzene	48.9	1.0	ug/L	50.00	ND	97.8	70-130	1.30	30	06/28/2013	
m & p - Xylene	96.1	2.0	ug/L	100.0	ND	96.1	70-130	4.10	30	06/28/2013	
Methyl iodide	69.3	1.0	ug/L	50.00	ND	139	70-130	12.4	30	06/28/2013	A04, A06

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2813 - Method: 5030				**Prepared: 06/28/2013**							
Matrix Spike Dup (B3F2813-MSD1)	**Source: 1306226-04**										
Methylene chloride	55.5	5.0	ug/L	50.00	ND	111	70-130	3.24	30	06/28/2013	
Methyltertiarybutylether	49.7	1.0	ug/L	50.00	ND	99.5	70-130	0.878	30	06/28/2013	
Naphthalene	52.8	5.0	ug/L	50.00	ND	106	70-130	3.33	30	06/28/2013	X
n-Butylbenzene	50.5	1.0	ug/L	50.00	ND	101	70-130	1.42	30	06/28/2013	
n-Propylbenzene	49.0	1.0	ug/L	50.00	ND	98.0	70-130	0.627	30	06/28/2013	
o-Xylene	50.0	1.0	ug/L	50.00	ND	100	70-130	3.63	30	06/28/2013	
p-Isopropyl toluene	50.2	1.0	ug/L	50.00	ND	100	70-130	0.329	30	06/28/2013	
sec-Butylbenzene	50.1	1.0	ug/L	50.00	ND	100	70-130	0.0242	30	06/28/2013	
Styrene	53.4	1.0	ug/L	50.00	ND	107	70-130	6.13	30	06/28/2013	
tert-Butylbenzene	49.3	1.0	ug/L	50.00	ND	98.5	70-130	0.787	30	06/28/2013	
tertiary Butyl Alcohol	257	50	ug/L	250.0	ND	103	70-130	6.11	30	06/28/2013	
tertiaryAmylmethylether	50.4	5.0	ug/L	50.00	ND	101	70-130	2.84	30	06/28/2013	
Tetrachloroethylene	47.2	1.0	ug/L	50.00	ND	94.4	70-130	2.27	30	06/28/2013	
Tetrahydrofuran	52.4	5.0	ug/L	50.00	ND	105	70-130	0.245	30	06/28/2013	
Toluene	46.8	1.0	ug/L	50.00	ND	93.5	70-130	4.45	30	06/28/2013	
trans-1,2-Dichloroethylene	51.1	1.0	ug/L	50.00	ND	102	70-130	1.83	30	06/28/2013	
trans-1,3-Dichloropropylene	50.4	1.0	ug/L	50.00	ND	101	70-130	0.603	30	06/28/2013	
trans-1,4-Dichloro-2-butene	51.5	5.0	ug/L	50.00	ND	103	70-130	0.773	30	06/28/2013	
Trichloroethylene	47.3	1.0	ug/L	50.00	ND	94.6	70-130	3.80	30	06/28/2013	
Trichlorofluoromethane	51.9	1.0	ug/L	50.00	ND	104	70-130	2.65	30	06/28/2013	
Vinyl chloride	58.1	1.0	ug/L	50.00	ND	116	70-130	6.06	30	06/28/2013	
Surrogate: Bromofluorobenzene	*47.9*		ug/L	*50.00*		*95.8*	*85-115*			06/28/2013	
Surrogate: Dibromofluoromethane	*51.1*		ug/L	*50.00*		*102*	*82.7-115*			06/28/2013	
Surrogate: Toluene-d8	*49.2*		ug/L	*50.00*		*98.4*	*85-115*			06/28/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2415 - Method: 3510 Water SVOC				**Prepared: 06/25/2013**							
Blank (B3F2415-BLK1)											
1,2,4-Trichlorobenzene	ND	2.0	ug/L							07/02/2013	
2,4,5-Trichlorophenol	ND	5.0	ug/L							07/02/2013	
2,4,6-Trichlorophenol	ND	4.0	ug/L							07/02/2013	
2,4-Dichlorophenol	ND	10	ug/L							07/02/2013	
2,4-Dimethylphenol	ND	5.0	ug/L							07/02/2013	
2,4-Dinitrophenol	ND	25	ug/L							07/02/2013	
2,4-Dinitrotoluene	ND	5.0	ug/L							07/02/2013	
2,6-Dinitrotoluene	ND	5.0	ug/L							07/02/2013	
2-Chloroaniline	ND	5.0	ug/L							07/02/2013	
2-Chloronaphthalene	ND	2.0	ug/L							07/02/2013	
2-Chlorophenol	ND	10	ug/L							07/02/2013	
2-Methyl-4,6-dinitrophenol	ND	20	ug/L							07/02/2013	
2-Methylnaphthalene	ND	5.0	ug/L							07/02/2013	
2-Methylphenol (o-Cresol)	ND	10	ug/L							07/02/2013	
2-Nitroaniline	ND	20	ug/L							07/02/2013	
2-Nitrophenol	ND	5.0	ug/L							07/02/2013	
3 & 4-Methylphenol	ND	20	ug/L							07/02/2013	
3-Nitroaniline	ND	20	ug/L							07/02/2013	
4-Bromophenyl phenyl ether	ND	2.0	ug/L							07/02/2013	
4-Chloro-3-methyl-phenol	ND	5.0	ug/L							07/02/2013	
4-Chloroaniline	ND	10	ug/L							07/02/2013	
4-Chlorodiphenylether	ND	1.0	ug/L							07/02/2013	
4-Nitroaniline	ND	20	ug/L							07/02/2013	
4-Nitrophenol	ND	25	ug/L							07/02/2013	
Acenaphthene	ND	1.0	ug/L							07/02/2013	
Acenaphthylene	ND	1.0	ug/L							07/02/2013	
Aniline	ND	4.0	ug/L							07/02/2013	
Anthracene	ND	1.0	ug/L							07/02/2013	
Azobenzene	ND	2.0	ug/L							07/02/2013	
Benz[a]anthracene	ND	1.0	ug/L							07/02/2013	
Benzo[a]pyrene	ND	1.0	ug/L							07/02/2013	
Benzo[b]fluoranthene	ND	1.0	ug/L							07/02/2013	
Benzo[g,h,i]perylene	ND	1.0	ug/L							07/02/2013	
Benzo[k]fluoranthene	ND	1.0	ug/L							07/02/2013	
Benzyl Alcohol	ND	50	ug/L							07/02/2013	
Bis(2-chloroethoxy)methane	ND	2.0	ug/L							07/02/2013	
Bis(2-chloroethyl)ether	ND	1.0	ug/L							07/02/2013	
Bis(2-chloroisopropyl)ether	ND	1.0	ug/L							07/02/2013	
Bis(2-ethylhexyl)phthalate	ND	5.0	ug/L							07/02/2013	
Butyl benzyl phthalate	ND	5.0	ug/L							07/02/2013	
Carbazole	ND	5.0	ug/L							07/02/2013	
Chrysene	ND	1.0	ug/L							07/02/2013	
Dibenz[a,h]anthracene	ND	2.0	ug/L							07/02/2013	
Dibenzofuran	ND	4.0	ug/L							07/02/2013	
Diethylphthalate	ND	5.0	ug/L							07/02/2013	
Dimethyl phthalate	ND	5.0	ug/L							07/02/2013	
Di-n-butyl phthalate	ND	5.0	ug/L							07/02/2013	
Di-n-octyl phthalate	ND	5.0	ug/L							07/02/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2415 - Method: 3510 Water SVOC				**Prepared: 06/25/2013**							
Blank (B3F2415-BLK1)											
Fluoranthene	ND	1.0	ug/L							07/02/2013	
Fluorene	ND	1.0	ug/L							07/02/2013	
Hexachlorobenzene	ND	1.0	ug/L							07/02/2013	
Hexachlorobutadiene	ND	1.0	ug/L							07/02/2013	
Hexachlorocyclopentadiene	ND	10	ug/L							07/02/2013	
Hexachloroethane	ND	1.0	ug/L							07/02/2013	
Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L							07/02/2013	
Isophorone	ND	1.0	ug/L							07/02/2013	
N,N-dimethylaniline	ND	5.0	ug/L							07/02/2013	
Naphthalene	ND	1.0	ug/L							07/02/2013	
Nitrobenzene	ND	2.0	ug/L							07/02/2013	
N-methylaniline	ND	1.0	ug/L							07/02/2013	
N-Nitrosodimethylamine	ND	5.0	ug/L							07/02/2013	
N-Nitrosodi-n-propylamine	ND	2.0	ug/L							07/02/2013	
N-Nitrosodiphenylamine	ND	2.0	ug/L							07/02/2013	
Pentachlorophenol	ND	20	ug/L							07/02/2013	
Phenanthrene	ND	1.0	ug/L							07/02/2013	
Phenol	ND	5.0	ug/L							07/02/2013	
Pyrene	ND	1.0	ug/L							07/02/2013	
Pyridine	ND	20	ug/L							07/02/2013	
Tetramethylurea	ND	1.0	ug/L							07/02/2013	
Surrogate: 2,4,6-Tribromophenol	*44.2*		ug/L	*50.00*		*88.3*	*33.8-115*			07/02/2013	
Surrogate: 2-Fluorobiphenyl	*15.2*		ug/L	*25.00*		*60.8*	*24.1-115*			07/02/2013	
Surrogate: 2-Fluorophenol	*11.6*		ug/L	*50.00*		*23.2*	*10-115*			07/02/2013	
Surrogate: Nitrobenzene-d5	*15.9*		ug/L	*25.00*		*63.5*	*17.8-115*			07/02/2013	
Surrogate: Phenol-d6	*7.59*		ug/L	*50.00*		*15.2*	*10-115*			07/02/2013	
Surrogate: p-Terphenyl-d14	*21.9*		ug/L	*25.00*		*87.7*	*41.8-115*			07/02/2013	
LCS (B3F2415-BS1)											
1,2,4-Trichlorobenzene	25.1	2.0	ug/L	50.00		50.2	17-70.9			07/02/2013	
2,4,5-Trichlorophenol	77.7	5.0	ug/L	100.0		77.7	42-109.1			07/02/2013	
2,4,6-Trichlorophenol	75.0	4.0	ug/L	100.0		75.0	37.7-104.6			07/02/2013	
2,4-Dichlorophenol	69.3	10	ug/L	100.0		69.3	30.2-96.9			07/02/2013	
2,4-Dimethylphenol	65.6	5.0	ug/L	100.0		65.6	29.9-97.6			07/02/2013	
2,4-Dinitrophenol	61.2	25	ug/L	100.0		61.2	34.3-113			07/02/2013	
2,4-Dinitrotoluene	40.8	5.0	ug/L	50.00		81.5	52.9-115.4			07/02/2013	
2,6-Dinitrotoluene	38.7	5.0	ug/L	50.00		77.4	54.6-109.4			07/02/2013	
2-Chloroaniline	32.8	5.0	ug/L	50.00		65.5	51.9-89.3			07/02/2013	
2-Chloronaphthalene	30.8	2.0	ug/L	50.00		61.6	28.2-85.3			07/02/2013	
2-Chlorophenol	51.2	10	ug/L	100.0		51.2	18.4-84.6			07/02/2013	
2-Methyl-4,6-dinitrophenol	73.0	20	ug/L	100.0		73.0	52.1-117.9			07/02/2013	
2-Methylnaphthalene	28.8	5.0	ug/L	50.00		57.6	25.3-79.1			07/02/2013	
2-Methylphenol (o-Cresol)	46.3	10	ug/L	100.0		46.3	22.9-83.2			07/02/2013	
2-Nitroaniline	36.8	20	ug/L	50.00		73.6	51.1-108.1			07/02/2013	
2-Nitrophenol	68.5	5.0	ug/L	100.0		68.5	24.8-94.7			07/02/2013	
3 & 4-Methylphenol	41.1	20	ug/L	100.0		41.1	20.4-80			07/02/2013	
3-Nitroaniline	36.5	20	ug/L	50.00		73.0	51.8-112.1			07/02/2013	
4-Bromophenyl phenyl ether	35.5	2.0	ug/L	50.00		71.1	48.6-102.4			07/02/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2415 - Method: 3510 Water SVOC				**Prepared: 06/25/2013**							
LCS (B3F2415-BS1)											
4-Chloro-3-methyl-phenol	68.1	5.0	ug/L	100.0		68.1	40.3-104.7			07/02/2013	
4-Chloroaniline	32.3	10	ug/L	50.00		64.7	46.4-106.3			07/02/2013	
4-Chlorodiphenylether	36.3	1.0	ug/L	50.00		72.7	40-98.2			07/02/2013	
4-Nitroaniline	39.2	20	ug/L	50.00		78.4	47.6-127.5			07/02/2013	
4-Nitrophenol	19.4	25	ug/L	100.0		19.4	15.1-52			07/02/2013	T
Acenaphthene	33.8	1.0	ug/L	50.00		67.7	35.2-90.9			07/02/2013	
Acenaphthylene	36.0	1.0	ug/L	50.00		72.0	38.7-99.1			07/02/2013	
Aniline	19.7	4.0	ug/L	50.00		39.5	10-88.7			07/02/2013	
Anthracene	38.7	1.0	ug/L	50.00		77.4	53.9-106.8			07/02/2013	
Azobenzene	34.1	2.0	ug/L	50.00		68.2	39.7-109.3			07/02/2013	
Benz[a]anthracene	37.0	1.0	ug/L	50.00		74.1	52.5-113.7			07/02/2013	
Benzo[a]pyrene	32.6	1.0	ug/L	50.00		65.2	43.7-118			07/02/2013	
Benzo[b]fluoranthene	39.8	1.0	ug/L	50.00		79.5	44.1-118.6			07/02/2013	
Benzo[g,h,i]perylene	26.5	1.0	ug/L	50.00		53.0	25.8-127			07/02/2013	
Benzo[k]fluoranthene	38.2	1.0	ug/L	50.00		76.4	41.9-117.7			07/02/2013	
Benzyl Alcohol	45.9	50	ug/L	100.0		45.9	22.1-175			07/02/2013	T
Bis(2-chloroethoxy)methane	32.1	2.0	ug/L	50.00		64.1	27-96.8			07/02/2013	
Bis(2-chloroethyl)ether	29.4	1.0	ug/L	50.00		58.7	19.9-89.6			07/02/2013	
Bis(2-chloroisopropyl)ether	27.9	1.0	ug/L	50.00		55.7	14.2-92.7			07/02/2013	
Bis(2-ethylhexyl)phthalate	33.0	5.0	ug/L	50.00		66.0	41.1-120.2			07/02/2013	
Butyl benzyl phthalate	36.9	5.0	ug/L	50.00		73.8	54.6-118.5			07/02/2013	
Carbazole	38.6	5.0	ug/L	50.00		77.2	55.7-113.9			07/02/2013	
Chrysene	35.8	1.0	ug/L	50.00		71.6	53.1-114.9			07/02/2013	
Dibenz[a,h]anthracene	28.7	2.0	ug/L	50.00		57.3	23.4-134.7			07/02/2013	
Dibenzofuran	33.7	4.0	ug/L	50.00		67.4	37.7-92			07/02/2013	
Diethylphthalate	43.5	5.0	ug/L	50.00		87.1	56.6-111.9			07/02/2013	
Dimethyl phthalate	38.9	5.0	ug/L	50.00		77.8	56.9-106.4			07/02/2013	
Di-n-butyl phthalate	38.5	5.0	ug/L	50.00		76.9	55.1-115.8			07/02/2013	
Di-n-octyl phthalate	29.2	5.0	ug/L	50.00		58.4	43.6-120.8			07/02/2013	
Fluoranthene	40.4	1.0	ug/L	50.00		80.7	55-112.1			07/02/2013	
Fluorene	36.9	1.0	ug/L	50.00		73.9	42-98			07/02/2013	
Hexachlorobenzene	37.3	1.0	ug/L	50.00		74.5	49.5-103.4			07/02/2013	
Hexachlorobutadiene	25.1	1.0	ug/L	50.00		50.1	14.2-71.4			07/02/2013	
Hexachlorocyclopentadiene	16.4	10	ug/L	50.00		32.7	10-58.9			07/02/2013	
Hexachloroethane	19.2	1.0	ug/L	50.00		38.3	10.9-61.4			07/02/2013	
Indeno(1,2,3-c,d)pyrene	22.7	2.0	ug/L	50.00		45.5	29.1-133.2			07/02/2013	
Isophorone	31.3	1.0	ug/L	50.00		62.5	29.3-98.9			07/02/2013	
N,N-dimethylaniline	30.9	5.0	ug/L	50.00		61.9	38.2-91.2			07/02/2013	
Naphthalene	27.7	1.0	ug/L	50.00		55.4	22-76.8			07/02/2013	
Nitrobenzene	32.5	2.0	ug/L	50.00		65.0	26-89.7			07/02/2013	
N-methylaniline	29.6	1.0	ug/L	50.00		59.2	29.6-98.5			07/02/2013	
N-Nitrosodimethylamine	14.1	5.0	ug/L	50.00		28.2	10-72.1			07/02/2013	
N-Nitrosodi-n-propylamine	35.4	2.0	ug/L	50.00		70.8	29.5-96.3			07/02/2013	
N-Nitrosodiphenylamine	36.0	2.0	ug/L	50.00		72.1	57.3-112.2			07/02/2013	
Pentachlorophenol	79.2	20	ug/L	100.0		79.2	45.5-108.7			07/02/2013	
Phenanthrene	37.3	1.0	ug/L	50.00		74.6	54.5-102.4			07/02/2013	
Phenol	19.5	5.0	ug/L	100.0		19.5	10-40.3			07/02/2013	
Pyrene	36.3	1.0	ug/L	50.00		72.6	54.2-110.5			07/02/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2415 - Method: 3510 Water SVOC				**Prepared: 06/25/2013**							
LCS (B3F2415-BS1)											
Pyridine	9.65	20	ug/L	50.00		19.3	10-63.2			07/02/2013	T
Tetramethylurea	21.7	1.0	ug/L	50.00		43.4	13.9-94.9			07/02/2013	
Surrogate: 2,4,6-Tribromophenol	*46.5*		ug/L	*50.00*		*93.0*	*33.8-115*			07/02/2013	
Surrogate: 2-Fluorobiphenyl	*15.4*		ug/L	*25.00*		*61.7*	*24.1-115*			07/02/2013	
Surrogate: 2-Fluorophenol	*12.9*		ug/L	*50.00*		*25.8*	*10-115*			07/02/2013	
Surrogate: Nitrobenzene-d5	*16.2*		ug/L	*25.00*		*64.8*	*17.8-115*			07/02/2013	
Surrogate: Phenol-d6	*11.1*		ug/L	*50.00*		*22.2*	*10-115*			07/02/2013	
Surrogate: p-Terphenyl-d14	*17.7*		ug/L	*25.00*		*70.7*	*41.8-115*			07/02/2013	
LCS Dup (B3F2415-BSD1)											
1,2,4-Trichlorobenzene	23.5	2.0	ug/L	50.00		46.9	17-70.9	6.84	28	07/02/2013	
2,4,5-Trichlorophenol	75.9	5.0	ug/L	100.0		75.9	42-109.1	2.36	19.9	07/02/2013	
2,4,6-Trichlorophenol	74.4	4.0	ug/L	100.0		74.4	37.7-104.6	0.706	19.8	07/02/2013	
2,4-Dichlorophenol	65.8	10	ug/L	100.0		65.8	30.2-96.9	5.09	21.7	07/02/2013	
2,4-Dimethylphenol	62.4	5.0	ug/L	100.0		62.4	29.9-97.6	4.94	24.2	07/02/2013	
2,4-Dinitrophenol	65.3	25	ug/L	100.0		65.3	34.3-113	6.48	32.4	07/02/2013	
2,4-Dinitrotoluene	40.9	5.0	ug/L	50.00		81.8	52.9-115.4	0.323	20.9	07/02/2013	
2,6-Dinitrotoluene	39.7	5.0	ug/L	50.00		79.4	54.6-109.4	2.65	16.5	07/02/2013	
2-Chloroaniline	31.6	5.0	ug/L	50.00		63.3	51.9-89.3	3.54	20	07/02/2013	
2-Chloronaphthalene	29.2	2.0	ug/L	50.00		58.4	28.2-85.3	5.30	22.4	07/02/2013	
2-Chlorophenol	48.1	10	ug/L	100.0		48.1	18.4-84.6	6.37	29.8	07/02/2013	
2-Methyl-4,6-dinitrophenol	76.5	20	ug/L	100.0		76.5	52.1-117.9	4.74	15	07/02/2013	
2-Methylnaphthalene	29.0	5.0	ug/L	50.00		58.0	25.3-79.1	0.562	21.8	07/02/2013	
2-Methylphenol (o-Cresol)	44.9	10	ug/L	100.0		44.9	22.9-83.2	3.06	30.2	07/02/2013	
2-Nitroaniline	37.7	20	ug/L	50.00		75.4	51.1-108.1	2.32	15.9	07/02/2013	
2-Nitrophenol	64.7	5.0	ug/L	100.0		64.7	24.8-94.7	5.70	24.3	07/02/2013	
3 & 4-Methylphenol	40.9	20	ug/L	100.0		40.9	20.4-80	0.422	30.2	07/02/2013	
3-Nitroaniline	37.8	20	ug/L	50.00		75.7	51.8-112.1	3.58	20.5	07/02/2013	
4-Bromophenyl phenyl ether	36.3	2.0	ug/L	50.00		72.6	48.6-102.4	2.11	15.9	07/02/2013	
4-Chloro-3-methyl-phenol	68.2	5.0	ug/L	100.0		68.2	40.3-104.7	0.213	20	07/02/2013	
4-Chloroaniline	29.0	10	ug/L	50.00		58.1	46.4-106.3	10.8	33.6	07/02/2013	
4-Chlorodiphenylether	35.9	1.0	ug/L	50.00		71.8	40-98.2	1.19	17	07/02/2013	
4-Nitroaniline	39.9	20	ug/L	50.00		79.8	47.6-127.5	1.78	27.5	07/02/2013	
4-Nitrophenol	21.5	25	ug/L	100.0		21.5	15.1-52	10.1	28.2	07/02/2013	T
Acenaphthene	32.8	1.0	ug/L	50.00		65.6	35.2-90.9	3.08	19.1	07/02/2013	
Acenaphthylene	34.9	1.0	ug/L	50.00		69.8	38.7-99.1	3.14	18	07/02/2013	
Aniline	11.9	4.0	ug/L	50.00		23.8	10-88.7	49.5	55.7	07/02/2013	
Anthracene	38.4	1.0	ug/L	50.00		76.9	53.9-106.8	0.708	15	07/02/2013	
Azobenzene	34.4	2.0	ug/L	50.00		68.7	39.7-109.3	0.770	17.4	07/02/2013	
Benz[a]anthracene	35.4	1.0	ug/L	50.00		70.7	52.5-113.7	4.62	16	07/02/2013	
Benzo[a]pyrene	32.0	1.0	ug/L	50.00		64.0	43.7-118	1.87	22.8	07/02/2013	
Benzo[b]fluoranthene	38.9	1.0	ug/L	50.00		77.8	44.1-118.6	2.18	23.4	07/02/2013	
Benzo[g,h,i]perylene	28.2	1.0	ug/L	50.00		56.5	25.8-127	6.31	32.2	07/02/2013	
Benzo[k]fluoranthene	37.1	1.0	ug/L	50.00		74.2	41.9-117.7	2.94	22.8	07/02/2013	
Benzyl Alcohol	45.6	50	ug/L	100.0		45.6	22.1-175	0.670	32.9	07/02/2013	T
Bis(2-chloroethoxy)methane	31.9	2.0	ug/L	50.00		63.8	27-96.8	0.395	25.6	07/02/2013	
Bis(2-chloroethyl)ether	28.4	1.0	ug/L	50.00		56.9	19.9-89.6	3.22	32	07/02/2013	
Bis(2-chloroisopropyl)ether	27.2	1.0	ug/L	50.00		54.4	14.2-92.7	2.29	28.2	07/02/2013	

Lab Work Order # 1306226

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2415 - Method: 3510 Water SVOC				**Prepared: 06/25/2013**							
LCS Dup (B3F2415-BSD1)											
Bis(2-ethylhexyl)phthalate	32.1	5.0	ug/L	50.00		64.1	41.1-120.2	2.95	25.7	07/02/2013	
Butyl benzyl phthalate	37.1	5.0	ug/L	50.00		74.3	54.6-118.5	0.654	15.1	07/02/2013	
Carbazole	36.9	5.0	ug/L	50.00		73.8	55.7-113.9	4.48	15	07/02/2013	
Chrysene	34.0	1.0	ug/L	50.00		67.9	53.1-114.9	5.35	16.3	07/02/2013	
Dibenz[a,h]anthracene	30.7	2.0	ug/L	50.00		61.4	23.4-134.7	6.93	29.8	07/02/2013	
Dibenzofuran	32.6	4.0	ug/L	50.00		65.2	37.7-92	3.21	17	07/02/2013	
Diethylphthalate	44.1	5.0	ug/L	50.00		88.2	56.6-111.9	1.32	17.7	07/02/2013	
Dimethyl phthalate	39.6	5.0	ug/L	50.00		79.2	56.9-106.4	1.86	15	07/02/2013	
Di-n-butyl phthalate	38.6	5.0	ug/L	50.00		77.2	55.1-115.8	0.384	15	07/02/2013	
Di-n-octyl phthalate	28.0	5.0	ug/L	50.00		56.1	43.6-120.8	4.13	26.2	07/02/2013	
Fluoranthene	38.3	1.0	ug/L	50.00		76.6	55-112.1	5.19	16.3	07/02/2013	
Fluorene	36.1	1.0	ug/L	50.00		72.3	42-98	2.14	16.4	07/02/2013	
Hexachlorobenzene	36.5	1.0	ug/L	50.00		73.1	49.5-103.4	1.96	15	07/02/2013	
Hexachlorobutadiene	23.9	1.0	ug/L	50.00		47.8	14.2-71.4	4.78	29	07/02/2013	
Hexachlorocyclopentadiene	17.3	10	ug/L	50.00		34.7	10-58.9	5.86	36.7	07/02/2013	
Hexachloroethane	18.8	1.0	ug/L	50.00		37.6	10.9-61.4	2.02	33.6	07/02/2013	
Indeno(1,2,3-c,d)pyrene	23.8	2.0	ug/L	50.00		47.7	29.1-133.2	4.74	29.3	07/02/2013	
Isophorone	31.2	1.0	ug/L	50.00		62.5	29.3-98.9	0.0339	25.6	07/02/2013	
N,N-dimethylaniline	29.5	5.0	ug/L	50.00		58.9	38.2-91.2	4.84	19.6	07/02/2013	
Naphthalene	26.1	1.0	ug/L	50.00		52.3	22-76.8	5.69	24.2	07/02/2013	
Nitrobenzene	31.0	2.0	ug/L	50.00		61.9	26-89.7	4.88	25	07/02/2013	
N-methylaniline	25.5	1.0	ug/L	50.00		51.0	29.6-98.5	14.9	40.7	07/02/2013	
N-Nitrosodimethylamine	14.2	5.0	ug/L	50.00		28.4	10-72.1	0.799	45.8	07/02/2013	
N-Nitrosodi-n-propylamine	36.3	2.0	ug/L	50.00		72.5	29.5-96.3	2.40	27.6	07/02/2013	
N-Nitrosodiphenylamine	36.7	2.0	ug/L	50.00		73.5	57.3-112.2	1.95	16.7	07/02/2013	
Pentachlorophenol	79.6	20	ug/L	100.0		79.6	45.5-108.7	0.565	15	07/02/2013	
Phenanthrene	36.4	1.0	ug/L	50.00		72.8	54.5-102.4	2.47	15	07/02/2013	
Phenol	18.9	5.0	ug/L	100.0		18.9	10-40.3	3.18	34.4	07/02/2013	
Pyrene	36.5	1.0	ug/L	50.00		73.0	54.2-110.5	0.615	18.6	07/02/2013	
Pyridine	4.47	20	ug/L	50.00		8.93	10-63.2	73.4	94.9	07/02/2013	A08, T
Tetramethylurea	23.2	1.0	ug/L	50.00		46.3	13.9-94.9	6.57	30.3	07/02/2013	
Surrogate: 2,4,6-Tribromophenol	*46.5*		ug/L	*50.00*		*93.1*	*33.8-115*			07/02/2013	
Surrogate: 2-Fluorobiphenyl	*15.0*		ug/L	*25.00*		*59.9*	*24.1-115*			07/02/2013	
Surrogate: 2-Fluorophenol	*11.9*		ug/L	*50.00*		*23.9*	*10-115*			07/02/2013	
Surrogate: Nitrobenzene-d5	*14.5*		ug/L	*25.00*		*58.2*	*17.8-115*			07/02/2013	
Surrogate: Phenol-d6	*10.4*		ug/L	*50.00*		*20.7*	*10-115*			07/02/2013	
Surrogate: p-Terphenyl-d14	*17.4*		ug/L	*25.00*		*69.7*	*41.8-115*			07/02/2013	
Matrix Spike (B3F2415-MS1)	**Source: 1306226-04**										
1,2,4-Trichlorobenzene	26.7	2.0	ug/L	51.02	ND	52.3	12.6-78.2			07/02/2013	
2,4,5-Trichlorophenol	78.3	5.1	ug/L	102.0	ND	76.7	35.7-118.6			07/02/2013	
2,4,6-Trichlorophenol	76.2	4.1	ug/L	102.0	ND	74.7	32.7-108.7			07/02/2013	
2,4-Dichlorophenol	68.4	10	ug/L	102.0	ND	67.0	24.7-98.5			07/02/2013	
2,4-Dimethylphenol	63.5	5.1	ug/L	102.0	ND	62.3	25.2-99.7			07/02/2013	
2,4-Dinitrophenol	64.2	26	ug/L	102.0	ND	62.9	32.9-131.3			07/02/2013	
2,4-Dinitrotoluene	39.7	5.1	ug/L	51.02	ND	77.8	52.9-115.3			07/02/2013	
2,6-Dinitrotoluene	39.1	5.1	ug/L	51.02	ND	76.6	54-109.4			07/02/2013	
2-Chloroaniline	30.9	5.1	ug/L	51.02	ND	60.7	30.4-97.2			07/02/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2415 - Method: 3510 Water SVOC				**Prepared: 06/25/2013**							
Matrix Spike (B3F2415-MS1)	**Source: 1306226-04**										
2-Chloronaphthalene	32.4	2.0	ug/L	51.02	ND	63.5	26.2-92.3			07/02/2013	
2-Chlorophenol	49.8	10	ug/L	102.0	ND	48.8	13.1-87.2			07/02/2013	
2-Methyl-4,6-dinitrophenol	77.8	20	ug/L	102.0	ND	76.3	52.3-119.8			07/02/2013	
2-Methylnaphthalene	31.2	5.1	ug/L	51.02	ND	61.1	13.4-95.1			07/02/2013	
2-Methylphenol (o-Cresol)	44.7	10	ug/L	102.0	ND	43.8	14.6-92.5			07/02/2013	
2-Nitroaniline	36.5	20	ug/L	51.02	ND	71.5	49.2-108.4			07/02/2013	
2-Nitrophenol	66.6	5.1	ug/L	102.0	ND	65.3	18.3-95.6			07/02/2013	
3 & 4-Methylphenol	40.1	20	ug/L	102.0	ND	39.3	12.1-93			07/02/2013	
3-Nitroaniline	34.9	20	ug/L	51.02	ND	68.4	40.2-113.5			07/02/2013	
4-Bromophenyl phenyl ether	37.3	2.0	ug/L	51.02	ND	73.1	49.8-106.2			07/02/2013	
4-Chloro-3-methyl-phenol	68.7	5.1	ug/L	102.0	ND	67.4	37.1-109.2			07/02/2013	
4-Chloroaniline	32.1	10	ug/L	51.02	ND	62.9	27.2-109.5			07/02/2013	
4-Chlorodiphenylether	36.0	1.0	ug/L	51.02	ND	70.6	42.6-101.8			07/02/2013	
4-Nitroaniline	37.6	20	ug/L	51.02	ND	73.7	33-129.4			07/02/2013	
4-Nitrophenol	20.2	26	ug/L	102.0	ND	19.8	10-86.9			07/02/2013	T
Acenaphthene	35.1	1.0	ug/L	51.02	ND	68.8	35.2-95.8			07/02/2013	
Acenaphthylene	36.5	1.0	ug/L	51.02	ND	71.5	38.3-103.1			07/02/2013	
Aniline	21.8	4.1	ug/L	51.02	ND	42.8	10-85.1			07/02/2013	
Anthracene	38.8	1.0	ug/L	51.02	ND	76.1	54.2-105.4			07/02/2013	
Azobenzene	36.0	2.0	ug/L	51.02	ND	70.5	45.7-105.9			07/02/2013	
Benz[a]anthracene	29.6	1.0	ug/L	51.02	ND	58.0	39.8-119.3			07/02/2013	
Benzo[a]pyrene	26.4	1.0	ug/L	51.02	ND	51.6	30-125.5			07/02/2013	
Benzo[b]fluoranthene	31.5	1.0	ug/L	51.02	ND	61.7	29.9-124.8			07/02/2013	
Benzo[g,h,i]perylene	21.3	1.0	ug/L	51.02	ND	41.7	10-133.9			07/02/2013	
Benzo[k]fluoranthene	30.3	1.0	ug/L	51.02	ND	59.3	28.6-120.8			07/02/2013	
Benzyl Alcohol	44.2	51	ug/L	102.0	ND	43.3	10-193.5			07/02/2013	T
Bis(2-chloroethoxy)methane	31.2	2.0	ug/L	51.02	ND	61.1	18.2-97.2			07/02/2013	
Bis(2-chloroethyl)ether	28.7	1.0	ug/L	51.02	ND	56.2	13-89.7			07/02/2013	
Bis(2-chloroisopropyl)ether	28.9	1.0	ug/L	51.02	ND	56.7	11.9-90.2			07/02/2013	
Bis(2-ethylhexyl)phthalate	25.0	5.1	ug/L	51.02	ND	48.9	24.7-129.2			07/02/2013	
Butyl benzyl phthalate	34.7	5.1	ug/L	51.02	ND	68.0	50.3-121.1			07/02/2013	
Carbazole	38.9	5.1	ug/L	51.02	ND	76.3	53.6-115.9			07/02/2013	
Chrysene	28.3	1.0	ug/L	51.02	ND	55.6	39.3-119.7			07/02/2013	
Dibenz[a,h]anthracene	23.4	2.0	ug/L	51.02	ND	45.9	10-140.4			07/02/2013	
Dibenzofuran	34.2	4.1	ug/L	51.02	ND	67.0	39.1-95.8			07/02/2013	
Diethylphthalate	42.5	5.1	ug/L	51.02	ND	83.3	56-112.5			07/02/2013	
Dimethyl phthalate	37.8	5.1	ug/L	51.02	ND	74.1	56.7-104.3			07/02/2013	
Di-n-butyl phthalate	37.3	5.1	ug/L	51.02	ND	73.1	53.6-114.7			07/02/2013	
Di-n-octyl phthalate	21.7	5.1	ug/L	51.02	ND	42.5	25.6-129.5			07/02/2013	
Fluoranthene	36.8	1.0	ug/L	51.02	ND	72.1	53.7-110.6			07/02/2013	
Fluorene	37.1	1.0	ug/L	51.02	ND	72.8	43.6-100.7			07/02/2013	
Hexachlorobenzene	34.2	1.0	ug/L	51.02	ND	67.1	45.8-105.9			07/02/2013	
Hexachlorobutadiene	26.1	1.0	ug/L	51.02	ND	51.1	10.8-78.6			07/02/2013	
Hexachlorocyclopentadiene	20.8	10	ug/L	51.02	ND	40.8	10-79.7			07/02/2013	
Hexachloroethane	20.8	1.0	ug/L	51.02	ND	40.8	10-76.7			07/02/2013	
Indeno(1,2,3-c,d)pyrene	18.3	2.0	ug/L	51.02	ND	35.8	12.4-140.5			07/02/2013	
Isophorone	31.3	1.0	ug/L	51.02	ND	61.3	23.1-96.1			07/02/2013	
N,N-dimethylaniline	27.6	5.1	ug/L	51.02	ND	54.1	26.8-92.2			07/02/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2415 - Method: 3510 Water SVOC				**Prepared: 06/25/2013**							
Matrix Spike (B3F2415-MS1)	**Source: 1306226-04**										
Naphthalene	29.0	1.0	ug/L	51.02	ND	56.8	10-104.5			07/02/2013	
Nitrobenzene	32.2	2.0	ug/L	51.02	ND	63.0	19.2-91.4			07/02/2013	
N-methylaniline	30.1	1.0	ug/L	51.02	ND	58.9	17.2-101.8			07/02/2013	
N-Nitrosodimethylamine	13.4	5.1	ug/L	51.02	ND	26.2	10-85.9			07/02/2013	
N-Nitrosodi-n-propylamine	35.9	2.0	ug/L	51.02	ND	70.5	21.8-95			07/02/2013	
N-Nitrosodiphenylamine	40.5	2.0	ug/L	51.02	ND	79.3	58.3-114.6			07/02/2013	
Pentachlorophenol	82.0	20	ug/L	102.0	ND	80.3	45.2-121.4			07/02/2013	
Phenanthrene	37.8	1.0	ug/L	51.02	ND	74.2	55.4-103.2			07/02/2013	
Phenol	18.0	5.1	ug/L	102.0	ND	17.6	10-59.7			07/02/2013	
Pyrene	34.6	1.0	ug/L	51.02	ND	67.8	49.1-113.8			07/02/2013	
Pyridine	9.92	20	ug/L	51.02	ND	19.4	10-72.3			07/02/2013	T
Tetramethylurea	20.7	1.0	ug/L	51.02	ND	40.6	23.6-99.1			07/02/2013	
Surrogate: 2,4,6-Tribromophenol	*48.3*		ug/L	*51.02*		*94.7*	*33.8-115*			07/02/2013	
Surrogate: 2-Fluorobiphenyl	*15.8*		ug/L	*25.51*		*61.8*	*24.1-115*			07/02/2013	
Surrogate: 2-Fluorophenol	*11.5*		ug/L	*51.02*		*22.6*	*10-115*			07/02/2013	
Surrogate: Nitrobenzene-d5	*15.4*		ug/L	*25.51*		*60.5*	*17.8-115*			07/02/2013	
Surrogate: Phenol-d6	*10.2*		ug/L	*51.02*		*20.0*	*10-115*			07/02/2013	
Surrogate: p-Terphenyl-d14	*14.8*		ug/L	*25.51*		*58.1*	*41.8-115*			07/02/2013	
Matrix Spike Dup (B3F2415-MSD1)	**Source: 1306226-04**										
1,2,4-Trichlorobenzene	25.8	2.0	ug/L	51.02	ND	50.5	12.6-78.2	3.36	67.7	07/02/2013	
2,4,5-Trichlorophenol	76.1	5.1	ug/L	102.0	ND	74.5	35.7-118.6	2.87	35.6	07/02/2013	
2,4,6-Trichlorophenol	72.9	4.1	ug/L	102.0	ND	71.5	32.7-108.7	4.46	38.9	07/02/2013	
2,4-Dichlorophenol	65.5	10	ug/L	102.0	ND	64.2	24.7-98.5	4.35	53.7	07/02/2013	
2,4-Dimethylphenol	61.8	5.1	ug/L	102.0	ND	60.5	25.2-99.7	2.85	51.7	07/02/2013	
2,4-Dinitrophenol	61.0	26	ug/L	102.0	ND	59.8	32.9-131.3	5.05	27.1	07/02/2013	
2,4-Dinitrotoluene	39.3	5.1	ug/L	51.02	ND	77.1	52.9-115.3	0.962	20.8	07/02/2013	
2,6-Dinitrotoluene	38.3	5.1	ug/L	51.02	ND	75.1	54-109.4	2.00	19.4	07/02/2013	
2-Chloroaniline	30.4	5.1	ug/L	51.02	ND	59.6	30.4-97.2	1.79	35	07/02/2013	
2-Chloronaphthalene	31.4	2.0	ug/L	51.02	ND	61.6	26.2-92.3	3.07	45.4	07/02/2013	
2-Chlorophenol	44.5	10	ug/L	102.0	ND	43.6	13.1-87.2	11.4	78.4	07/02/2013	
2-Methyl-4,6-dinitrophenol	73.8	20	ug/L	102.0	ND	72.3	52.3-119.8	5.39	15	07/02/2013	
2-Methylnaphthalene	30.3	5.1	ug/L	51.02	ND	59.5	13.4-95.1	2.76	54.2	07/02/2013	
2-Methylphenol (o-Cresol)	41.8	10	ug/L	102.0	ND	41.0	14.6-92.5	6.70	64.8	07/02/2013	
2-Nitroaniline	35.9	20	ug/L	51.02	ND	70.5	49.2-108.4	1.49	23.2	07/02/2013	
2-Nitrophenol	64.2	5.1	ug/L	102.0	ND	62.9	18.3-95.6	3.74	63.5	07/02/2013	
3 & 4-Methylphenol	38.0	20	ug/L	102.0	ND	37.2	12.1-93	5.37	56.8	07/02/2013	
3-Nitroaniline	35.8	20	ug/L	51.02	ND	70.3	40.2-113.5	2.65	53	07/02/2013	
4-Bromophenyl phenyl ether	35.9	2.0	ug/L	51.02	ND	70.3	49.8-106.2	3.84	19.9	07/02/2013	
4-Chloro-3-methyl-phenol	65.7	5.1	ug/L	102.0	ND	64.4	37.1-109.2	4.53	35.1	07/02/2013	
4-Chloroaniline	30.7	10	ug/L	51.02	ND	60.1	27.2-109.5	4.54	48.7	07/02/2013	
4-Chlorodiphenylether	37.4	1.0	ug/L	51.02	ND	73.4	42.6-101.8	3.89	26.3	07/02/2013	
4-Nitroaniline	38.8	20	ug/L	51.02	ND	76.1	33-129.4	3.17	28.4	07/02/2013	
4-Nitrophenol	20.9	26	ug/L	102.0	ND	20.5	10-86.9	3.36	35.1	07/02/2013	T
Acenaphthene	35.5	1.0	ug/L	51.02	ND	69.6	35.2-95.8	1.17	34.5	07/02/2013	
Acenaphthylene	37.0	1.0	ug/L	51.02	ND	72.6	38.3-103.1	1.54	35	07/02/2013	
Aniline	19.7	4.1	ug/L	51.02	ND	38.5	10-85.1	10.5	88.2	07/02/2013	
Anthracene	38.9	1.0	ug/L	51.02	ND	76.2	54.2-105.4	0.192	15	07/02/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2415 - Method: 3510 Water SVOC				**Prepared: 06/25/2013**							
Matrix Spike Dup (B3F2415-MSD1)	**Source: 1306226-04**										
Azobenzene	34.4	2.0	ug/L	51.02	ND	67.5	45.7-105.9	4.38	24.8	07/02/2013	
Benz[a]anthracene	33.6	1.0	ug/L	51.02	ND	65.8	39.8-119.3	12.6	21.1	07/02/2013	
Benzo[a]pyrene	30.6	1.0	ug/L	51.02	ND	59.9	30-125.5	14.8	27.1	07/02/2013	
Benzo[b]fluoranthene	36.1	1.0	ug/L	51.02	ND	70.8	29.9-124.8	13.6	27.2	07/02/2013	
Benzo[g,h,i]perylene	25.1	1.0	ug/L	51.02	ND	49.2	10-133.9	16.5	35.9	07/02/2013	
Benzo[k]fluoranthene	33.4	1.0	ug/L	51.02	ND	65.5	28.6-120.8	9.81	26.7	07/02/2013	
Benzyl Alcohol	39.6	51	ug/L	102.0	ND	38.8	10-193.5	10.8	54	07/02/2013	T
Bis(2-chloroethoxy)methane	30.6	2.0	ug/L	51.02	ND	60.0	18.2-97.2	1.87	57.8	07/02/2013	
Bis(2-chloroethyl)ether	27.3	1.0	ug/L	51.02	ND	53.5	13-89.7	4.90	77.1	07/02/2013	
Bis(2-chloroisopropyl)ether	27.5	1.0	ug/L	51.02	ND	53.9	11.9-90.2	5.09	78.2	07/02/2013	
Bis(2-ethylhexyl)phthalate	30.0	5.1	ug/L	51.02	ND	58.8	24.7-129.2	18.3	29.8	07/02/2013	
Butyl benzyl phthalate	37.1	5.1	ug/L	51.02	ND	72.7	50.3-121.1	6.69	17.7	07/02/2013	
Carbazole	38.4	5.1	ug/L	51.02	ND	75.3	53.6-115.9	1.39	15	07/02/2013	
Chrysene	33.3	1.0	ug/L	51.02	ND	65.3	39.3-119.7	16.1	22.2	07/02/2013	
Dibenz[a,h]anthracene	26.7	2.0	ug/L	51.02	ND	52.3	10-140.4	13.0	39.2	07/02/2013	
Dibenzofuran	34.5	4.1	ug/L	51.02	ND	67.7	39.1-95.8	0.984	30.4	07/02/2013	
Diethylphthalate	43.6	5.1	ug/L	51.02	ND	85.4	56-112.5	2.50	17.9	07/02/2013	
Dimethyl phthalate	37.8	5.1	ug/L	51.02	ND	74.1	56.7-104.3	0.0699	18.2	07/02/2013	
Di-n-butyl phthalate	39.2	5.1	ug/L	51.02	ND	76.8	53.6-114.7	4.82	15.1	07/02/2013	
Di-n-octyl phthalate	25.7	5.1	ug/L	51.02	ND	50.5	25.6-129.5	17.1	29.6	07/02/2013	
Fluoranthene	39.5	1.0	ug/L	51.02	ND	77.4	53.7-110.6	7.01	18.2	07/02/2013	
Fluorene	38.3	1.0	ug/L	51.02	ND	75.1	43.6-100.7	3.17	24.7	07/02/2013	
Hexachlorobenzene	36.4	1.0	ug/L	51.02	ND	71.3	45.8-105.9	6.12	18.6	07/02/2013	
Hexachlorobutadiene	25.3	1.0	ug/L	51.02	ND	49.6	10.8-78.6	2.99	78.9	07/02/2013	
Hexachlorocyclopentadiene	19.6	10	ug/L	51.02	ND	38.3	10-79.7	6.17	74.7	07/02/2013	
Hexachloroethane	19.8	1.0	ug/L	51.02	ND	38.9	10-76.7	4.79	95.4	07/02/2013	
Indeno(1,2,3-c,d)pyrene	21.3	2.0	ug/L	51.02	ND	41.7	12.4-140.5	15.1	33.5	07/02/2013	
Isophorone	30.3	1.0	ug/L	51.02	ND	59.4	23.1-96.1	3.10	47.1	07/02/2013	
N,N-dimethylaniline	27.1	5.1	ug/L	51.02	ND	53.2	26.8-92.2	1.71	29.9	07/02/2013	
Naphthalene	27.9	1.0	ug/L	51.02	ND	54.7	10-104.5	3.71	71.1	07/02/2013	
Nitrobenzene	31.1	2.0	ug/L	51.02	ND	60.9	19.2-91.4	3.39	64.6	07/02/2013	
N-methylaniline	28.0	1.0	ug/L	51.02	ND	54.8	17.2-101.8	7.18	55.6	07/02/2013	
N-Nitrosodimethylamine	12.4	5.1	ug/L	51.02	ND	24.3	10-85.9	7.50	85.3	07/02/2013	
N-Nitrosodi-n-propylamine	34.0	2.0	ug/L	51.02	ND	66.7	21.8-95	5.43	52	07/02/2013	
N-Nitrosodiphenylamine	38.2	2.0	ug/L	51.02	ND	74.8	58.3-114.6	5.83	15.9	07/02/2013	
Pentachlorophenol	78.7	20	ug/L	102.0	ND	77.1	45.2-121.4	4.10	18.3	07/02/2013	
Phenanthrene	38.0	1.0	ug/L	51.02	ND	74.4	55.4-103.2	0.342	15	07/02/2013	
Phenol	17.3	5.1	ug/L	102.0	ND	17.0	10-59.7	3.85	75	07/02/2013	
Pyrene	35.8	1.0	ug/L	51.02	ND	70.1	49.1-113.8	3.38	18.9	07/02/2013	
Pyridine	9.50	20	ug/L	51.02	ND	18.6	10-72.3	4.26	156.3	07/02/2013	T
Tetramethylurea	19.2	1.0	ug/L	51.02	ND	37.6	23.6-99.1	7.47	33.3	07/02/2013	
Surrogate: 2,4,6-Tribromophenol	*45.3*		ug/L	*51.02*		*88.8*	*33.8-115*			07/02/2013	
Surrogate: 2-Fluorobiphenyl	*15.4*		ug/L	*25.51*		*60.3*	*24.1-115*			07/02/2013	
Surrogate: 2-Fluorophenol	*12.2*		ug/L	*51.02*		*24.0*	*10-115*			07/02/2013	
Surrogate: Nitrobenzene-d5	*14.6*		ug/L	*25.51*		*57.4*	*17.8-115*			07/02/2013	
Surrogate: Phenol-d6	*9.55*		ug/L	*51.02*		*18.7*	*10-115*			07/02/2013	
Surrogate: p-Terphenyl-d14	*16.5*		ug/L	*25.51*		*64.5*	*41.8-115*			07/02/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2612 - Method: 3510 Water SVOC				**Prepared: 06/26/2013**							
Blank (B3F2612-BLK1)											
1,2,4-Trichlorobenzene	ND	2.0	ug/L							07/08/2013	
2,4,5-Trichlorophenol	ND	5.0	ug/L							07/08/2013	
2,4,6-Trichlorophenol	ND	4.0	ug/L							07/08/2013	
2,4-Dichlorophenol	ND	10	ug/L							07/08/2013	
2,4-Dimethylphenol	ND	5.0	ug/L							07/08/2013	
2,4-Dinitrophenol	ND	25	ug/L							07/08/2013	
2,4-Dinitrotoluene	ND	5.0	ug/L							07/08/2013	
2,6-Dinitrotoluene	ND	5.0	ug/L							07/08/2013	
2-Chloroaniline	ND	5.0	ug/L							07/08/2013	
2-Chloronaphthalene	ND	2.0	ug/L							07/08/2013	
2-Chlorophenol	ND	10	ug/L							07/08/2013	
2-Methyl-4,6-dinitrophenol	ND	20	ug/L							07/08/2013	
2-Methylnaphthalene	ND	5.0	ug/L							07/08/2013	
2-Methylphenol (o-Cresol)	ND	10	ug/L							07/08/2013	
2-Nitroaniline	ND	20	ug/L							07/08/2013	
2-Nitrophenol	ND	5.0	ug/L							07/08/2013	
3 & 4-Methylphenol	ND	20	ug/L							07/08/2013	
3-Nitroaniline	ND	20	ug/L							07/08/2013	
4-Bromophenyl phenyl ether	ND	2.0	ug/L							07/08/2013	
4-Chloro-3-methyl-phenol	ND	5.0	ug/L							07/08/2013	
4-Chloroaniline	ND	10	ug/L							07/08/2013	
4-Chlorodiphenylether	ND	1.0	ug/L							07/08/2013	
4-Nitroaniline	ND	20	ug/L							07/08/2013	
4-Nitrophenol	ND	25	ug/L							07/08/2013	
Acenaphthene	ND	1.0	ug/L							07/08/2013	
Acenaphthylene	ND	1.0	ug/L							07/08/2013	
Aniline	ND	4.0	ug/L							07/08/2013	
Anthracene	ND	1.0	ug/L							07/08/2013	
Azobenzene	ND	2.0	ug/L							07/08/2013	
Benz[a]anthracene	ND	1.0	ug/L							07/08/2013	
Benzo[a]pyrene	ND	1.0	ug/L							07/08/2013	
Benzo[b]fluoranthene	ND	1.0	ug/L							07/08/2013	
Benzo[g,h,i]perylene	ND	1.0	ug/L							07/08/2013	
Benzo[k]fluoranthene	ND	1.0	ug/L							07/08/2013	
Benzyl Alcohol	ND	50	ug/L							07/08/2013	
Bis(2-chloroethoxy)methane	ND	2.0	ug/L							07/08/2013	
Bis(2-chloroethyl)ether	ND	1.0	ug/L							07/08/2013	
Bis(2-chloroisopropyl)ether	ND	1.0	ug/L							07/08/2013	
Bis(2-ethylhexyl)phthalate	ND	5.0	ug/L							07/08/2013	
Butyl benzyl phthalate	ND	5.0	ug/L							07/08/2013	
Carbazole	ND	5.0	ug/L							07/08/2013	
Chrysene	ND	1.0	ug/L							07/08/2013	
Dibenz[a,h]anthracene	ND	2.0	ug/L							07/08/2013	
Dibenzofuran	ND	4.0	ug/L							07/08/2013	
Diethylphthalate	ND	5.0	ug/L							07/08/2013	
Dimethyl phthalate	ND	5.0	ug/L							07/08/2013	
Di-n-butyl phthalate	ND	5.0	ug/L							07/08/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2612 - Method: 3510 Water SVOC				**Prepared: 06/26/2013**							
Blank (B3F2612-BLK1)											
Di-n-octyl phthalate	ND	5.0	ug/L							07/08/2013	
Fluoranthene	ND	1.0	ug/L							07/08/2013	
Fluorene	ND	1.0	ug/L							07/08/2013	
Hexachlorobenzene	ND	1.0	ug/L							07/08/2013	
Hexachlorobutadiene	ND	1.0	ug/L							07/08/2013	
Hexachlorocyclopentadiene	ND	10	ug/L							07/08/2013	
Hexachloroethane	ND	1.0	ug/L							07/08/2013	
Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L							07/08/2013	
Isophorone	ND	1.0	ug/L							07/08/2013	
N,N-dimethylaniline	ND	5.0	ug/L							07/08/2013	
Naphthalene	ND	1.0	ug/L							07/08/2013	
Nitrobenzene	ND	2.0	ug/L							07/08/2013	
N-methylaniline	ND	1.0	ug/L							07/08/2013	
N-Nitrosodimethylamine	ND	5.0	ug/L							07/08/2013	
N-Nitrosodi-n-propylamine	ND	2.0	ug/L							07/08/2013	
N-Nitrosodiphenylamine	ND	2.0	ug/L							07/08/2013	
Pentachlorophenol	ND	20	ug/L							07/08/2013	
Phenanthrene	ND	1.0	ug/L							07/08/2013	
Phenol	ND	5.0	ug/L							07/08/2013	
Pyrene	ND	1.0	ug/L							07/08/2013	
Pyridine	ND	20	ug/L							07/08/2013	
Tetramethylurea	ND	1.0	ug/L							07/08/2013	
Surrogate: 2,4,6-Tribromophenol	*40.0*		ug/L	*50.00*		*80.1*	*33.8-115*			07/08/2013	
Surrogate: 2-Fluorobiphenyl	*12.2*		ug/L	*25.00*		*48.8*	*24.1-115*			07/08/2013	
Surrogate: 2-Fluorophenol	*11.1*		ug/L	*50.00*		*22.3*	*10-115*			07/08/2013	
Surrogate: Nitrobenzene-d5	*12.8*		ug/L	*25.00*		*51.2*	*17.8-115*			07/08/2013	
Surrogate: Phenol-d6	*6.87*		ug/L	*50.00*		*13.7*	*10-115*			07/08/2013	
Surrogate: p-Terphenyl-d14	*19.8*		ug/L	*25.00*		*79.1*	*41.8-115*			07/08/2013	
LCS (B3F2612-BS1)											
1,2,4-Trichlorobenzene	21.8	2.0	ug/L	50.00		43.7	17-70.9			07/08/2013	
2,4,5-Trichlorophenol	73.0	5.0	ug/L	100.0		73.0	42-109.1			07/08/2013	
2,4,6-Trichlorophenol	75.2	4.0	ug/L	100.0		75.2	37.7-104.6			07/08/2013	
2,4-Dichlorophenol	64.0	10	ug/L	100.0		64.0	30.2-96.9			07/08/2013	
2,4-Dimethylphenol	60.1	5.0	ug/L	100.0		60.1	29.9-97.6			07/08/2013	
2,4-Dinitrophenol	60.2	25	ug/L	100.0		60.2	34.3-113			07/08/2013	
2,4-Dinitrotoluene	39.6	5.0	ug/L	50.00		79.1	52.9-115.4			07/08/2013	
2,6-Dinitrotoluene	38.6	5.0	ug/L	50.00		77.1	54.6-109.4			07/08/2013	
2-Chloroaniline	30.9	5.0	ug/L	50.00		61.8	51.9-89.3			07/08/2013	
2-Chloronaphthalene	26.2	2.0	ug/L	50.00		52.4	28.2-85.3			07/08/2013	
2-Chlorophenol	51.0	10	ug/L	100.0		51.0	18.4-84.6			07/08/2013	
2-Methyl-4,6-dinitrophenol	77.7	20	ug/L	100.0		77.7	52.1-117.9			07/08/2013	
2-Methylnaphthalene	25.1	5.0	ug/L	50.00		50.3	25.3-79.1			07/08/2013	
2-Methylphenol (o-Cresol)	44.2	10	ug/L	100.0		44.2	22.9-83.2			07/08/2013	
2-Nitroaniline	33.7	20	ug/L	50.00		67.3	51.1-108.1			07/08/2013	
2-Nitrophenol	59.6	5.0	ug/L	100.0		59.6	24.8-94.7			07/08/2013	
3 & 4-Methylphenol	42.0	20	ug/L	100.0		42.0	20.4-80			07/08/2013	
3-Nitroaniline	35.9	20	ug/L	50.00		71.9	51.8-112.1			07/08/2013	

Lab Work Order # 1306226

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2612 - Method: 3510 Water SVOC				**Prepared: 06/26/2013**							
LCS (B3F2612-BS1)											
4-Bromophenyl phenyl ether	37.0	2.0	ug/L	50.00		73.9	48.6-102.4			07/08/2013	
4-Chloro-3-methyl-phenol	64.2	5.0	ug/L	100.0		64.2	40.3-104.7			07/08/2013	
4-Chloroaniline	31.1	10	ug/L	50.00		62.2	46.4-106.3			07/08/2013	
4-Chlorodiphenylether	32.5	1.0	ug/L	50.00		65.0	40-98.2			07/08/2013	
4-Nitroaniline	38.1	20	ug/L	50.00		76.3	47.6-127.5			07/08/2013	
4-Nitrophenol	29.7	25	ug/L	100.0		29.7	15.1-52			07/08/2013	
Acenaphthene	30.2	1.0	ug/L	50.00		60.3	35.2-90.9			07/08/2013	
Acenaphthylene	32.1	1.0	ug/L	50.00		64.2	38.7-99.1			07/08/2013	
Aniline	17.7	4.0	ug/L	50.00		35.4	10-88.7			07/08/2013	
Anthracene	39.7	1.0	ug/L	50.00		79.5	53.9-106.8			07/08/2013	
Azobenzene	37.2	2.0	ug/L	50.00		74.4	39.7-109.3			07/08/2013	
Benz[a]anthracene	36.5	1.0	ug/L	50.00		73.1	52.5-113.7			07/08/2013	
Benzo[a]pyrene	29.8	1.0	ug/L	50.00		59.6	43.7-118			07/08/2013	
Benzo[b]fluoranthene	33.6	1.0	ug/L	50.00		67.2	44.1-118.6			07/08/2013	
Benzo[g,h,i]perylene	31.8	1.0	ug/L	50.00		63.6	25.8-127			07/08/2013	
Benzo[k]fluoranthene	34.1	1.0	ug/L	50.00		68.1	41.9-117.7			07/08/2013	
Benzyl Alcohol	44.1	50	ug/L	100.0		44.1	22.1-175			07/08/2013	T
Bis(2-chloroethoxy)methane	26.3	2.0	ug/L	50.00		52.6	27-96.8			07/08/2013	
Bis(2-chloroethyl)ether	25.8	1.0	ug/L	50.00		51.5	19.9-89.6			07/08/2013	
Bis(2-chloroisopropyl)ether	43.9	1.0	ug/L	50.00		87.7	14.2-92.7			07/08/2013	
Bis(2-ethylhexyl)phthalate	32.1	5.0	ug/L	50.00		64.3	41.1-120.2			07/08/2013	
Butyl benzyl phthalate	30.0	5.0	ug/L	50.00		60.1	54.6-118.5			07/08/2013	
Carbazole	41.3	5.0	ug/L	50.00		82.6	55.7-113.9			07/08/2013	
Chrysene	35.4	1.0	ug/L	50.00		70.7	53.1-114.9			07/08/2013	
Dibenz[a,h]anthracene	35.5	2.0	ug/L	50.00		71.0	23.4-134.7			07/08/2013	
Dibenzofuran	29.7	4.0	ug/L	50.00		59.4	37.7-92			07/08/2013	
Diethylphthalate	42.5	5.0	ug/L	50.00		85.0	56.6-111.9			07/08/2013	
Dimethyl phthalate	39.3	5.0	ug/L	50.00		78.5	56.9-106.4			07/08/2013	
Di-n-butyl phthalate	42.1	5.0	ug/L	50.00		84.2	55.1-115.8			07/08/2013	
Di-n-octyl phthalate	34.5	5.0	ug/L	50.00		69.0	43.6-120.8			07/08/2013	
Fluoranthene	41.3	1.0	ug/L	50.00		82.5	55-112.1			07/08/2013	
Fluorene	33.2	1.0	ug/L	50.00		66.3	42-98			07/08/2013	
Hexachlorobenzene	38.9	1.0	ug/L	50.00		77.8	49.5-103.4			07/08/2013	
Hexachlorobutadiene	22.3	1.0	ug/L	50.00		44.5	14.2-71.4			07/08/2013	
Hexachlorocyclopentadiene	12.8	10	ug/L	50.00		25.5	10-58.9			07/08/2013	
Hexachloroethane	18.2	1.0	ug/L	50.00		36.4	10.9-61.4			07/08/2013	
Indeno(1,2,3-c,d)pyrene	30.7	2.0	ug/L	50.00		61.4	29.1-133.2			07/08/2013	
Isophorone	27.2	1.0	ug/L	50.00		54.5	29.3-98.9			07/08/2013	
N,N-dimethylaniline	30.9	5.0	ug/L	50.00		61.7	38.2-91.2			07/08/2013	
Naphthalene	23.7	1.0	ug/L	50.00		47.3	22-76.8			07/08/2013	
Nitrobenzene	27.0	2.0	ug/L	50.00		53.9	26-89.7			07/08/2013	
N-methylaniline	30.6	1.0	ug/L	50.00		61.3	29.6-98.5			07/08/2013	
N-Nitrosodimethylamine	13.5	5.0	ug/L	50.00		27.0	10-72.1			07/08/2013	
N-Nitrosodi-n-propylamine	32.0	2.0	ug/L	50.00		64.0	29.5-96.3			07/08/2013	
N-Nitrosodiphenylamine	38.0	2.0	ug/L	50.00		75.9	57.3-112.2			07/08/2013	
Pentachlorophenol	66.2	20	ug/L	100.0		66.2	45.5-108.7			07/08/2013	
Phenanthrene	36.9	1.0	ug/L	50.00		73.8	54.5-102.4			07/08/2013	
Phenol	15.1	5.0	ug/L	100.0		15.1	10-40.3			07/08/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2612 - Method: 3510 Water SVOC				**Prepared: 06/26/2013**							
LCS (B3F2612-BS1)											
Pyrene	31.1	1.0	ug/L	50.00		62.2	54.2-110.5			07/08/2013	
Pyridine	6.51	20	ug/L	50.00		13.0	10-63.2			07/08/2013	T
Tetramethylurea	21.4	1.0	ug/L	50.00		42.7	13.9-94.9			07/08/2013	
Surrogate: 2,4,6-Tribromophenol	*41.1*		ug/L	*50.00*		*82.2*	*33.8-115*			07/08/2013	
Surrogate: 2-Fluorobiphenyl	*13.4*		ug/L	*25.00*		*53.8*	*24.1-115*			07/08/2013	
Surrogate: 2-Fluorophenol	*12.4*		ug/L	*50.00*		*24.8*	*10-115*			07/08/2013	
Surrogate: Nitrobenzene-d5	*13.4*		ug/L	*25.00*		*53.5*	*17.8-115*			07/08/2013	
Surrogate: Phenol-d6	*7.52*		ug/L	*50.00*		*15.0*	*10-115*			07/08/2013	
Surrogate: p-Terphenyl-d14	*14.6*		ug/L	*25.00*		*58.4*	*41.8-115*			07/08/2013	
LCS Dup (B3F2612-BSD1)											
1,2,4-Trichlorobenzene	27.1	2.0	ug/L	50.00		54.3	17-70.9	21.7	28	07/08/2013	
2,4,5-Trichlorophenol	86.4	5.0	ug/L	100.0		86.4	42-109.1	16.7	19.9	07/08/2013	
2,4,6-Trichlorophenol	90.2	4.0	ug/L	100.0		90.2	37.7-104.6	18.1	19.8	07/08/2013	
2,4-Dichlorophenol	76.2	10	ug/L	100.0		76.2	30.2-96.9	17.5	21.7	07/08/2013	
2,4-Dimethylphenol	70.9	5.0	ug/L	100.0		70.9	29.9-97.6	16.5	24.2	07/08/2013	
2,4-Dinitrophenol	67.9	25	ug/L	100.0		67.9	34.3-113	12.0	32.4	07/08/2013	
2,4-Dinitrotoluene	45.7	5.0	ug/L	50.00		91.4	52.9-115.4	14.4	20.9	07/08/2013	
2,6-Dinitrotoluene	45.3	5.0	ug/L	50.00		90.6	54.6-109.4	16.1	16.5	07/08/2013	
2-Chloroaniline	34.9	5.0	ug/L	50.00		69.8	51.9-89.3	12.2	20	07/08/2013	
2-Chloronaphthalene	33.8	2.0	ug/L	50.00		67.5	28.2-85.3	25.2	22.4	07/08/2013	A07
2-Chlorophenol	57.1	10	ug/L	100.0		57.1	18.4-84.6	11.3	29.8	07/08/2013	
2-Methyl-4,6-dinitrophenol	88.6	20	ug/L	100.0		88.6	52.1-117.9	13.1	15	07/08/2013	
2-Methylnaphthalene	31.7	5.0	ug/L	50.00		63.5	25.3-79.1	23.2	21.8	07/08/2013	A07
2-Methylphenol (o-Cresol)	49.3	10	ug/L	100.0		49.3	22.9-83.2	11.1	30.2	07/08/2013	
2-Nitroaniline	40.2	20	ug/L	50.00		80.5	51.1-108.1	17.8	15.9	07/08/2013	A07
2-Nitrophenol	71.8	5.0	ug/L	100.0		71.8	24.8-94.7	18.5	24.3	07/08/2013	
3 & 4-Methylphenol	46.4	20	ug/L	100.0		46.4	20.4-80	9.93	30.2	07/08/2013	
3-Nitroaniline	38.4	20	ug/L	50.00		76.7	51.8-112.1	6.56	20.5	07/08/2013	
4-Bromophenyl phenyl ether	44.5	2.0	ug/L	50.00		89.0	48.6-102.4	18.5	15.9	07/08/2013	A07
4-Chloro-3-methyl-phenol	75.6	5.0	ug/L	100.0		75.6	40.3-104.7	16.3	20	07/08/2013	
4-Chloroaniline	32.3	10	ug/L	50.00		64.5	46.4-106.3	3.72	33.6	07/08/2013	
4-Chlorodiphenylether	40.0	1.0	ug/L	50.00		80.1	40-98.2	20.8	17	07/08/2013	A07
4-Nitroaniline	41.5	20	ug/L	50.00		83.0	47.6-127.5	8.48	27.5	07/08/2013	
4-Nitrophenol	32.3	25	ug/L	100.0		32.3	15.1-52	8.55	28.2	07/08/2013	
Acenaphthene	37.5	1.0	ug/L	50.00		75.0	35.2-90.9	21.7	19.1	07/08/2013	A07
Acenaphthylene	40.5	1.0	ug/L	50.00		81.0	38.7-99.1	23.1	18	07/08/2013	A07
Aniline	17.0	4.0	ug/L	50.00		34.0	10-88.7	4.03	55.7	07/08/2013	
Anthracene	45.8	1.0	ug/L	50.00		91.7	53.9-106.8	14.3	15	07/08/2013	
Azobenzene	45.0	2.0	ug/L	50.00		89.9	39.7-109.3	18.9	17.4	07/08/2013	A07
Benz[a]anthracene	38.5	1.0	ug/L	50.00		77.1	52.5-113.7	5.32	16	07/08/2013	
Benzo[a]pyrene	30.1	1.0	ug/L	50.00		60.3	43.7-118	1.16	22.8	07/08/2013	
Benzo[b]fluoranthene	35.5	1.0	ug/L	50.00		71.1	44.1-118.6	5.70	23.4	07/08/2013	
Benzo[g,h,i]perylene	32.1	1.0	ug/L	50.00		64.3	25.8-127	1.02	32.2	07/08/2013	
Benzo[k]fluoranthene	33.5	1.0	ug/L	50.00		67.1	41.9-117.7	1.51	22.8	07/08/2013	
Benzyl Alcohol	48.7	50	ug/L	100.0		48.7	22.1-175	9.97	32.9	07/08/2013	T
Bis(2-chloroethoxy)methane	32.2	2.0	ug/L	50.00		64.4	27-96.8	20.1	25.6	07/08/2013	
Bis(2-chloroethyl)ether	29.2	1.0	ug/L	50.00		58.4	19.9-89.6	12.6	32	07/08/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2612 - Method: 3510 Water SVOC				**Prepared: 06/26/2013**							
LCS Dup (B3F2612-BSD1)											
Bis(2-chloroisopropyl)ether	49.9	1.0	ug/L	50.00		99.7	14.2-92.7	12.8	28.2	07/08/2013	A09
Bis(2-ethylhexyl)phthalate	35.4	5.0	ug/L	50.00		70.8	41.1-120.2	9.74	25.7	07/08/2013	
Butyl benzyl phthalate	33.9	5.0	ug/L	50.00		67.7	54.6-118.5	11.9	15.1	07/08/2013	
Carbazole	46.9	5.0	ug/L	50.00		93.7	55.7-113.9	12.6	15	07/08/2013	
Chrysene	37.3	1.0	ug/L	50.00		74.5	53.1-114.9	5.22	16.3	07/08/2013	
Dibenz[a,h]anthracene	36.2	2.0	ug/L	50.00		72.4	23.4-134.7	1.88	29.8	07/08/2013	
Dibenzofuran	37.3	4.0	ug/L	50.00		74.6	37.7-92	22.7	17	07/08/2013	A07
Diethylphthalate	49.4	5.0	ug/L	50.00		98.8	56.6-111.9	15.1	17.7	07/08/2013	
Dimethyl phthalate	47.0	5.0	ug/L	50.00		94.1	56.9-106.4	18.0	15	07/08/2013	A07
Di-n-butyl phthalate	46.2	5.0	ug/L	50.00		92.5	55.1-115.8	9.41	15	07/08/2013	
Di-n-octyl phthalate	38.2	5.0	ug/L	50.00		76.4	43.6-120.8	10.2	26.2	07/08/2013	
Fluoranthene	44.9	1.0	ug/L	50.00		89.8	55-112.1	8.47	16.3	07/08/2013	
Fluorene	40.2	1.0	ug/L	50.00		80.3	42-98	19.1	16.4	07/08/2013	A07
Hexachlorobenzene	41.2	1.0	ug/L	50.00		82.4	49.5-103.4	5.72	15	07/08/2013	
Hexachlorobutadiene	26.9	1.0	ug/L	50.00		53.8	14.2-71.4	18.8	29	07/08/2013	
Hexachlorocyclopentadiene	15.7	10	ug/L	50.00		31.4	10-58.9	20.5	36.7	07/08/2013	
Hexachloroethane	22.2	1.0	ug/L	50.00		44.4	10.9-61.4	19.9	33.6	07/08/2013	
Indeno(1,2,3-c,d)pyrene	31.2	2.0	ug/L	50.00		62.5	29.1-133.2	1.65	29.3	07/08/2013	
Isophorone	33.2	1.0	ug/L	50.00		66.4	29.3-98.9	19.7	25.6	07/08/2013	
N,N-dimethylaniline	32.0	5.0	ug/L	50.00		63.9	38.2-91.2	3.55	19.6	07/08/2013	
Naphthalene	29.6	1.0	ug/L	50.00		59.2	22-76.8	22.3	24.2	07/08/2013	
Nitrobenzene	33.0	2.0	ug/L	50.00		66.1	26-89.7	20.3	25	07/08/2013	
N-methylaniline	31.2	1.0	ug/L	50.00		62.4	29.6-98.5	1.76	40.7	07/08/2013	
N-Nitrosodimethylamine	14.3	5.0	ug/L	50.00		28.6	10-72.1	5.79	45.8	07/08/2013	
N-Nitrosodi-n-propylamine	37.8	2.0	ug/L	50.00		75.7	29.5-96.3	16.8	27.6	07/08/2013	
N-Nitrosodiphenylamine	46.0	2.0	ug/L	50.00		92.0	57.3-112.2	19.1	16.7	07/08/2013	A07
Pentachlorophenol	73.1	20	ug/L	100.0		73.1	45.5-108.7	9.90	15	07/08/2013	
Phenanthrene	42.9	1.0	ug/L	50.00		85.8	54.5-102.4	15.1	15	07/08/2013	A07
Phenol	16.2	5.0	ug/L	100.0		16.2	10-40.3	7.27	34.4	07/08/2013	
Pyrene	36.2	1.0	ug/L	50.00		72.4	54.2-110.5	15.3	18.6	07/08/2013	
Pyridine	8.48	20	ug/L	50.00		17.0	10-63.2	26.3	94.9	07/08/2013	T
Tetramethylurea	22.9	1.0	ug/L	50.00		45.9	13.9-94.9	7.15	30.3	07/08/2013	
Surrogate: 2,4,6-Tribromophenol	*47.0*		ug/L	*50.00*		*94.0*	*33.8-115*			07/08/2013	
Surrogate: 2-Fluorobiphenyl	*16.9*		ug/L	*25.00*		*67.5*	*24.1-115*			07/08/2013	
Surrogate: 2-Fluorophenol	*13.3*		ug/L	*50.00*		*26.6*	*10-115*			07/08/2013	
Surrogate: Nitrobenzene-d5	*16.4*		ug/L	*25.00*		*65.5*	*17.8-115*			07/08/2013	
Surrogate: Phenol-d6	*8.34*		ug/L	*50.00*		*16.7*	*10-115*			07/08/2013	
Surrogate: p-Terphenyl-d14	*15.8*		ug/L	*25.00*		*63.4*	*41.8-115*			07/08/2013	
Matrix Spike (B3F2612-MS1)	**Source: 1306224-04**										
1,2,4-Trichlorobenzene	27.4	2.0	ug/L	50.00	ND	54.8	12.6-78.2			07/08/2013	
2,4,5-Trichlorophenol	89.8	5.0	ug/L	100.0	ND	89.8	35.7-118.6			07/08/2013	
2,4,6-Trichlorophenol	92.9	4.0	ug/L	100.0	ND	92.9	32.7-108.7			07/08/2013	
2,4-Dichlorophenol	73.8	10	ug/L	100.0	ND	73.8	24.7-98.5			07/08/2013	
2,4-Dimethylphenol	69.0	5.0	ug/L	100.0	ND	69.0	25.2-99.7			07/08/2013	
2,4-Dinitrophenol	68.0	25	ug/L	100.0	ND	68.0	32.9-131.3			07/08/2013	
2,4-Dinitrotoluene	45.5	5.0	ug/L	50.00	ND	91.1	52.9-115.3			07/08/2013	
2,6-Dinitrotoluene	44.7	5.0	ug/L	50.00	ND	89.4	54-109.4			07/08/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2612 - Method: 3510 Water SVOC				**Prepared: 06/26/2013**							
Matrix Spike (B3F2612-MS1)	**Source: 1306224-04**										
2-Chloroaniline	32.5	5.0	ug/L	50.00	ND	65.0	30.4-97.2			07/08/2013	
2-Chloronaphthalene	32.9	2.0	ug/L	50.00	ND	65.7	26.2-92.3			07/08/2013	
2-Chlorophenol	53.6	10	ug/L	100.0	ND	53.6	13.1-87.2			07/08/2013	
2-Methyl-4,6-dinitrophenol	87.3	20	ug/L	100.0	ND	87.3	52.3-119.8			07/08/2013	
2-Methylnaphthalene	32.8	5.0	ug/L	50.00	ND	65.7	13.4-95.1			07/08/2013	
2-Methylphenol (o-Cresol)	44.7	10	ug/L	100.0	ND	44.7	14.6-92.5			07/08/2013	
2-Nitroaniline	39.5	20	ug/L	50.00	ND	79.0	49.2-108.4			07/08/2013	
2-Nitrophenol	72.7	5.0	ug/L	100.0	ND	72.7	18.3-95.6			07/08/2013	
3 & 4-Methylphenol	42.0	20	ug/L	100.0	ND	42.0	12.1-93			07/08/2013	
3-Nitroaniline	36.6	20	ug/L	50.00	ND	73.2	40.2-113.5			07/08/2013	
4-Bromophenyl phenyl ether	41.9	2.0	ug/L	50.00	ND	83.7	49.8-106.2			07/08/2013	
4-Chloro-3-methyl-phenol	73.6	5.0	ug/L	100.0	ND	73.6	37.1-109.2			07/08/2013	
4-Chloroaniline	26.2	10	ug/L	50.00	ND	52.5	27.2-109.5			07/08/2013	
4-Chlorodiphenylether	38.7	1.0	ug/L	50.00	ND	77.3	42.6-101.8			07/08/2013	
4-Nitroaniline	41.4	20	ug/L	50.00	ND	82.8	33-129.4			07/08/2013	
4-Nitrophenol	30.9	25	ug/L	100.0	ND	30.9	10-86.9			07/08/2013	
Acenaphthene	37.1	1.0	ug/L	50.00	ND	74.3	35.2-95.8			07/08/2013	
Acenaphthylene	39.9	1.0	ug/L	50.00	ND	79.9	38.3-103.1			07/08/2013	
Aniline	13.1	4.0	ug/L	50.00	ND	26.2	10-85.1			07/08/2013	
Anthracene	42.9	1.0	ug/L	50.00	ND	85.8	54.2-105.4			07/08/2013	
Azobenzene	44.7	2.0	ug/L	50.00	ND	89.5	45.7-105.9			07/08/2013	
Benz[a]anthracene	29.2	1.0	ug/L	50.00	ND	58.5	39.8-119.3			07/08/2013	
Benzo[a]pyrene	22.5	1.0	ug/L	50.00	ND	44.9	30-125.5			07/08/2013	
Benzo[b]fluoranthene	26.8	1.0	ug/L	50.00	ND	53.7	29.9-124.8			07/08/2013	
Benzo[g,h,i]perylene	21.3	1.0	ug/L	50.00	ND	42.7	10-133.9			07/08/2013	
Benzo[k]fluoranthene	24.0	1.0	ug/L	50.00	ND	47.9	28.6-120.8			07/08/2013	
Benzyl Alcohol	42.2	50	ug/L	100.0	ND	42.2	10-193.5			07/08/2013	T
Bis(2-chloroethoxy)methane	31.4	2.0	ug/L	50.00	ND	62.8	18.2-97.2			07/08/2013	
Bis(2-chloroethyl)ether	27.9	1.0	ug/L	50.00	ND	55.8	13-89.7			07/08/2013	
Bis(2-chloroisopropyl)ether	49.7	1.0	ug/L	50.00	ND	99.3	11.9-90.2			07/08/2013	A04
Bis(2-ethylhexyl)phthalate	25.0	5.0	ug/L	50.00	ND	50.0	24.7-129.2			07/08/2013	
Butyl benzyl phthalate	31.6	5.0	ug/L	50.00	ND	63.1	50.3-121.1			07/08/2013	
Carbazole	44.8	5.0	ug/L	50.00	ND	89.7	53.6-115.9			07/08/2013	
Chrysene	27.3	1.0	ug/L	50.00	ND	54.5	39.3-119.7			07/08/2013	
Dibenz[a,h]anthracene	23.8	2.0	ug/L	50.00	ND	47.6	10-140.4			07/08/2013	
Dibenzofuran	36.9	4.0	ug/L	50.00	ND	73.9	39.1-95.8			07/08/2013	
Diethylphthalate	47.7	5.0	ug/L	50.00	ND	95.5	56-112.5			07/08/2013	
Dimethyl phthalate	43.7	5.0	ug/L	50.00	ND	87.5	56.7-104.3			07/08/2013	
Di-n-butyl phthalate	42.2	5.0	ug/L	50.00	ND	84.4	53.6-114.7			07/08/2013	
Di-n-octyl phthalate	25.2	5.0	ug/L	50.00	ND	50.5	25.6-129.5			07/08/2013	
Fluoranthene	37.7	1.0	ug/L	50.00	ND	75.5	53.7-110.6			07/08/2013	
Fluorene	40.0	1.0	ug/L	50.00	ND	79.9	43.6-100.7			07/08/2013	
Hexachlorobenzene	36.0	1.0	ug/L	50.00	ND	72.0	45.8-105.9			07/08/2013	
Hexachlorobutadiene	28.3	1.0	ug/L	50.00	ND	56.6	10.8-78.6			07/08/2013	
Hexachlorocyclopentadiene	18.5	10	ug/L	50.00	ND	37.0	10-79.7			07/08/2013	
Hexachloroethane	22.3	1.0	ug/L	50.00	ND	44.6	10-76.7			07/08/2013	
Indeno(1,2,3-c,d)pyrene	20.4	2.0	ug/L	50.00	ND	40.9	12.4-140.5			07/08/2013	
Isophorone	32.8	1.0	ug/L	50.00	ND	65.6	23.1-96.1			07/08/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2612 - Method: 3510 Water SVOC				**Prepared: 06/26/2013**							
Matrix Spike (B3F2612-MS1)	**Source: 1306224-04**										
N,N-dimethylaniline	27.1	5.0	ug/L	50.00	ND	54.1	26.8-92.2			07/08/2013	
Naphthalene	29.9	1.0	ug/L	50.00	ND	59.8	10-104.5			07/08/2013	
Nitrobenzene	31.7	2.0	ug/L	50.00	ND	63.3	19.2-91.4			07/08/2013	
N-methylaniline	26.2	1.0	ug/L	50.00	ND	52.3	17.2-101.8			07/08/2013	
N-Nitrosodimethylamine	11.9	5.0	ug/L	50.00	ND	23.9	10-85.9			07/08/2013	
N-Nitrosodi-n-propylamine	36.4	2.0	ug/L	50.00	ND	72.8	21.8-95			07/08/2013	
N-Nitrosodiphenylamine	46.6	2.0	ug/L	50.00	ND	93.3	58.3-114.6			07/08/2013	
Pentachlorophenol	71.6	20	ug/L	100.0	ND	71.6	45.2-121.4			07/08/2013	
Phenanthrene	41.4	1.0	ug/L	50.00	ND	82.8	55.4-103.2			07/08/2013	
Phenol	15.3	5.0	ug/L	100.0	ND	15.3	10-59.7			07/08/2013	
Pyrene	33.8	1.0	ug/L	50.00	ND	67.7	49.1-113.8			07/08/2013	
Pyridine	7.14	20	ug/L	50.00	ND	14.3	10-72.3			07/08/2013	T
Tetramethylurea	19.6	1.0	ug/L	50.00	ND	39.1	23.6-99.1			07/08/2013	
Surrogate: 2,4,6-Tribromophenol	*46.2*		ug/L	*50.00*		*92.4*	*33.8-115*			07/08/2013	
Surrogate: 2-Fluorobiphenyl	*17.3*		ug/L	*25.00*		*69.0*	*24.1-115*			07/08/2013	
Surrogate: 2-Fluorophenol	*11.8*		ug/L	*50.00*		*23.6*	*10-115*			07/08/2013	
Surrogate: Nitrobenzene-d5	*15.6*		ug/L	*25.00*		*62.5*	*17.8-115*			07/08/2013	
Surrogate: Phenol-d6	*7.15*		ug/L	*50.00*		*14.3*	*10-115*			07/08/2013	
Surrogate: p-Terphenyl-d14	*13.2*		ug/L	*25.00*		*52.9*	*41.8-115*			07/08/2013	
Matrix Spike Dup (B3F2612-MSD1)	**Source: 1306224-04**										
1,2,4-Trichlorobenzene	27.6	2.0	ug/L	50.00	ND	55.2	12.6-78.2	0.794	67.7	07/08/2013	
2,4,5-Trichlorophenol	93.7	5.0	ug/L	100.0	ND	93.7	35.7-118.6	4.23	35.6	07/08/2013	
2,4,6-Trichlorophenol	93.4	4.0	ug/L	100.0	ND	93.4	32.7-108.7	0.542	38.9	07/08/2013	
2,4-Dichlorophenol	75.6	10	ug/L	100.0	ND	75.6	24.7-98.5	2.41	53.7	07/08/2013	
2,4-Dimethylphenol	69.5	5.0	ug/L	100.0	ND	69.5	25.2-99.7	0.626	51.7	07/08/2013	
2,4-Dinitrophenol	74.4	25	ug/L	100.0	ND	74.4	32.9-131.3	9.06	27.1	07/08/2013	
2,4-Dinitrotoluene	50.8	5.0	ug/L	50.00	ND	102	52.9-115.3	11.0	20.8	07/08/2013	
2,6-Dinitrotoluene	47.2	5.0	ug/L	50.00	ND	94.4	54-109.4	5.35	19.4	07/08/2013	
2-Chloroaniline	32.7	5.0	ug/L	50.00	ND	65.5	30.4-97.2	0.703	35	07/08/2013	
2-Chloronaphthalene	34.8	2.0	ug/L	50.00	ND	69.5	26.2-92.3	5.62	45.4	07/08/2013	
2-Chlorophenol	53.4	10	ug/L	100.0	ND	53.4	13.1-87.2	0.451	78.4	07/08/2013	
2-Methyl-4,6-dinitrophenol	89.6	20	ug/L	100.0	ND	89.6	52.3-119.8	2.69	15	07/08/2013	
2-Methylnaphthalene	32.4	5.0	ug/L	50.00	ND	64.9	13.4-95.1	1.23	54.2	07/08/2013	
2-Methylphenol (o-Cresol)	44.7	10	ug/L	100.0	ND	44.7	14.6-92.5	0.00469	64.8	07/08/2013	
2-Nitroaniline	41.6	20	ug/L	50.00	ND	83.2	49.2-108.4	5.15	23.2	07/08/2013	
2-Nitrophenol	70.6	5.0	ug/L	100.0	ND	70.6	18.3-95.6	2.88	63.5	07/08/2013	
3 & 4-Methylphenol	42.0	20	ug/L	100.0	ND	42.0	12.1-93	0.168	56.8	07/08/2013	
3-Nitroaniline	42.7	20	ug/L	50.00	ND	85.3	40.2-113.5	15.3	53	07/08/2013	
4-Bromophenyl phenyl ether	44.1	2.0	ug/L	50.00	ND	88.1	49.8-106.2	5.12	19.9	07/08/2013	
4-Chloro-3-methyl-phenol	77.6	5.0	ug/L	100.0	ND	77.6	37.1-109.2	5.33	35.1	07/08/2013	
4-Chloroaniline	33.1	10	ug/L	50.00	ND	66.3	27.2-109.5	23.3	48.7	07/08/2013	
4-Chlorodiphenylether	45.0	1.0	ug/L	50.00	ND	90.0	42.6-101.8	15.2	26.3	07/08/2013	
4-Nitroaniline	47.8	20	ug/L	50.00	ND	95.6	33-129.4	14.3	28.4	07/08/2013	
4-Nitrophenol	32.7	25	ug/L	100.0	ND	32.7	10-86.9	5.58	35.1	07/08/2013	
Acenaphthene	40.4	1.0	ug/L	50.00	ND	80.9	35.2-95.8	8.50	34.5	07/08/2013	
Acenaphthylene	43.0	1.0	ug/L	50.00	ND	86.0	38.3-103.1	7.40	35	07/08/2013	
Aniline	21.5	4.0	ug/L	50.00	ND	43.0	10-85.1	48.6	88.2	07/08/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2612 - Method: 3510 Water SVOC				**Prepared: 06/26/2013**							
Matrix Spike Dup (B3F2612-MSD1)	**Source: 1306224-04**										
Anthracene	45.9	1.0	ug/L	50.00	ND	91.9	54.2-105.4	6.79	15	07/08/2013	
Azobenzene	44.9	2.0	ug/L	50.00	ND	89.9	45.7-105.9	0.418	24.8	07/08/2013	
Benz[a]anthracene	35.8	1.0	ug/L	50.00	ND	71.7	39.8-119.3	20.3	21.1	07/08/2013	
Benzo[a]pyrene	25.7	1.0	ug/L	50.00	ND	51.4	30-125.5	13.5	27.1	07/08/2013	
Benzo[b]fluoranthene	29.4	1.0	ug/L	50.00	ND	58.9	29.9-124.8	9.26	27.2	07/08/2013	
Benzo[g,h,i]perylene	25.7	1.0	ug/L	50.00	ND	51.3	10-133.9	18.4	35.9	07/08/2013	
Benzo[k]fluoranthene	29.1	1.0	ug/L	50.00	ND	58.2	28.6-120.8	19.3	26.7	07/08/2013	
Benzyl Alcohol	41.7	50	ug/L	100.0	ND	41.7	10-193.5	1.30	54	07/08/2013	T
Bis(2-chloroethoxy)methane	30.6	2.0	ug/L	50.00	ND	61.2	18.2-97.2	2.66	57.8	07/08/2013	
Bis(2-chloroethyl)ether	27.4	1.0	ug/L	50.00	ND	54.7	13-89.7	1.93	77.1	07/08/2013	
Bis(2-chloroisopropyl)ether	48.5	1.0	ug/L	50.00	ND	97.0	11.9-90.2	2.38	78.2	07/08/2013	A04
Bis(2-ethylhexyl)phthalate	30.0	5.0	ug/L	50.00	ND	60.0	24.7-129.2	18.3	29.8	07/08/2013	
Butyl benzyl phthalate	36.9	5.0	ug/L	50.00	ND	73.7	50.3-121.1	15.5	17.7	07/08/2013	
Carbazole	48.2	5.0	ug/L	50.00	ND	96.3	53.6-115.9	7.13	15	07/08/2013	
Chrysene	33.7	1.0	ug/L	50.00	ND	67.4	39.3-119.7	21.1	22.2	07/08/2013	
Dibenz[a,h]anthracene	28.4	2.0	ug/L	50.00	ND	56.8	10-140.4	17.5	39.2	07/08/2013	
Dibenzofuran	40.6	4.0	ug/L	50.00	ND	81.3	39.1-95.8	9.51	30.4	07/08/2013	
Diethylphthalate	52.7	5.0	ug/L	50.00	ND	105	56-112.5	9.93	17.9	07/08/2013	
Dimethyl phthalate	48.2	5.0	ug/L	50.00	ND	96.4	56.7-104.3	9.72	18.2	07/08/2013	
Di-n-butyl phthalate	47.1	5.0	ug/L	50.00	ND	94.3	53.6-114.7	11.1	15.1	07/08/2013	
Di-n-octyl phthalate	30.0	5.0	ug/L	50.00	ND	60.0	25.6-129.5	17.2	29.6	07/08/2013	
Fluoranthene	43.7	1.0	ug/L	50.00	ND	87.4	53.7-110.6	14.6	18.2	07/08/2013	
Fluorene	44.0	1.0	ug/L	50.00	ND	88.1	43.6-100.7	9.71	24.7	07/08/2013	
Hexachlorobenzene	40.8	1.0	ug/L	50.00	ND	81.7	45.8-105.9	12.6	18.6	07/08/2013	
Hexachlorobutadiene	27.2	1.0	ug/L	50.00	ND	54.4	10.8-78.6	3.85	78.9	07/08/2013	
Hexachlorocyclopentadiene	17.5	10	ug/L	50.00	ND	34.9	10-79.7	5.78	74.7	07/08/2013	
Hexachloroethane	21.8	1.0	ug/L	50.00	ND	43.5	10-76.7	2.33	95.4	07/08/2013	
Indeno(1,2,3-c,d)pyrene	24.3	2.0	ug/L	50.00	ND	48.6	12.4-140.5	17.2	33.5	07/08/2013	
Isophorone	32.4	1.0	ug/L	50.00	ND	64.9	23.1-96.1	1.16	47.1	07/08/2013	
N,N-dimethylaniline	29.4	5.0	ug/L	50.00	ND	58.8	26.8-92.2	8.20	29.9	07/08/2013	
Naphthalene	29.4	1.0	ug/L	50.00	ND	58.8	10-104.5	1.55	71.1	07/08/2013	
Nitrobenzene	32.3	2.0	ug/L	50.00	ND	64.7	19.2-91.4	2.11	64.6	07/08/2013	
N-methylaniline	31.8	1.0	ug/L	50.00	ND	63.5	17.2-101.8	19.4	55.6	07/08/2013	
N-Nitrosodimethylamine	13.3	5.0	ug/L	50.00	ND	26.6	10-85.9	11.0	85.3	07/08/2013	
N-Nitrosodi-n-propylamine	35.1	2.0	ug/L	50.00	ND	70.1	21.8-95	3.76	52	07/08/2013	
N-Nitrosodiphenylamine	47.0	2.0	ug/L	50.00	ND	94.0	58.3-114.6	0.763	15.9	07/08/2013	
Pentachlorophenol	72.8	20	ug/L	100.0	ND	72.8	45.2-121.4	1.69	18.3	07/08/2013	
Phenanthrene	43.6	1.0	ug/L	50.00	ND	87.2	55.4-103.2	5.17	15	07/08/2013	
Phenol	17.8	5.0	ug/L	100.0	ND	17.8	10-59.7	15.3	75	07/08/2013	
Pyrene	39.1	1.0	ug/L	50.00	ND	78.2	49.1-113.8	14.4	18.9	07/08/2013	
Pyridine	11.4	20	ug/L	50.00	ND	22.8	10-72.3	46.1	156.3	07/08/2013	T
Tetramethylurea	19.7	1.0	ug/L	50.00	ND	39.3	23.6-99.1	0.484	33.3	07/08/2013	
Surrogate: 2,4,6-Tribromophenol	*47.1*		ug/L	*50.00*		*94.1*	*33.8-115*			07/08/2013	
Surrogate: 2-Fluorobiphenyl	*17.5*		ug/L	*25.00*		*69.8*	*24.1-115*			07/08/2013	
Surrogate: 2-Fluorophenol	*11.8*		ug/L	*50.00*		*23.5*	*10-115*			07/08/2013	
Surrogate: Nitrobenzene-d5	*15.9*		ug/L	*25.00*		*63.4*	*17.8-115*			07/08/2013	
Surrogate: Phenol-d6	*7.44*		ug/L	*50.00*		*14.9*	*10-115*			07/08/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2612 - Method: 3510 Water SVOC				**Prepared: 06/26/2013**							
Matrix Spike Dup (B3F2612-MSD1)	**Source: 1306224-04**										
Surrogate: p-Terphenyl-d14	*15.9*		ug/L	*25.00*		*63.6*	*41.8-115*			07/08/2013	

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Inorganics-General Chemistry - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2507											
Blank (B3F2507-BLK1)											
Total Cyanide	ND	0.005	mg/L							06/25/2013	
LCS (B3F2507-BS1)											
Total Cyanide	0.176	0.005	mg/L	0.2000		88.1	80-120			06/25/2013	
Matrix Spike (B3F2507-MS1)	**Source: 1306226-10**										
Total Cyanide	0.118	0.005	mg/L	0.1005	0.021	96.6	80-120			06/25/2013	
Matrix Spike Dup (B3F2507-MSD1)	**Source: 1306226-10**										
Total Cyanide	0.116	0.005	mg/L	0.1005	0.021	94.6	80-120	1.72	20	06/25/2013	
Batch B3F2508											
Blank (B3F2508-BLK1)											
Available Cyanide	ND	0.002	mg/L							06/25/2013	
LCS (B3F2508-BS1)											
Available Cyanide	0.051	0.002	mg/L	0.05025		102	80-120			06/25/2013	
Matrix Spike (B3F2508-MS1)	**Source: 1306226-10**										
Available Cyanide	0.053	0.002	mg/L	0.05025	0.001	104	80-120			06/25/2013	
Matrix Spike Dup (B3F2508-MSD1)	**Source: 1306226-10**										
Available Cyanide	0.051	0.002	mg/L	0.05025	0.001	99.8	80-120	3.70	20	06/25/2013	

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Inorganics-Metals - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2412 - Method: 7470				**Prepared: 06/24/2013**							
Blank (B3F2412-BLK1)											
Mercury	ND	0.2	ug/L							06/25/2013	
LCS (B3F2412-BS1)											
Mercury	4.1	0.2	ug/L	4.000		102	85-115			06/25/2013	
Matrix Spike (B3F2412-MS1)	**Source: 1306226-09**										
Mercury	4.1	0.2	ug/L	4.000	ND	104	80-120			06/25/2013	
Matrix Spike Dup (B3F2412-MSD1)	**Source: 1306226-09**										
Mercury	4.1	0.2	ug/L	4.000	ND	104	80-120	0.121	20	06/25/2013	
Batch B3F2614 - Method: 3010				**Prepared: 06/26/2013**							
Blank (B3F2614-BLK1)											
Arsenic	ND	1.0	ug/L							07/01/2013	
Barium	ND	5.0	ug/L							07/01/2013	
Cadmium	ND	0.2	ug/L							07/01/2013	
Chromium	ND	1.0	ug/L							07/01/2013	
Copper	ND	1.0	ug/L							07/01/2013	
Lead	ND	1.0	ug/L							07/01/2013	
Selenium	ND	1.0	ug/L							07/01/2013	
Silver	ND	0.2	ug/L							07/01/2013	
Zinc	ND	5.0	ug/L							07/01/2013	
LCS (B3F2614-BS1)											
Arsenic	49.7	1.0	ug/L	50.00		99.5	85-115			07/01/2013	
Barium	49.0	5.0	ug/L	50.00		98.0	85-115			07/01/2013	
Cadmium	49.2	0.2	ug/L	50.00		98.4	85-115			07/01/2013	
Chromium	49.8	1.0	ug/L	50.00		99.7	85-115			07/01/2013	
Copper	48.7	1.0	ug/L	50.00		97.4	85-115			07/01/2013	
Lead	50.1	1.0	ug/L	50.00		100	85-115			07/01/2013	
Selenium	49.1	1.0	ug/L	50.00		98.1	85-115			07/01/2013	
Silver	49.2	0.2	ug/L	50.00		98.3	85-115			07/01/2013	
Zinc	48.9	5.0	ug/L	50.00		97.8	85-115			07/01/2013	
Matrix Spike (B3F2614-MS1)	**Source: 1306226-02**										
Arsenic	48.4	1.0	ug/L	50.00	ND	96.7	80-120			07/01/2013	
Barium	89.2	5.0	ug/L	50.00	43.5	91.5	80-120			07/01/2013	
Cadmium	48.2	0.2	ug/L	50.00	ND	96.5	80-120			07/01/2013	
Chromium	48.4	1.0	ug/L	50.00	ND	96.7	80-120			07/01/2013	
Copper	51.1	1.0	ug/L	50.00	6.2	90.0	80-120			07/01/2013	
Lead	47.1	1.0	ug/L	50.00	ND	94.1	80-120			07/01/2013	
Selenium	48.0	1.0	ug/L	50.00	3.2	89.6	80-120			07/01/2013	
Silver	47.6	0.2	ug/L	50.00	ND	95.2	80-120			07/01/2013	
Zinc	46.0	5.0	ug/L	50.00	ND	92.1	80-120			07/01/2013	
Matrix Spike Dup (B3F2614-MSD1)	**Source: 1306226-02**										
Arsenic	49.3	1.0	ug/L	50.00	ND	98.6	80-120	1.91	20	07/01/2013	
Barium	90.3	5.0	ug/L	50.00	43.5	93.7	80-120	1.23	20	07/01/2013	
Cadmium	48.0	0.2	ug/L	50.00	ND	96.1	80-120	0.411	20	07/01/2013	

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Inorganics-Metals - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2614 - Method: 3010				**Prepared: 06/26/2013**							
Matrix Spike Dup (B3F2614-MSD1)	**Source: 1306226-02**										
Chromium	49.4	1.0	ug/L	50.00	ND	98.9	80-120	2.23	20	07/01/2013	
Copper	52.3	1.0	ug/L	50.00	6.2	92.3	80-120	2.22	20	07/01/2013	
Lead	48.8	1.0	ug/L	50.00	ND	97.5	80-120	3.55	20	07/01/2013	
Selenium	49.3	1.0	ug/L	50.00	3.2	92.2	80-120	2.70	20	07/01/2013	
Silver	46.9	0.2	ug/L	50.00	ND	93.9	80-120	1.43	20	07/01/2013	
Zinc	47.2	5.0	ug/L	50.00	ND	94.4	80-120	2.51	20	07/01/2013	
Batch B3F2716 - Method: 3010				**Prepared: 06/27/2013**							
Blank (B3F2716-BLK1)											
Arsenic	ND	1.0	ug/L							07/02/2013	
Barium	ND	5.0	ug/L							07/02/2013	
Cadmium	ND	0.2	ug/L							07/02/2013	
Chromium	ND	1.0	ug/L							07/02/2013	
Copper	ND	1.0	ug/L							07/02/2013	
Lead	ND	1.0	ug/L							07/02/2013	
Selenium	ND	1.0	ug/L							07/02/2013	
Silver	ND	0.2	ug/L							07/02/2013	
Zinc	ND	5.0	ug/L							07/02/2013	
LCS (B3F2716-BS1)											
Arsenic	48.5	1.0	ug/L	50.00		96.9	85-115			07/02/2013	
Barium	50.5	5.0	ug/L	50.00		101	85-115			07/02/2013	
Cadmium	48.8	0.2	ug/L	50.00		97.7	85-115			07/02/2013	
Chromium	49.4	1.0	ug/L	50.00		98.8	85-115			07/02/2013	
Copper	48.7	1.0	ug/L	50.00		97.4	85-115			07/02/2013	
Lead	49.9	1.0	ug/L	50.00		99.8	85-115			07/02/2013	
Selenium	47.9	1.0	ug/L	50.00		95.7	85-115			07/02/2013	
Silver	49.5	0.2	ug/L	50.00		99.1	85-115			07/02/2013	
Zinc	46.7	5.0	ug/L	50.00		93.3	85-115			07/02/2013	
Matrix Spike (B3F2716-MS1)	**Source: 1306260-17**										
Arsenic	49.0	1.0	ug/L	50.00	ND	98.1	80-120			07/02/2013	
Barium	96.6	5.0	ug/L	50.00	49.6	93.9	80-120			07/02/2013	
Cadmium	48.1	0.2	ug/L	50.00	ND	96.3	80-120			07/02/2013	
Chromium	48.4	1.0	ug/L	50.00	ND	96.8	80-120			07/02/2013	
Copper	47.5	1.0	ug/L	50.00	ND	95.1	80-120			07/02/2013	
Lead	48.9	1.0	ug/L	50.00	ND	97.8	80-120			07/02/2013	
Selenium	47.1	1.0	ug/L	50.00	ND	94.3	80-120			07/02/2013	
Silver	48.2	0.2	ug/L	50.00	ND	96.3	80-120			07/02/2013	
Zinc	74.3	5.0	ug/L	50.00	29.9	88.7	80-120			07/02/2013	
Matrix Spike Dup (B3F2716-MSD1)	**Source: 1306260-17**										
Arsenic	49.2	1.0	ug/L	50.00	ND	98.4	80-120	0.381	20	07/02/2013	
Barium	97.3	5.0	ug/L	50.00	49.6	95.4	80-120	0.740	20	07/02/2013	
Cadmium	48.1	0.2	ug/L	50.00	ND	96.2	80-120	0.0769	20	07/02/2013	
Chromium	48.9	1.0	ug/L	50.00	ND	97.8	80-120	1.10	20	07/02/2013	
Copper	48.2	1.0	ug/L	50.00	ND	96.4	80-120	1.34	20	07/02/2013	

STATE OF MICHIGAN
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TEL: (517) 335-9800
FAX: (517) 335-9600

Inorganics-Metals - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2716 - Method: 3010				**Prepared: 06/27/2013**							
Matrix Spike Dup (B3F2716-MSD1)	**Source: 1306260-17**										
Lead	48.9	1.0	ug/L	50.00	ND	97.9	80-120	0.0961	20	07/02/2013	
Selenium	48.2	1.0	ug/L	50.00	ND	96.5	80-120	2.31	20	07/02/2013	
Silver	47.9	0.2	ug/L	50.00	ND	95.9	80-120	0.458	20	07/02/2013	
Zinc	73.9	5.0	ug/L	50.00	29.9	88.0	80-120	0.482	20	07/02/2013	

MICHIGAN DEPT. OF NATURAL RESOURCES AND ENVIRONMENT
ENVIRONMENTAL LABORATORY
ANALYSIS REQUEST SHEET

White
Page 1 of 1

LAB WORK ORDER # 1306226

MATRIX=WATER

SITE CODE NUMBER	SITE NAME	ACCEPT HT CODES? Y / N If yes which parameters?
MIB000000180	TCPBPA - Traverse City Place Brownfield Plan Area	

DIVISION	DISTRICT/OFFICE	MDNRE PROJECT MANAGER	E-MAIL ADDRESS	PHONE
RRD	Superfund	Teressa Ducsay	Ducsayt@michigan.gov	373-4809

PRIMARY CONTACT PERSON	CONTRACT FIRM NAME (if applicable)	PHONE	AY: 12	INDEX: 44092	PCA:
Teressa Ducsay		373-4809	PROJECT: 456842		PH: 19

OVERFLOW LAB (Required)
1ST CHOICE: TriMatrix
2ND CHOICE:

E-MAIL ADDRESSES TO SEND ADDITIONAL REPORTS TO:
1.)
2.)

COLLECTED BY: Teressa Ducsay PHONE: 373-4809

**** SAFETY INFORMATION REQUIRED ****
SEE BACK OF FORM

LAB USE ONLY		FIELD ID (Sample Identification)	SAMPLE COLLECTED DATE MM/DD/YY	SAMPLE COLLECTED TIME MILITARY	GPS COORDINATES LATITUDE	GPS COORDINATES LONGITUDE	COMMENTS
1	AB	TMW-01	06/19/13	19:05			
2	AB	TMW-02	06/20/13	9:30			
3	AB	TMW-02 DUP	"	"			
4	AB	TMW-03	06/19/13	16:45			
5	AB	TMW-03 MS					
6	AB	TMW-03 MSD					
7	AB	TMW-04	06/20/13	18:10			
8	AB	TMW-05		15:45			
9	AB	TMW-06		13:35			
10	AB	TMW-09	6/21/13	12:50			

ORGANIC

VOA VOLATILES (8260)
Full List 1 2 3 4 5 6 7 8 9 10
BTEX/MTBE/TMB only 1 2 3 4 5 6 7 8 9 10
Chlorinated only 1 2 3 4 5 6 7 8 9 10
GRO 1 2 3 4 5 6 7 8 9 10
1,4 Dioxane 1 2 3 4 5 6 7 8 9 10

METH METHANE, ETHENE, ETHANE (Modified 8015)
Methane, ethane, ethene 1 2 3 4 5 6 7 8 9 10

ON PESTICIDES/PCBS (8081/8082)
Pesticides & PCBs 1 2 3 4 5 6 7 8 9 10
Pesticides only 1 2 3 4 5 6 7 8 9 10
PCBs only 1 2 3 4 5 6 7 8 9 10
Toxaphene 1 2 3 4 5 6 7 8 9 10
Specialty Pesticides 1 2 3 4 5 6 7 8 9 10

BNA BASE NEUTRAL & ACIDS (8270)
BNAs 1 2 3 4 5 6 7 8 9 10
Benzidines 1 2 3 4 5 6 7 8 9 10
PNAs only 1 2 3 4 5 6 7 8 9 10
BNs only 1 2 3 4 5 6 7 8 9 10
ACIDs only 1 2 3 4 5 6 7 8 9 10

ORGANIC SPECIAL REQUESTS
Library Search - Volatiles 1 2 3 4 5 6 7 8 9 10
Library Search - Semi-Vols 1 2 3 4 5 6 7 8 9 10
FingerPrint 1 2 3 4 5 6 7 8 9 10
DRO/ORO (8015) 1 2 3 4 5 6 7 8 9 10

GENERAL CHEMISTRY

GN NO_2, O-Phos 1 2 3 4 5 6 7 8 9 10
NO_3 Calc (NO_2+NO_3, NO_2) 1 2 3 4 5 6 7 8 9 10
Residue SS 1 2 3 4 5 6 7 8 9 10
Residue TDS 1 2 3 4 5 6 7 8 9 10
BOD Tot 5 day 1 2 3 4 5 6 7 8 9 10
BOD Carb 5 day 1 2 3 4 5 6 7 8 9 10
Turbidity 1 2 3 4 5 6 7 8 9 10
CA Chlorophyll 1 2 3 4 5 6 7 8 9 10
GA COD 1 2 3 4 5 6 7 8 9 10
TOC 1 2 3 4 5 6 7 8 9 10
NO_3 + NO_2, NH_3 1 2 3 4 5 6 7 8 9 10
KJEL N, Tot P 1 2 3 4 5 6 7 8 9 10
S Sulfide 1 2 3 4 5 6 7 8 9 10
GP Phenolics 1 2 3 4 5 6 7 8 9 10
GB Total CN 1 2 3 4 5 6 7 8 9 10
[redacted]
GCN Available CN 1 2 3 4 5 6 7 8 9 10

INORGANIC
MN pH, Conductance 1 2 3 4 5 6 7 8 9 10
Cl, SO_4, Total Alk 1 2 3 4 5 6 7 8 9 10
HCO_3, CO_3 1 2 3 4 5 6 7 8 9 10
Cr^{+6} 1 2 3 4 5 6 7 8 9 10

OG Oil & Grease 1 2 3 4 5 6 7 8 9 10

INORGANIC

MA - Total Metals
MICH TEN METALS 1 2 3 4 5 6 7 8 9 10
(As, Ba, Cd, Cr, Cu, Pb, Hg, Se, Ag, Zn)
OP MEMO 2 METALS 1 2 3 4 5 6 7 8 9 10
(Sb,As,Ba,Be,Cd,Cr,Cu,Co,Fe,Pb,Mn,Hg,Mo,Ni,Se,Ag,Tl,V,Zn)
↓Circle Metal and Corresponding Sample No. Below↓
Al Sb As Ba Be B Cd Cr 1 2 3 4 5 6 7 8 9 10
Co Cu Fe Pb Li Mn Hg Mo
Ni Se Ag Sr Tl Ti V Zn
Ca Mg K Na 1 2 3 4 5 6 7 8 9 10
Hardness Calc (Ca Mg) 1 2 3 4 5 6 7 8 9 10
LL Hg
Low Level Mercury 1 2 3 4 5 6 7 8 9 10

MAD or MD - Dissolved Metals
Lab Filtration 1 2 3 4 5 6 7 8 9 10
MICH TEN METALS 1 2 3 4 5 6 7 8 9 10
(As, Ba, Cd, Cr, Cu, Pb, Hg, Se, Ag, Zn)
OP MEMO 2 Metals 1 2 3 4 5 6 7 8 9 10
(Sb,As,Ba,Be,Cd,Cr,Cu,Co,Fe,Pb,Mn,Hg,Mo,Ni,Se,Ag,Tl,V,Zn)
↓Circle Metal and Corresponding Sample No. Below↓
Al Sb As Ba Be B Cd Cr 1 2 3 4 5 6 7 8 9 10
Co Cu Fe Pb Li Mn Hg Mo
Ni Se Ag Sr Tl Ti V Zn
Ca Mg K Na 1 2 3 4 5 6 7 8 9 10
Hardness Calc (Ca Mg) 1 2 3 4 5 6 7 8 9 10
LL Hg
Low Level Mercury 1 2 3 4 5 6 7 8 9 10

Chain-of-Custody

	RELEASED BY / ORGANIZATION	RECEIVED BY / ORGANIZATION	DATE	TIME
Print Name & Organization	Teresa Ducsay, Mich. DEQ	John Spielberg, Mich. DEQ	06/21/13	20:15
Signature	Teresa Ducsay	John Spielberg		
Print Name & Organization	John Spielberg, Mich. DEQ	John D. Watson II MDEQ	6/24/13	09:37
Signature	John Spielberg	[illegible]		
Print Name & Organization		Print Name & Organization		
Signature		Signature		

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
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FAX: (517) 335-9600

18 July 2013

Work Order: 1306260

Price: $9,297.00

Teresa Ducsay
MDEQ-RRD-LANSING
525 W. Allegan Street
Lansing, MI 48909

RE: TCPBPA-TRAVERSE CITY PLACE BROWNFIELD I

I certify that the analyses performed by the MDEQ Environmental Laboratory were conducted by methods approved by the U.S. Environmental Protection Agency and other appropriate regulatory agencies.

Sincerely,

George Krisztian
Laboratory Director

STATE OF MICHIGAN
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MDEQ-RRD-LANSING	Project: TCPBPA-TRAVERSE CITY PLACE BROWNFIELD PLAN AREA	
525 W. Allegan Street	Site Code: MIB000000180	**Reported:**
Lansing MI, 48909	Project Manager: Teresa Ducsay	07/18/2013

Analytical Report for Samples

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Qualifier
TMW-07	1306260-01	Water	06/25/2013	06/26/2013	
TMW-08	1306260-02	Water	06/25/2013	06/26/2013	
TMW-10	1306260-03	Water	06/24/2013	06/26/2013	
VAS-01(12-16)	1306260-04	Water	06/25/2013	06/26/2013	
VAS-01(16-20)	1306260-05	Water	06/25/2013	06/26/2013	
VAS-01(20-24)	1306260-06	Water	06/25/2013	06/26/2013	
VAS-01(26-30)	1306260-07	Water	06/25/2013	06/26/2013	
VAS-02(12-16)	1306260-08	Water	06/25/2013	06/26/2013	
VAS-02(12-16)DUP	1306260-09	Water	06/25/2013	06/26/2013	
VAS-02(16-20)	1306260-10	Water	06/25/2013	06/26/2013	
VAS-02(20-24)	1306260-11	Water	06/25/2013	06/26/2013	
VAS-02(26-30)	1306260-12	Water	06/25/2013	06/26/2013	
VAS-03(12-16)	1306260-13	Water	06/25/2013	06/26/2013	
VAS-03(12-16)MS	1306260-14	Water	06/25/2013	06/26/2013	
VAS-03(12-16)MSD	1306260-15	Water	06/25/2013	06/26/2013	
VAS-03(16-20)	1306260-16	Water	06/25/2013	06/26/2013	
VAS-03(20-24)	1306260-17	Water	06/25/2013	06/26/2013	
VAS-03(26-30)	1306260-18	Water	06/25/2013	06/26/2013	

Notes and Definitions

X	Methods 8260 & 624 are used to analyze volatile organics that have boiling points below 200 ºC. 2-Methylnaphthalene & naphthalene have boiling points above 200 ºC and are better suited to analysis by methods 8270 & 625 as semivolatile organics.
T	Reported value is less than the reporting limit (RL). Result is estimated.
KR	Reporting limit(s) raised due to low sample volume submitted.
A09	Result is estimated due to high recovery of batch quality control.
A07	Result(s) and reporting limit(s) are estimated due to poor precision.
A06	Result is estimated due to high continuing calibration standard criteria failure.
A05	Result and reporting limit are estimated due to low continuing calibration standard criteria failure.
A04	Result is estimated due to high matrix spike recovery.
A03	Result(s) and reporting limit(s) are estimated due to low matrix spike recovery.
ND	Indicates compound analyzed for but not detected
RL	Reporting Limit
NA	Not Applicable

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-07

Lab ID: 1306260-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	A05
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/29/13	B3G0123	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	

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FAX: (517) 335-9600

Client ID: TMW-07
Lab ID: 1306260-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/29/13	B3G0123	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/29/13	B3G0123	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
Surrogate: Bromofluorobenzene			*98.4 %*	*85-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Dibromofluoromethane			*103 %*	*82.7-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Toluene-d8			*97.8 %*	*85-115*		*06/29/13*	B3G0123	*8260*	

STATE OF MICHIGAN
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MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-07
Lab ID: 1306260-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
105-67-9	2,4-Dimethylphenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
51-28-5	2,4-Dinitrophenol	ND	25	ug/L	1	07/11/13	B3G0113	8270	
121-14-2	2,4-Dinitrotoluene	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
95-51-2	2-Chloroaniline	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
91-58-7	2-Chloronaphthalene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/11/13	B3G0113	8270	
88-74-4	2-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
88-75-5	2-Nitrophenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
108394,106445	3 & 4-Methylphenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
99-09-2	3-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/11/13	B3G0113	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-01-6	4-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
100-02-7	4-Nitrophenol	ND	25	ug/L	1	07/11/13	B3G0113	8270	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
62-53-3	Aniline	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
103-33-3	Azobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-51-6	Benzyl Alcohol	ND	50	ug/L	1	07/11/13	B3G0113	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
85-68-7	Butyl benzyl phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
86-74-8	Carbazole	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-07
Lab ID: 1306260-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
132-64-9	Dibenzofuran	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
84-66-2	Diethylphthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
131-11-3	Dimethyl phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
84-74-2	Di-n-butyl phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
117-84-0	Di-n-octyl phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
86-73-7	Fluorene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/11/13	B3G0113	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
121-69-7	N,N-dimethylaniline	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
91-20-3	Naphthalene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
98-95-3	Nitrobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
87-86-5	Pentachlorophenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-95-2	Phenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
110-86-1	Pyridine	ND	20	ug/L	1	07/11/13	B3G0113	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
Surrogate: 2,4,6-Tribromophenol			*76.2 %*	*33.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorobiphenyl			*60.8 %*	*24.1-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorophenol			*15.5 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Nitrobenzene-d5			*59.7 %*	*17.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Phenol-d6			*15.1 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: p-Terphenyl-d14			*57.7 %*	*41.8-115*		*07/11/13*	B3G0113	*8270*	

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ENVIRONMENTAL LABORATORY

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-07

Lab ID: 1306260-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	Available Cyanide	ND	0.002	mg/L	1	06/27/13	B3F2707	OIA-1677	
57-12-5	**Total Cyanide**	**0.021**	0.005	mg/L	1	06/26/13	B3F2620	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	Arsenic	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-39-3	**Barium**	**22**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-47-3	**Chromium**	**1.2**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-50-8	Copper	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-92-1	Lead	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	07/03/13	B3G0211	7470/245.1	
7782-49-2	Selenium	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-66-6	Zinc	ND	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	

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ENVIRONMENTAL LABORATORY

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-08

Lab ID: 1306260-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	A05
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/29/13	B3G0123	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	

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TEL: (517) 335-9800
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Client ID: TMW-08
Lab ID: 1306260-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/29/13	B3G0123	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/29/13	B3G0123	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
Surrogate: Bromofluorobenzene			*100 %*	*85-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Dibromofluoromethane			*105 %*	*82.7-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Toluene-d8			*100 %*	*85-115*		*06/29/13*	B3G0123	*8260*	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-08
Lab ID: 1306260-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
105-67-9	2,4-Dimethylphenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
51-28-5	2,4-Dinitrophenol	ND	25	ug/L	1	07/11/13	B3G0113	8270	
121-14-2	2,4-Dinitrotoluene	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
95-51-2	2-Chloroaniline	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
91-58-7	2-Chloronaphthalene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/11/13	B3G0113	8270	
88-74-4	2-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
88-75-5	2-Nitrophenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
108394,106445	3 & 4-Methylphenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
99-09-2	3-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/11/13	B3G0113	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-01-6	4-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
100-02-7	4-Nitrophenol	ND	25	ug/L	1	07/11/13	B3G0113	8270	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
62-53-3	Aniline	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
103-33-3	Azobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-51-6	Benzyl Alcohol	ND	50	ug/L	1	07/11/13	B3G0113	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
85-68-7	Butyl benzyl phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
86-74-8	Carbazole	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	

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ENVIRONMENTAL LABORATORY

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-08
Lab ID: 1306260-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
132-64-9	Dibenzofuran	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
84-66-2	Diethylphthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
131-11-3	Dimethyl phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
84-74-2	Di-n-butyl phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
117-84-0	Di-n-octyl phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
86-73-7	Fluorene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/11/13	B3G0113	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
121-69-7	N,N-dimethylaniline	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
91-20-3	Naphthalene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
98-95-3	Nitrobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
87-86-5	Pentachlorophenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-95-2	Phenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
110-86-1	Pyridine	ND	20	ug/L	1	07/11/13	B3G0113	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
Surrogate: 2,4,6-Tribromophenol			*69.0 %*	*33.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorobiphenyl			*57.7 %*	*24.1-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorophenol			*18.1 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Nitrobenzene-d5			*55.3 %*	*17.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Phenol-d6			*13.3 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: p-Terphenyl-d14			*66.2 %*	*41.8-115*		*07/11/13*	B3G0113	*8270*	

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ENVIRONMENTAL LABORATORY

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-08

Lab ID: 1306260-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	Available Cyanide	ND	0.002	mg/L	1	06/27/13	B3F2707	OIA-1677	
57-12-5	Total Cyanide	ND	0.005	mg/L	1	06/26/13	B3F2620	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	**Arsenic**	**1.8**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-39-3	**Barium**	**25**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-47-3	**Chromium**	**1.2**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-50-8	**Copper**	**1.8**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-92-1	Lead	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	07/03/13	B3G0211	7470/245.1	
7782-49-2	Selenium	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-66-6	Zinc	ND	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	

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ENVIRONMENTAL LABORATORY

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Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-10
Lab ID: 1306260-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	A05
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/29/13	B3G0123	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	

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ENVIRONMENTAL LABORATORY

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Client ID: TMW-10
Lab ID: 1306260-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/29/13	B3G0123	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/29/13	B3G0123	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
Surrogate: Bromofluorobenzene			*99.4 %*	*85-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Dibromofluoromethane			*103 %*	*82.7-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Toluene-d8			*97.8 %*	*85-115*		*06/29/13*	B3G0123	*8260*	

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ENVIRONMENTAL LABORATORY

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TEL: (517) 335-9800
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Client ID: TMW-10
Lab ID: 1306260-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ug/L	1	07/03/13	B3F2805	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	ug/L	1	07/03/13	B3F2805	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	ug/L	1	07/03/13	B3F2805	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/03/13	B3F2805	8270	
105-67-9	2,4-Dimethylphenol	ND	5.1	ug/L	1	07/03/13	B3F2805	8270	
51-28-5	2,4-Dinitrophenol	ND	25	ug/L	1	07/03/13	B3F2805	8270	A05
121-14-2	2,4-Dinitrotoluene	ND	5.1	ug/L	1	07/03/13	B3F2805	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.1	ug/L	1	07/03/13	B3F2805	8270	
95-51-2	2-Chloroaniline	ND	5.1	ug/L	1	07/03/13	B3F2805	8270	
91-58-7	2-Chloronaphthalene	ND	2.0	ug/L	1	07/03/13	B3F2805	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/03/13	B3F2805	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	20	ug/L	1	07/03/13	B3F2805	8270	
91-57-6	2-Methylnaphthalene	ND	5.1	ug/L	1	07/03/13	B3F2805	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/03/13	B3F2805	8270	
88-74-4	2-Nitroaniline	ND	20	ug/L	1	07/03/13	B3F2805	8270	
88-75-5	2-Nitrophenol	ND	5.1	ug/L	1	07/03/13	B3F2805	8270	
108394,106445	3 & 4-Methylphenol	ND	20	ug/L	1	07/03/13	B3F2805	8270	
99-09-2	3-Nitroaniline	ND	20	ug/L	1	07/03/13	B3F2805	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	ug/L	1	07/03/13	B3F2805	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.1	ug/L	1	07/03/13	B3F2805	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/03/13	B3F2805	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
100-01-6	4-Nitroaniline	ND	20	ug/L	1	07/03/13	B3F2805	8270	
100-02-7	4-Nitrophenol	ND	25	ug/L	1	07/03/13	B3F2805	8270	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
62-53-3	Aniline	ND	4.0	ug/L	1	07/03/13	B3F2805	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
103-33-3	Azobenzene	ND	2.0	ug/L	1	07/03/13	B3F2805	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
100-51-6	Benzyl Alcohol	ND	51	ug/L	1	07/03/13	B3F2805	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.0	ug/L	1	07/03/13	B3F2805	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.1	ug/L	1	07/03/13	B3F2805	8270	
85-68-7	Butyl benzyl phthalate	ND	5.1	ug/L	1	07/03/13	B3F2805	8270	
86-74-8	Carbazole	ND	5.1	ug/L	1	07/03/13	B3F2805	8270	

STATE OF MICHIGAN
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MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-10

Lab ID: 1306260-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	07/03/13	B3F2805	8270	
132-64-9	Dibenzofuran	ND	4.0	ug/L	1	07/03/13	B3F2805	8270	
84-66-2	Diethylphthalate	ND	5.1	ug/L	1	07/03/13	B3F2805	8270	
131-11-3	Dimethyl phthalate	ND	5.1	ug/L	1	07/03/13	B3F2805	8270	
84-74-2	Di-n-butyl phthalate	ND	5.1	ug/L	1	07/03/13	B3F2805	8270	
117-84-0	Di-n-octyl phthalate	ND	5.1	ug/L	1	07/03/13	B3F2805	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
86-73-7	Fluorene	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/03/13	B3F2805	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	07/03/13	B3F2805	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
121-69-7	N,N-dimethylaniline	ND	5.1	ug/L	1	07/03/13	B3F2805	8270	
91-20-3	Naphthalene	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
98-95-3	Nitrobenzene	ND	2.0	ug/L	1	07/03/13	B3F2805	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.1	ug/L	1	07/03/13	B3F2805	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.0	ug/L	1	07/03/13	B3F2805	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.0	ug/L	1	07/03/13	B3F2805	8270	
87-86-5	Pentachlorophenol	ND	20	ug/L	1	07/03/13	B3F2805	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
108-95-2	Phenol	ND	5.1	ug/L	1	07/03/13	B3F2805	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
110-86-1	Pyridine	ND	20	ug/L	1	07/03/13	B3F2805	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/03/13	B3F2805	8270	
Surrogate: 2,4,6-Tribromophenol			*79.6 %*	*33.8-115*		*07/03/13*	B3F2805	*8270*	
Surrogate: 2-Fluorobiphenyl			*55.1 %*	*24.1-115*		*07/03/13*	B3F2805	*8270*	
Surrogate: 2-Fluorophenol			*19.4 %*	*10-115*		*07/03/13*	B3F2805	*8270*	
Surrogate: Nitrobenzene-d5			*55.6 %*	*17.8-115*		*07/03/13*	B3F2805	*8270*	
Surrogate: Phenol-d6			*13.1 %*	*10-115*		*07/03/13*	B3F2805	*8270*	
Surrogate: p-Terphenyl-d14			*60.0 %*	*41.8-115*		*07/03/13*	B3F2805	*8270*	

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ENVIRONMENTAL LABORATORY

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: TMW-10

Lab ID: 1306260-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	Available Cyanide	ND	0.002	mg/L	1	06/27/13	B3F2707	OIA-1677	
57-12-5	**Total Cyanide**	**0.018**	0.005	mg/L	1	06/26/13	B3F2620	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	Arsenic	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-39-3	**Barium**	**270**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-47-3	Chromium	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-50-8	**Copper**	**2.6**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-92-1	Lead	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	07/03/13	B3G0211	7470/245.1	
7782-49-2	Selenium	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-66-6	Zinc	ND	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-01(12-16)

Lab ID: 1306260-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	A05
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/29/13	B3G0123	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	

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ENVIRONMENTAL LABORATORY

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Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-01(12-16)

Lab ID: 1306260-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/29/13	B3G0123	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/29/13	B3G0123	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
Surrogate: Bromofluorobenzene			*97.6 %*	*85-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Dibromofluoromethane			*103 %*	*82.7-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Toluene-d8			*97.2 %*	*85-115*		*06/29/13*	B3G0123	*8260*	

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ENVIRONMENTAL LABORATORY

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TEL: (517) 335-9800
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Client ID: VAS-01(12-16)
Lab ID: 1306260-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
105-67-9	2,4-Dimethylphenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
51-28-5	2,4-Dinitrophenol	ND	25	ug/L	1	07/11/13	B3G0113	8270	
121-14-2	2,4-Dinitrotoluene	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
95-51-2	2-Chloroaniline	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
91-58-7	2-Chloronaphthalene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/11/13	B3G0113	8270	
88-74-4	2-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
88-75-5	2-Nitrophenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
108394,106445	3 & 4-Methylphenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
99-09-2	3-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/11/13	B3G0113	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-01-6	4-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
100-02-7	4-Nitrophenol	ND	25	ug/L	1	07/11/13	B3G0113	8270	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
62-53-3	Aniline	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
103-33-3	Azobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-51-6	Benzyl Alcohol	ND	50	ug/L	1	07/11/13	B3G0113	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
85-68-7	Butyl benzyl phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
86-74-8	Carbazole	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-01(12-16)

Lab ID: 1306260-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
132-64-9	Dibenzofuran	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
84-66-2	Diethylphthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
131-11-3	Dimethyl phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
84-74-2	Di-n-butyl phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
117-84-0	Di-n-octyl phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
86-73-7	Fluorene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/11/13	B3G0113	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
121-69-7	N,N-dimethylaniline	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
91-20-3	Naphthalene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
98-95-3	Nitrobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
87-86-5	Pentachlorophenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-95-2	Phenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
110-86-1	Pyridine	ND	20	ug/L	1	07/11/13	B3G0113	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
Surrogate: 2,4,6-Tribromophenol			*76.6 %*	*33.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorobiphenyl			*57.8 %*	*24.1-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorophenol			*19.5 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Nitrobenzene-d5			*54.3 %*	*17.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Phenol-d6			*13.8 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: p-Terphenyl-d14			*68.1 %*	*41.8-115*		*07/11/13*	B3G0113	*8270*	

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ENVIRONMENTAL LABORATORY

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-01(12-16)

Lab ID: 1306260-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	**Available Cyanide**	**0.029**	0.002	mg/L	1	06/27/13	B3F2707	OIA-1677	
57-12-5	**Total Cyanide**	**1.9**	0.050	mg/L	10	06/26/13	B3F2620	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	**Arsenic**	**1.1**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-39-3	**Barium**	**49**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-47-3	**Chromium**	**2.6**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-50-8	**Copper**	**2.8**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-92-1	Lead	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	07/03/13	B3G0211	7470/245.1	
7782-49-2	**Selenium**	**6.4**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-66-6	Zinc	ND	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	

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TEL: (517) 335-9800
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Client ID: VAS-01(16-20)

Lab ID: 1306260-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	A05
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/29/13	B3G0123	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	

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TEL: (517) 335-9800
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Client ID: VAS-01(16-20)

Lab ID: 1306260-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/29/13	B3G0123	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/29/13	B3G0123	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
Surrogate: Bromofluorobenzene			*97.6 %*	*85-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Dibromofluoromethane			*104 %*	*82.7-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Toluene-d8			*97.8 %*	*85-115*		*06/29/13*	B3G0123	*8260*	

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Client ID: VAS-01(16-20)
Lab ID: 1306260-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
105-67-9	2,4-Dimethylphenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
51-28-5	2,4-Dinitrophenol	ND	25	ug/L	1	07/11/13	B3G0113	8270	
121-14-2	2,4-Dinitrotoluene	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
95-51-2	2-Chloroaniline	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
91-58-7	2-Chloronaphthalene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
91-57-6	2-Methylnaphthalene	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/11/13	B3G0113	8270	
88-74-4	2-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
88-75-5	2-Nitrophenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
108394,106445	3 & 4-Methylphenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
99-09-2	3-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/11/13	B3G0113	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-01-6	4-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
100-02-7	4-Nitrophenol	ND	25	ug/L	1	07/11/13	B3G0113	8270	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
62-53-3	Aniline	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
103-33-3	Azobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-51-6	Benzyl Alcohol	ND	51	ug/L	1	07/11/13	B3G0113	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
85-68-7	Butyl benzyl phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
86-74-8	Carbazole	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-01(16-20)

Lab ID: 1306260-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
132-64-9	Dibenzofuran	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
84-66-2	Diethylphthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
131-11-3	Dimethyl phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
84-74-2	Di-n-butyl phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
117-84-0	Di-n-octyl phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
86-73-7	Fluorene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/11/13	B3G0113	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
121-69-7	N,N-dimethylaniline	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
91-20-3	Naphthalene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
98-95-3	Nitrobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
87-86-5	Pentachlorophenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-95-2	Phenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
110-86-1	Pyridine	ND	20	ug/L	1	07/11/13	B3G0113	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
Surrogate: 2,4,6-Tribromophenol			*75.5 %*	*33.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorobiphenyl			*63.7 %*	*24.1-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorophenol			*18.0 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Nitrobenzene-d5			*59.0 %*	*17.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Phenol-d6			*15.6 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: p-Terphenyl-d14			*63.8 %*	*41.8-115*		*07/11/13*	B3G0113	*8270*	

STATE OF MICHIGAN
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ENVIRONMENTAL LABORATORY

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Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-01(16-20)

Lab ID: 1306260-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	**Available Cyanide**	**0.009**	0.002	mg/L	1	06/27/13	B3F2707	OIA-1677	
57-12-5	**Total Cyanide**	**0.36**	0.050	mg/L	10	06/26/13	B3F2620	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	Arsenic	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-39-3	**Barium**	**76**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-47-3	Chromium	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-50-8	**Copper**	**1.1**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-92-1	Lead	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	07/03/13	B3G0211	7470/245.1	
7782-49-2	**Selenium**	**2.5**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-66-6	**Zinc**	**5.0**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	

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TEL: (517) 335-9800
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Client ID: VAS-01(20-24)

Lab ID: 1306260-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	A05
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/29/13	B3G0123	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	

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Client ID: VAS-01(20-24)

Lab ID: 1306260-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/29/13	B3G0123	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/29/13	B3G0123	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
Surrogate: Bromofluorobenzene			*98.7 %*	*85-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Dibromofluoromethane			*104 %*	*82.7-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Toluene-d8			*98.1 %*	*85-115*		*06/29/13*	B3G0123	*8260*	

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Client ID: VAS-01(20-24)

Lab ID: 1306260-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
105-67-9	2,4-Dimethylphenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
51-28-5	2,4-Dinitrophenol	ND	25	ug/L	1	07/11/13	B3G0113	8270	
121-14-2	2,4-Dinitrotoluene	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
95-51-2	2-Chloroaniline	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
91-58-7	2-Chloronaphthalene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
91-57-6	2-Methylnaphthalene	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/11/13	B3G0113	8270	
88-74-4	2-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
88-75-5	2-Nitrophenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
108394,106445	3 & 4-Methylphenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
99-09-2	3-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/11/13	B3G0113	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-01-6	4-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
100-02-7	4-Nitrophenol	ND	25	ug/L	1	07/11/13	B3G0113	8270	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
62-53-3	Aniline	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
103-33-3	Azobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-51-6	Benzyl Alcohol	ND	51	ug/L	1	07/11/13	B3G0113	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
85-68-7	Butyl benzyl phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
86-74-8	Carbazole	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	

STATE OF MICHIGAN
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MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-01(20-24)

Lab ID: 1306260-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
132-64-9	Dibenzofuran	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
84-66-2	Diethylphthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
131-11-3	Dimethyl phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
84-74-2	Di-n-butyl phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
117-84-0	Di-n-octyl phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
86-73-7	Fluorene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/11/13	B3G0113	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
121-69-7	N,N-dimethylaniline	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
91-20-3	Naphthalene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
98-95-3	Nitrobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
87-86-5	Pentachlorophenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-95-2	Phenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
110-86-1	Pyridine	ND	20	ug/L	1	07/11/13	B3G0113	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
Surrogate: 2,4,6-Tribromophenol			*72.4 %*	*33.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorobiphenyl			*64.0 %*	*24.1-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorophenol			*19.5 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Nitrobenzene-d5			*61.7 %*	*17.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Phenol-d6			*15.3 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: p-Terphenyl-d14			*66.6 %*	*41.8-115*		*07/11/13*	B3G0113	*8270*	

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-01(20-24)

Lab ID: 1306260-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	Available Cyanide	ND	0.002	mg/L	1	06/27/13	B3F2707	OIA-1677	
57-12-5	**Total Cyanide**	**0.027**	0.005	mg/L	1	06/26/13	B3F2620	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	**Arsenic**	**2.7**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-39-3	**Barium**	**51**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-47-3	Chromium	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-50-8	Copper	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-92-1	Lead	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	07/03/13	B3G0211	7470/245.1	
7782-49-2	Selenium	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-66-6	Zinc	ND	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	

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TEL: (517) 335-9800
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Client ID: VAS-01(26-30)

Lab ID: 1306260-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	A05
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/29/13	B3G0123	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	

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TEL: (517) 335-9800
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Client ID: VAS-01(26-30)

Lab ID: 1306260-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/29/13	B3G0123	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/29/13	B3G0123	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
79-01-6	**Trichloroethylene**	**1.0**	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
Surrogate: Bromofluorobenzene			*98.5 %*	*85-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Dibromofluoromethane			*103 %*	*82.7-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Toluene-d8			*98.8 %*	*85-115*		*06/29/13*	B3G0123	*8260*	

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Client ID: VAS-01(26-30)

Lab ID: 1306260-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.1	ug/L	1	07/11/13	B3G0113	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
105-67-9	2,4-Dimethylphenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
51-28-5	2,4-Dinitrophenol	ND	26	ug/L	1	07/11/13	B3G0113	8270	
121-14-2	2,4-Dinitrotoluene	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
95-51-2	2-Chloroaniline	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
91-58-7	2-Chloronaphthalene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
91-57-6	2-Methylnaphthalene	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/11/13	B3G0113	8270	
88-74-4	2-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
88-75-5	2-Nitrophenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
108394,106445	3 & 4-Methylphenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
99-09-2	3-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/11/13	B3G0113	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-01-6	4-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
100-02-7	4-Nitrophenol	ND	26	ug/L	1	07/11/13	B3G0113	8270	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
62-53-3	Aniline	ND	4.1	ug/L	1	07/11/13	B3G0113	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
103-33-3	Azobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-51-6	Benzyl Alcohol	ND	51	ug/L	1	07/11/13	B3G0113	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
85-68-7	Butyl benzyl phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
86-74-8	Carbazole	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	

STATE OF MICHIGAN
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MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-01(26-30)

Lab ID: 1306260-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
132-64-9	Dibenzofuran	ND	4.1	ug/L	1	07/11/13	B3G0113	8270	
84-66-2	**Diethylphthalate**	**11**	5.1	ug/L	1	07/11/13	B3G0113	8270	
131-11-3	Dimethyl phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
84-74-2	Di-n-butyl phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
117-84-0	Di-n-octyl phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
86-73-7	Fluorene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/11/13	B3G0113	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
121-69-7	N,N-dimethylaniline	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
91-20-3	Naphthalene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
98-95-3	Nitrobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
87-86-5	Pentachlorophenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-95-2	Phenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
110-86-1	Pyridine	ND	20	ug/L	1	07/11/13	B3G0113	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
Surrogate: 2,4,6-Tribromophenol			*69.7 %*	*33.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorobiphenyl			*58.8 %*	*24.1-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorophenol			*23.2 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Nitrobenzene-d5			*54.6 %*	*17.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Phenol-d6			*14.4 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: p-Terphenyl-d14			*60.9 %*	*41.8-115*		*07/11/13*	B3G0113	*8270*	

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ENVIRONMENTAL LABORATORY

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Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-01(26-30)

Lab ID: 1306260-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	Available Cyanide	ND	0.002	mg/L	1	06/27/13	B3F2707	OIA-1677	
57-12-5	Total Cyanide	ND	0.005	mg/L	1	06/26/13	B3F2620	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	**Arsenic**	**2.0**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-39-3	**Barium**	**59**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-47-3	Chromium	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-50-8	Copper	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-92-1	Lead	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	07/03/13	B3G0211	7470/245.1	
7782-49-2	Selenium	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-66-6	Zinc	ND	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	

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TEL: (517) 335-9800
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Client ID: VAS-02(12-16)

Lab ID: 1306260-08

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
526-73-8	**1,2,3-Trimethylbenzene**	**15**	1.0	ug/L	1	06/29/13	B3G0123	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
95-63-6	**1,2,4-Trimethylbenzene**	**23**	1.0	ug/L	1	06/29/13	B3G0123	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-67-8	**1,3,5-Trimethylbenzene**	**10**	1.0	ug/L	1	06/29/13	B3G0123	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	A05
91-57-6	**2-Methylnaphthalene**	**30**	5.0	ug/L	1	06/29/13	B3G0123	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/29/13	B3G0123	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-02(12-16)

Lab ID: 1306260-08

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
98-82-8	**Isopropylbenzene**	**1.4**	1.0	ug/L	1	06/29/13	B3G0123	8260	
1330-20-7	**m & p - Xylene**	**23**	2.0	ug/L	1	06/29/13	B3G0123	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
91-20-3	**Naphthalene**	**480**	50	ug/L	10	06/30/13	B3G0123	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-47-6	**o-Xylene**	**37**	1.0	ug/L	1	06/29/13	B3G0123	8260	
99-87-6	**p-Isopropyl toluene**	**1.1**	1.0	ug/L	1	06/29/13	B3G0123	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/29/13	B3G0123	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-88-3	**Toluene**	**2.7**	1.0	ug/L	1	06/29/13	B3G0123	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
Surrogate: Bromofluorobenzene			*98.1 %*	*85-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Dibromofluoromethane			*103 %*	*82.7-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Toluene-d8			*99.0 %*	*85-115*		*06/29/13*	B3G0123	*8260*	

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Client ID: VAS-02(12-16)
Lab ID: 1306260-08

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
105-67-9	2,4-Dimethylphenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
51-28-5	2,4-Dinitrophenol	ND	25	ug/L	1	07/11/13	B3G0113	8270	
121-14-2	2,4-Dinitrotoluene	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
95-51-2	2-Chloroaniline	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
91-58-7	2-Chloronaphthalene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
91-57-6	**2-Methylnaphthalene**	**9.6**	5.0	ug/L	1	07/11/13	B3G0113	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/11/13	B3G0113	8270	
88-74-4	2-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
88-75-5	2-Nitrophenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
108394,106445	3 & 4-Methylphenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
99-09-2	3-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/11/13	B3G0113	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-01-6	4-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
100-02-7	4-Nitrophenol	ND	25	ug/L	1	07/11/13	B3G0113	8270	
83-32-9	**Acenaphthene**	**2.2**	1.0	ug/L	1	07/11/13	B3G0113	8270	
208-96-8	**Acenaphthylene**	**22**	1.0	ug/L	1	07/11/13	B3G0113	8270	
62-53-3	Aniline	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
103-33-3	Azobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-51-6	Benzyl Alcohol	ND	50	ug/L	1	07/11/13	B3G0113	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
85-68-7	Butyl benzyl phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
86-74-8	**Carbazole**	**7.4**	5.0	ug/L	1	07/11/13	B3G0113	8270	

STATE OF MICHIGAN
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ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-02(12-16)

Lab ID: 1306260-08

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
132-64-9	Dibenzofuran	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
84-66-2	Diethylphthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
131-11-3	Dimethyl phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
84-74-2	Di-n-butyl phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
117-84-0	Di-n-octyl phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
86-73-7	**Fluorene**	**1.4**	1.0	ug/L	1	07/11/13	B3G0113	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/11/13	B3G0113	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
121-69-7	N,N-dimethylaniline	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
91-20-3	**Naphthalene**	**170**	10	ug/L	10	07/12/13	B3G0113	8270	
98-95-3	Nitrobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
87-86-5	Pentachlorophenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-95-2	Phenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
110-86-1	Pyridine	ND	20	ug/L	1	07/11/13	B3G0113	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
Surrogate: 2,4,6-Tribromophenol			*73.8 %*	*33.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorobiphenyl			*58.7 %*	*24.1-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorophenol			*23.5 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Nitrobenzene-d5			*56.3 %*	*17.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Phenol-d6			*13.8 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: p-Terphenyl-d14			*59.7 %*	*41.8-115*		*07/11/13*	B3G0113	*8270*	

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-02(12-16)

Lab ID: 1306260-08

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	**Available Cyanide**	**0.035**	0.002	mg/L	1	06/27/13	B3F2707	OIA-1677	
57-12-5	**Total Cyanide**	**1.8**	0.050	mg/L	10	06/26/13	B3F2620	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	**Arsenic**	**1.0**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-39-3	**Barium**	**19**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-47-3	**Chromium**	**8.8**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-50-8	**Copper**	**13**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-92-1	Lead	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	07/03/13	B3G0211	7470/245.1	
7782-49-2	**Selenium**	**2.0**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-66-6	Zinc	ND	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	

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Client ID: VAS-02(12-16)DUP

Lab ID: 1306260-09

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
526-73-8	**1,2,3-Trimethylbenzene**	**14**	1.0	ug/L	1	06/29/13	B3G0208	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
95-63-6	**1,2,4-Trimethylbenzene**	**22**	1.0	ug/L	1	06/29/13	B3G0208	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
108-67-8	**1,3,5-Trimethylbenzene**	**10**	1.0	ug/L	1	06/29/13	B3G0208	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	A03
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	A03
91-57-6	**2-Methylnaphthalene**	**28**	5.0	ug/L	1	06/29/13	B3G0208	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/29/13	B3G0208	8260	A03
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	

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TEL: (517) 335-9800
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Client ID: VAS-02(12-16)DUP

Lab ID: 1306260-09

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
98-82-8	**Isopropylbenzene**	**1.3**	1.0	ug/L	1	06/29/13	B3G0208	8260	
1330-20-7	**m & p - Xylene**	**22**	2.0	ug/L	1	06/29/13	B3G0208	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
91-20-3	**Naphthalene**	**490**	50	ug/L	10	06/30/13	B3G0208	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
95-47-6	**o-Xylene**	**37**	1.0	ug/L	1	06/29/13	B3G0208	8260	
99-87-6	**p-Isopropyl toluene**	**1.1**	1.0	ug/L	1	06/29/13	B3G0208	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/29/13	B3G0208	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
108-88-3	**Toluene**	**2.8**	1.0	ug/L	1	06/29/13	B3G0208	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	A05
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
Surrogate: Bromofluorobenzene			*98.6 %*	*85-115*		*06/29/13*	B3G0208	*8260*	
Surrogate: Dibromofluoromethane			*104 %*	*82.7-115*		*06/29/13*	B3G0208	*8260*	
Surrogate: Toluene-d8			*98.7 %*	*85-115*		*06/29/13*	B3G0208	*8260*	

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Client ID: VAS-02(12-16)DUP

Lab ID: 1306260-09

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
105-67-9	2,4-Dimethylphenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
51-28-5	2,4-Dinitrophenol	ND	25	ug/L	1	07/11/13	B3G0113	8270	
121-14-2	2,4-Dinitrotoluene	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
95-51-2	2-Chloroaniline	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
91-58-7	2-Chloronaphthalene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
91-57-6	**2-Methylnaphthalene**	**9.9**	5.0	ug/L	1	07/11/13	B3G0113	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/11/13	B3G0113	8270	
88-74-4	2-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
88-75-5	2-Nitrophenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
108394,106445	3 & 4-Methylphenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
99-09-2	3-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/11/13	B3G0113	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-01-6	4-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
100-02-7	4-Nitrophenol	ND	25	ug/L	1	07/11/13	B3G0113	8270	
83-32-9	**Acenaphthene**	**2.4**	1.0	ug/L	1	07/11/13	B3G0113	8270	
208-96-8	**Acenaphthylene**	**24**	1.0	ug/L	1	07/11/13	B3G0113	8270	
62-53-3	Aniline	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
103-33-3	Azobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-51-6	Benzyl Alcohol	ND	50	ug/L	1	07/11/13	B3G0113	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
85-68-7	Butyl benzyl phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
86-74-8	**Carbazole**	**7.0**	5.0	ug/L	1	07/11/13	B3G0113	8270	

STATE OF MICHIGAN
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MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-02(12-16)DUP

Lab ID: 1306260-09

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
132-64-9	Dibenzofuran	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
84-66-2	Diethylphthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
131-11-3	Dimethyl phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
84-74-2	Di-n-butyl phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
117-84-0	Di-n-octyl phthalate	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
86-73-7	**Fluorene**	**1.4**	1.0	ug/L	1	07/11/13	B3G0113	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/11/13	B3G0113	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
121-69-7	N,N-dimethylaniline	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
91-20-3	**Naphthalene**	**170**	10	ug/L	10	07/12/13	B3G0113	8270	
98-95-3	Nitrobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
87-86-5	Pentachlorophenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-95-2	Phenol	ND	5.0	ug/L	1	07/11/13	B3G0113	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
110-86-1	Pyridine	ND	20	ug/L	1	07/11/13	B3G0113	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
Surrogate: 2,4,6-Tribromophenol			*68.8 %*	*33.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorobiphenyl			*54.6 %*	*24.1-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorophenol			*25.2 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Nitrobenzene-d5			*53.2 %*	*17.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Phenol-d6			*16.4 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: p-Terphenyl-d14			*60.7 %*	*41.8-115*		*07/11/13*	B3G0113	*8270*	

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TEL: (517) 335-9800
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Client ID: VAS-02(12-16)DUP

Lab ID: 1306260-09

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	**Available Cyanide**	**0.030**	0.002	mg/L	1	06/27/13	B3F2707	OIA-1677	
57-12-5	**Total Cyanide**	**1.8**	0.050	mg/L	10	06/26/13	B3F2620	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	Arsenic	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-39-3	**Barium**	**18**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-47-3	**Chromium**	**1.6**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-50-8	**Copper**	**5.0**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-92-1	Lead	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	07/03/13	B3G0211	7470/245.1	
7782-49-2	**Selenium**	**2.1**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-66-6	Zinc	ND	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	

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TEL: (517) 335-9800
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Client ID: VAS-02(16-20)

Lab ID: 1306260-10

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	**Available Cyanide**	**0.003**	0.002	mg/L	1	06/27/13	B3F2707	OIA-1677	
57-12-5	**Total Cyanide**	**0.038**	0.005	mg/L	1	06/26/13	B3F2620	ASTM D 7511-09	

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TEL: (517) 335-9800
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Client ID: VAS-02(20-24)

Lab ID: 1306260-11

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	A03
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	A03
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/29/13	B3G0208	8260	A03
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	

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Client ID: VAS-02(20-24)

Lab ID: 1306260-11

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/29/13	B3G0208	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/29/13	B3G0208	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	A05
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
Surrogate: Bromofluorobenzene			*97.4 %*	*85-115*		*06/29/13*	B3G0208	*8260*	
Surrogate: Dibromofluoromethane			*102 %*	*82.7-115*		*06/29/13*	B3G0208	*8260*	
Surrogate: Toluene-d8			*97.3 %*	*85-115*		*06/29/13*	B3G0208	*8260*	

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Client ID: VAS-02(20-24)

Lab ID: 1306260-11

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.1	ug/L	1	07/11/13	B3G0113	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.2	ug/L	1	07/11/13	B3G0113	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.2	ug/L	1	07/11/13	B3G0113	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
105-67-9	2,4-Dimethylphenol	ND	5.2	ug/L	1	07/11/13	B3G0113	8270	
51-28-5	2,4-Dinitrophenol	ND	26	ug/L	1	07/11/13	B3G0113	8270	
121-14-2	2,4-Dinitrotoluene	ND	5.2	ug/L	1	07/11/13	B3G0113	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.2	ug/L	1	07/11/13	B3G0113	8270	
95-51-2	2-Chloroaniline	ND	5.2	ug/L	1	07/11/13	B3G0113	8270	
91-58-7	2-Chloronaphthalene	ND	2.1	ug/L	1	07/11/13	B3G0113	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	21	ug/L	1	07/11/13	B3G0113	8270	
91-57-6	2-Methylnaphthalene	ND	5.2	ug/L	1	07/11/13	B3G0113	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/11/13	B3G0113	8270	
88-74-4	2-Nitroaniline	ND	21	ug/L	1	07/11/13	B3G0113	8270	
88-75-5	2-Nitrophenol	ND	5.2	ug/L	1	07/11/13	B3G0113	8270	
108394,106445	3 & 4-Methylphenol	ND	21	ug/L	1	07/11/13	B3G0113	8270	
99-09-2	3-Nitroaniline	ND	21	ug/L	1	07/11/13	B3G0113	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.1	ug/L	1	07/11/13	B3G0113	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.2	ug/L	1	07/11/13	B3G0113	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/11/13	B3G0113	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-01-6	4-Nitroaniline	ND	21	ug/L	1	07/11/13	B3G0113	8270	
100-02-7	4-Nitrophenol	ND	26	ug/L	1	07/11/13	B3G0113	8270	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
62-53-3	Aniline	ND	4.2	ug/L	1	07/11/13	B3G0113	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
103-33-3	Azobenzene	ND	2.1	ug/L	1	07/11/13	B3G0113	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-51-6	Benzyl Alcohol	ND	52	ug/L	1	07/11/13	B3G0113	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.1	ug/L	1	07/11/13	B3G0113	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.2	ug/L	1	07/11/13	B3G0113	8270	
85-68-7	Butyl benzyl phthalate	ND	5.2	ug/L	1	07/11/13	B3G0113	8270	
86-74-8	Carbazole	ND	5.2	ug/L	1	07/11/13	B3G0113	8270	

STATE OF MICHIGAN
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MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-02(20-24)

Lab ID: 1306260-11

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.1	ug/L	1	07/11/13	B3G0113	8270	
132-64-9	Dibenzofuran	ND	4.2	ug/L	1	07/11/13	B3G0113	8270	
84-66-2	Diethylphthalate	ND	5.2	ug/L	1	07/11/13	B3G0113	8270	
131-11-3	Dimethyl phthalate	ND	5.2	ug/L	1	07/11/13	B3G0113	8270	
84-74-2	Di-n-butyl phthalate	ND	5.2	ug/L	1	07/11/13	B3G0113	8270	
117-84-0	Di-n-octyl phthalate	ND	5.2	ug/L	1	07/11/13	B3G0113	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
86-73-7	Fluorene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/11/13	B3G0113	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.1	ug/L	1	07/11/13	B3G0113	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
121-69-7	N,N-dimethylaniline	ND	5.2	ug/L	1	07/11/13	B3G0113	8270	
91-20-3	Naphthalene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
98-95-3	Nitrobenzene	ND	2.1	ug/L	1	07/11/13	B3G0113	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.2	ug/L	1	07/11/13	B3G0113	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.1	ug/L	1	07/11/13	B3G0113	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.1	ug/L	1	07/11/13	B3G0113	8270	
87-86-5	Pentachlorophenol	ND	21	ug/L	1	07/11/13	B3G0113	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-95-2	Phenol	ND	5.2	ug/L	1	07/11/13	B3G0113	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
110-86-1	Pyridine	ND	21	ug/L	1	07/11/13	B3G0113	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
Surrogate: 2,4,6-Tribromophenol			*67.9 %*	*33.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorobiphenyl			*55.2 %*	*24.1-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorophenol			*14.0 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Nitrobenzene-d5			*51.1 %*	*17.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Phenol-d6			*12.3 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: p-Terphenyl-d14			*56.9 %*	*41.8-115*		*07/11/13*	B3G0113	*8270*	

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-02(20-24)

Lab ID: 1306260-11

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	Available Cyanide	ND	0.002	mg/L	1	06/27/13	B3F2707	OIA-1677	
57-12-5	**Total Cyanide**	**0.012**	0.005	mg/L	1	06/26/13	B3F2620	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	Arsenic	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-39-3	**Barium**	**59**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-47-3	**Chromium**	**1.2**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-50-8	**Copper**	**1.4**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-92-1	Lead	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	07/03/13	B3G0211	7470/245.1	
7782-49-2	Selenium	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-66-6	Zinc	ND	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	

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Client ID: VAS-02(26-30)

Lab ID: 1306260-12

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	A03
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	A03
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/29/13	B3G0208	8260	A03
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	

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Client ID: VAS-02(26-30)

Lab ID: 1306260-12

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/29/13	B3G0208	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/29/13	B3G0208	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	A05
79-01-6	**Trichloroethylene**	**1.0**	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
Surrogate: Bromofluorobenzene			*99.6 %*	*85-115*		*06/29/13*	B3G0208	*8260*	
Surrogate: Dibromofluoromethane			*104 %*	*82.7-115*		*06/29/13*	B3G0208	*8260*	
Surrogate: Toluene-d8			*99.6 %*	*85-115*		*06/29/13*	B3G0208	*8260*	

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TEL: (517) 335-9800
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Client ID: VAS-02(26-30)

Lab ID: 1306260-12

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.1	ug/L	1	07/11/13	B3G0113	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
105-67-9	2,4-Dimethylphenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
51-28-5	2,4-Dinitrophenol	ND	25	ug/L	1	07/11/13	B3G0113	8270	
121-14-2	2,4-Dinitrotoluene	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
95-51-2	2-Chloroaniline	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
91-58-7	2-Chloronaphthalene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
91-57-6	2-Methylnaphthalene	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/11/13	B3G0113	8270	
88-74-4	2-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
88-75-5	2-Nitrophenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
108394,106445	3 & 4-Methylphenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
99-09-2	3-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/11/13	B3G0113	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-01-6	4-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
100-02-7	4-Nitrophenol	ND	25	ug/L	1	07/11/13	B3G0113	8270	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
62-53-3	Aniline	ND	4.1	ug/L	1	07/11/13	B3G0113	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
103-33-3	Azobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-51-6	Benzyl Alcohol	ND	51	ug/L	1	07/11/13	B3G0113	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
85-68-7	Butyl benzyl phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
86-74-8	Carbazole	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	

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Client ID: VAS-02(26-30)

Lab ID: 1306260-12

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
132-64-9	Dibenzofuran	ND	4.1	ug/L	1	07/11/13	B3G0113	8270	
84-66-2	Diethylphthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
131-11-3	Dimethyl phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
84-74-2	Di-n-butyl phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
117-84-0	Di-n-octyl phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
86-73-7	Fluorene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/11/13	B3G0113	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
121-69-7	N,N-dimethylaniline	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
91-20-3	Naphthalene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
98-95-3	Nitrobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
87-86-5	Pentachlorophenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-95-2	Phenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
110-86-1	Pyridine	ND	20	ug/L	1	07/11/13	B3G0113	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
Surrogate: 2,4,6-Tribromophenol			*65.1 %*	*33.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorobiphenyl			*58.1 %*	*24.1-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorophenol			*12.6 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Nitrobenzene-d5			*54.2 %*	*17.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Phenol-d6			*13.3 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: p-Terphenyl-d14			*51.0 %*	*41.8-115*		*07/11/13*	B3G0113	*8270*	

STATE OF MICHIGAN
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ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-02(26-30)

Lab ID: 1306260-12

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	Available Cyanide	ND	0.002	mg/L	1	06/27/13	B3F2707	OIA-1677	
57-12-5	**Total Cyanide**	**0.011**	0.005	mg/L	1	06/26/13	B3F2620	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	**Arsenic**	**1.5**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-39-3	**Barium**	**49**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-47-3	Chromium	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-50-8	Copper	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-92-1	Lead	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	07/03/13	B3G0211	7470/245.1	
7782-49-2	Selenium	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-66-6	**Zinc**	**6.0**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-03(12-16)

Lab ID: 1306260-13

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	A05
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/29/13	B3G0123	8260	A03
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	

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TEL: (517) 335-9800
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Client ID: VAS-03(12-16)

Lab ID: 1306260-13

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/29/13	B3G0123	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/29/13	B3G0123	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/29/13	B3G0123	8260	
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/29/13	B3G0123	8260	
Surrogate: Bromofluorobenzene			*97.6 %*	*85-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Dibromofluoromethane			*103 %*	*82.7-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Toluene-d8			*97.5 %*	*85-115*		*06/29/13*	B3G0123	*8260*	

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ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-03(12-16)
Lab ID: 1306260-13

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
105-67-9	2,4-Dimethylphenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
51-28-5	2,4-Dinitrophenol	ND	25	ug/L	1	07/11/13	B3G0113	8270	
121-14-2	2,4-Dinitrotoluene	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
95-51-2	2-Chloroaniline	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
91-58-7	2-Chloronaphthalene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/11/13	B3G0113	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
91-57-6	2-Methylnaphthalene	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/11/13	B3G0113	8270	
88-74-4	2-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
88-75-5	2-Nitrophenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
108394,106445	3 & 4-Methylphenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
99-09-2	3-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/11/13	B3G0113	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-01-6	4-Nitroaniline	ND	20	ug/L	1	07/11/13	B3G0113	8270	
100-02-7	4-Nitrophenol	ND	25	ug/L	1	07/11/13	B3G0113	8270	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
62-53-3	Aniline	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
103-33-3	Azobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-51-6	Benzyl Alcohol	ND	51	ug/L	1	07/11/13	B3G0113	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
85-68-7	Butyl benzyl phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
86-74-8	Carbazole	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	

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TEL: (517) 335-9800
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Client ID: VAS-03(12-16)

Lab ID: 1306260-13

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
132-64-9	Dibenzofuran	ND	4.0	ug/L	1	07/11/13	B3G0113	8270	
84-66-2	Diethylphthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
131-11-3	Dimethyl phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
84-74-2	Di-n-butyl phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
117-84-0	Di-n-octyl phthalate	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
86-73-7	Fluorene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/11/13	B3G0113	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
121-69-7	N,N-dimethylaniline	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
91-20-3	Naphthalene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
98-95-3	Nitrobenzene	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.0	ug/L	1	07/11/13	B3G0113	8270	
87-86-5	Pentachlorophenol	ND	20	ug/L	1	07/11/13	B3G0113	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-95-2	Phenol	ND	5.1	ug/L	1	07/11/13	B3G0113	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
110-86-1	Pyridine	ND	20	ug/L	1	07/11/13	B3G0113	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/11/13	B3G0113	8270	
Surrogate: 2,4,6-Tribromophenol			*81.9 %*	*33.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorobiphenyl			*59.6 %*	*24.1-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorophenol			*20.2 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Nitrobenzene-d5			*55.6 %*	*17.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Phenol-d6			*13.7 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: p-Terphenyl-d14			*72.3 %*	*41.8-115*		*07/11/13*	B3G0113	*8270*	

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ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-03(12-16)

Lab ID: 1306260-13

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	**Available Cyanide**	**0.024**	0.002	mg/L	1	06/27/13	B3F2707	OIA-1677	
57-12-5	**Total Cyanide**	**0.96**	0.050	mg/L	10	06/26/13	B3F2620	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	Arsenic	ND	1.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-39-3	**Barium**	**35**	5.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-47-3	Chromium	ND	1.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-50-8	Copper	ND	1.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7439-92-1	Lead	ND	1.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	07/03/13	B3G0211	7470/245.1	
7782-49-2	**Selenium**	**1.6**	1.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-66-6	**Zinc**	**36**	5.0	ug/L	1	07/02/13	B3F2719	6020/200.8	

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Client ID: VAS-03(12-16)MS

Lab ID: 1306260-14

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	**1,1,1,2-Tetrachloroethane**	**54**	1.0	ug/L	1	06/29/13	B3G0123	8260	
71-55-6	**1,1,1-Trichloroethane**	**52**	1.0	ug/L	1	06/29/13	B3G0123	8260	
79-34-5	**1,1,2,2-Tetrachloroethane**	**63**	1.0	ug/L	1	06/29/13	B3G0123	8260	A06
79-00-5	**1,1,2-Trichloroethane**	**50**	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-34-3	**1,1-Dichloroethane**	**50**	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-35-4	**1,1-Dichloroethylene**	**50**	1.0	ug/L	1	06/29/13	B3G0123	8260	
87-61-6	**1,2,3-Trichlorobenzene**	**53**	5.0	ug/L	1	06/29/13	B3G0123	8260	
96-18-4	**1,2,3-Trichloropropane**	**47**	1.0	ug/L	1	06/29/13	B3G0123	8260	
526-73-8	**1,2,3-Trimethylbenzene**	**52**	1.0	ug/L	1	06/29/13	B3G0123	8260	
120-82-1	**1,2,4-Trichlorobenzene**	**54**	5.0	ug/L	1	06/29/13	B3G0123	8260	
95-63-6	**1,2,4-Trimethylbenzene**	**52**	1.0	ug/L	1	06/29/13	B3G0123	8260	
96-12-8	**1,2-Dibromo-3-chloropropane**	**53**	5.0	ug/L	1	06/29/13	B3G0123	8260	
106-93-4	**1,2-Dibromoethane**	**53**	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-50-1	**1,2-Dichlorobenzene**	**53**	1.0	ug/L	1	06/29/13	B3G0123	8260	
107-06-2	**1,2-Dichloroethane**	**51**	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-87-5	**1,2-Dichloropropane**	**51**	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-67-8	**1,3,5-Trimethylbenzene**	**52**	1.0	ug/L	1	06/29/13	B3G0123	8260	
541-73-1	**1,3-Dichlorobenzene**	**53**	1.0	ug/L	1	06/29/13	B3G0123	8260	
106-46-7	**1,4-Dichlorobenzene**	**53**	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-93-3	**2-Butanone (MEK)**	**37**	5.0	ug/L	1	06/29/13	B3G0123	8260	
591-78-6	**2-Hexanone**	**37**	5.0	ug/L	1	06/29/13	B3G0123	8260	A05
91-57-6	**2-Methylnaphthalene**	**49**	5.0	ug/L	1	06/29/13	B3G0123	8260	X
67-64-1	**2-Propanone (acetone)**	**26**	20	ug/L	1	06/29/13	B3G0123	8260	A03
108-10-1	**4-Methyl-2-pentanone (MIBK)**	**48**	5.0	ug/L	1	06/29/13	B3G0123	8260	
107-13-1	**Acrylonitrile**	**48**	5.0	ug/L	1	06/29/13	B3G0123	8260	
71-43-2	**Benzene**	**52**	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-86-1	**Bromobenzene**	**49**	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-97-5	**Bromochloromethane**	**53**	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-27-4	**Bromodichloromethane**	**51**	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-25-2	**Bromoform**	**52**	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-83-9	**Bromomethane**	**55**	5.0	ug/L	1	06/29/13	B3G0123	8260	
75-15-0	**Carbon disulfide**	**52**	1.0	ug/L	1	06/29/13	B3G0123	8260	
56-23-5	**Carbon tetrachloride**	**53**	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-90-7	**Chlorobenzene**	**52**	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-00-3	**Chloroethane**	**51**	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-66-3	**Chloroform**	**51**	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-87-3	**Chloromethane**	**55**	5.0	ug/L	1	06/29/13	B3G0123	8260	
156-59-2	**cis-1,2-Dichloroethylene**	**46**	1.0	ug/L	1	06/29/13	B3G0123	8260	

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Client ID: VAS-03(12-16)MS

Lab ID: 1306260-14

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
10061-01-5	**cis-1,3-Dichloropropylene**	**52**	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-82-7	**Cyclohexane**	**46**	5.0	ug/L	1	06/29/13	B3G0123	8260	
124-48-1	**Dibromochloromethane**	**53**	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-95-3	**Dibromomethane**	**52**	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-71-8	**Dichlorodifluoromethane**	**68**	5.0	ug/L	1	06/29/13	B3G0123	8260	A04, A06
60-29-7	**Diethyl ether**	**50**	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-20-3	**Diisopropyl Ether**	**50**	5.0	ug/L	1	06/29/13	B3G0123	8260	
100-41-4	**Ethylbenzene**	**52**	1.0	ug/L	1	06/29/13	B3G0123	8260	
637-92-3	**Ethyltertiarybutylether**	**50**	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-72-1	**Hexachloroethane**	**45**	5.0	ug/L	1	06/29/13	B3G0123	8260	
98-82-8	**Isopropylbenzene**	**54**	1.0	ug/L	1	06/29/13	B3G0123	8260	
1330-20-7	**m & p - Xylene**	**100**	2.0	ug/L	1	06/29/13	B3G0123	8260	
74-88-4	**Methyl iodide**	**44**	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-09-2	**Methylene chloride**	**50**	5.0	ug/L	1	06/29/13	B3G0123	8260	
1634-04-4	**Methyltertiarybutylether**	**50**	1.0	ug/L	1	06/29/13	B3G0123	8260	
91-20-3	**Naphthalene**	**56**	5.0	ug/L	1	06/29/13	B3G0123	8260	X
104-51-8	**n-Butylbenzene**	**50**	1.0	ug/L	1	06/29/13	B3G0123	8260	
103-65-1	**n-Propylbenzene**	**52**	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-47-6	**o-Xylene**	**52**	1.0	ug/L	1	06/29/13	B3G0123	8260	
99-87-6	**p-Isopropyl toluene**	**51**	1.0	ug/L	1	06/29/13	B3G0123	8260	
135-98-8	**sec-Butylbenzene**	**52**	1.0	ug/L	1	06/29/13	B3G0123	8260	
100-42-5	**Styrene**	**60**	1.0	ug/L	1	06/29/13	B3G0123	8260	
98-06-6	**tert-Butylbenzene**	**58**	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-65-0	**tertiary Butyl Alcohol**	**240**	50	ug/L	1	06/29/13	B3G0123	8260	
994-05-8	**tertiaryAmylmethylether**	**50**	5.0	ug/L	1	06/29/13	B3G0123	8260	
127-18-4	**Tetrachloroethylene**	**55**	1.0	ug/L	1	06/29/13	B3G0123	8260	
109-99-9	**Tetrahydrofuran**	**49**	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-88-3	**Toluene**	**51**	1.0	ug/L	1	06/29/13	B3G0123	8260	
156-60-5	**trans-1,2-Dichloroethylene**	**58**	1.0	ug/L	1	06/29/13	B3G0123	8260	
10061-02-6	**trans-1,3-Dichloropropylene**	**53**	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-57-6	**trans-1,4-Dichloro-2-butene**	**37**	5.0	ug/L	1	06/29/13	B3G0123	8260	
79-01-6	**Trichloroethylene**	**48**	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-69-4	**Trichlorofluoromethane**	**53**	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-01-4	**Vinyl chloride**	**63**	1.0	ug/L	1	06/29/13	B3G0123	8260	
Surrogate: Bromofluorobenzene			*97.4 %*	*85-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Dibromofluoromethane			*103 %*	*82.7-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Toluene-d8			*96.8 %*	*85-115*		*06/29/13*	B3G0123	*8260*	

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Client ID: VAS-03(12-16)MS

Lab ID: 1306260-14

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	**1,2,4-Trichlorobenzene**	**28**	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-95-4	**2,4,5-Trichlorophenol**	**84**	5.0	ug/L	1	07/11/13	B3G0113	8270	
88-06-2	**2,4,6-Trichlorophenol**	**85**	4.0	ug/L	1	07/11/13	B3G0113	8270	
120-83-2	**2,4-Dichlorophenol**	**70**	10	ug/L	1	07/11/13	B3G0113	8270	
105-67-9	**2,4-Dimethylphenol**	**63**	5.0	ug/L	1	07/11/13	B3G0113	8270	
51-28-5	**2,4-Dinitrophenol**	**66**	25	ug/L	1	07/11/13	B3G0113	8270	
121-14-2	**2,4-Dinitrotoluene**	**42**	5.0	ug/L	1	07/11/13	B3G0113	8270	
606-20-2	**2,6-Dinitrotoluene**	**41**	5.0	ug/L	1	07/11/13	B3G0113	8270	
95-51-2	**2-Chloroaniline**	**31**	5.0	ug/L	1	07/11/13	B3G0113	8270	
91-58-7	**2-Chloronaphthalene**	**33**	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-57-8	**2-Chlorophenol**	**55**	10	ug/L	1	07/11/13	B3G0113	8270	
534-52-1	**2-Methyl-4,6-dinitrophenol**	**81**	20	ug/L	1	07/11/13	B3G0113	8270	
91-57-6	**2-Methylnaphthalene**	**33**	5.0	ug/L	1	07/11/13	B3G0113	8270	
95-48-7	**2-Methylphenol (o-Cresol)**	**46**	10	ug/L	1	07/11/13	B3G0113	8270	
88-74-4	**2-Nitroaniline**	**35**	20	ug/L	1	07/11/13	B3G0113	8270	
88-75-5	**2-Nitrophenol**	**68**	5.0	ug/L	1	07/11/13	B3G0113	8270	
108394,106445	**3 & 4-Methylphenol**	**44**	20	ug/L	1	07/11/13	B3G0113	8270	
99-09-2	**3-Nitroaniline**	**35**	20	ug/L	1	07/11/13	B3G0113	8270	
101-55-3	**4-Bromophenyl phenyl ether**	**36**	2.0	ug/L	1	07/11/13	B3G0113	8270	
59-50-7	**4-Chloro-3-methyl-phenol**	**71**	5.0	ug/L	1	07/11/13	B3G0113	8270	
106-47-8	**4-Chloroaniline**	**29**	10	ug/L	1	07/11/13	B3G0113	8270	
7005-72-3	**4-Chlorodiphenylether**	**36**	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-01-6	**4-Nitroaniline**	**37**	20	ug/L	1	07/11/13	B3G0113	8270	
100-02-7	**4-Nitrophenol**	**30**	25	ug/L	1	07/11/13	B3G0113	8270	
83-32-9	**Acenaphthene**	**36**	1.0	ug/L	1	07/11/13	B3G0113	8270	
208-96-8	**Acenaphthylene**	**38**	1.0	ug/L	1	07/11/13	B3G0113	8270	
62-53-3	**Aniline**	**17**	4.0	ug/L	1	07/11/13	B3G0113	8270	
120-12-7	**Anthracene**	**39**	1.0	ug/L	1	07/11/13	B3G0113	8270	
103-33-3	**Azobenzene**	**41**	2.0	ug/L	1	07/11/13	B3G0113	8270	
56-55-3	**Benz[a]anthracene**	**27**	1.0	ug/L	1	07/11/13	B3G0113	8270	
50-32-8	**Benzo[a]pyrene**	**21**	1.0	ug/L	1	07/11/13	B3G0113	8270	
205-99-2	**Benzo[b]fluoranthene**	**25**	1.0	ug/L	1	07/11/13	B3G0113	8270	
191-24-2	**Benzo[g,h,i]perylene**	**20**	1.0	ug/L	1	07/11/13	B3G0113	8270	
207-08-9	**Benzo[k]fluoranthene**	**24**	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-51-6	**Benzyl Alcohol**	**44**	50	ug/L	1	07/11/13	B3G0113	8270	T
111-91-1	**Bis(2-chloroethoxy)methane**	**31**	2.0	ug/L	1	07/11/13	B3G0113	8270	
111-44-4	**Bis(2-chloroethyl)ether**	**30**	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-60-1	**Bis(2-chloroisopropyl)ether**	**54**	1.0	ug/L	1	07/11/13	B3G0113	8270	A04

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Client ID: VAS-03(12-16)MS

Lab ID: 1306260-14

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
117-81-7	**Bis(2-ethylhexyl)phthalate**	**23**	5.0	ug/L	1	07/11/13	B3G0113	8270	
85-68-7	**Butyl benzyl phthalate**	**29**	5.0	ug/L	1	07/11/13	B3G0113	8270	
86-74-8	**Carbazole**	**42**	5.0	ug/L	1	07/11/13	B3G0113	8270	
218-01-9	**Chrysene**	**24**	1.0	ug/L	1	07/11/13	B3G0113	8270	
53-70-3	**Dibenz[a,h]anthracene**	**21**	2.0	ug/L	1	07/11/13	B3G0113	8270	
132-64-9	**Dibenzofuran**	**35**	4.0	ug/L	1	07/11/13	B3G0113	8270	
84-66-2	**Diethylphthalate**	**45**	5.0	ug/L	1	07/11/13	B3G0113	8270	
131-11-3	**Dimethyl phthalate**	**40**	5.0	ug/L	1	07/11/13	B3G0113	8270	
84-74-2	**Di-n-butyl phthalate**	**40**	5.0	ug/L	1	07/11/13	B3G0113	8270	
117-84-0	**Di-n-octyl phthalate**	**24**	5.0	ug/L	1	07/11/13	B3G0113	8270	
206-44-0	**Fluoranthene**	**36**	1.0	ug/L	1	07/11/13	B3G0113	8270	
86-73-7	**Fluorene**	**37**	1.0	ug/L	1	07/11/13	B3G0113	8270	
118-74-1	**Hexachlorobenzene**	**31**	1.0	ug/L	1	07/11/13	B3G0113	8270	
87-68-3	**Hexachlorobutadiene**	**27**	1.0	ug/L	1	07/11/13	B3G0113	8270	
77-47-4	**Hexachlorocyclopentadiene**	**19**	10	ug/L	1	07/11/13	B3G0113	8270	
67-72-1	**Hexachloroethane**	**24**	1.0	ug/L	1	07/11/13	B3G0113	8270	
193-39-5	**Indeno(1,2,3-c,d)pyrene**	**19**	2.0	ug/L	1	07/11/13	B3G0113	8270	
78-59-1	**Isophorone**	**31**	1.0	ug/L	1	07/11/13	B3G0113	8270	
121-69-7	**N,N-dimethylaniline**	**27**	5.0	ug/L	1	07/11/13	B3G0113	8270	
91-20-3	**Naphthalene**	**30**	1.0	ug/L	1	07/11/13	B3G0113	8270	
98-95-3	**Nitrobenzene**	**33**	2.0	ug/L	1	07/11/13	B3G0113	8270	
100-61-8	**N-methylaniline**	**32**	1.0	ug/L	1	07/11/13	B3G0113	8270	
67-75-9	**N-Nitrosodimethylamine**	**14**	5.0	ug/L	1	07/11/13	B3G0113	8270	
621-64-7	**N-Nitrosodi-n-propylamine**	**37**	2.0	ug/L	1	07/11/13	B3G0113	8270	
86-30-6	**N-Nitrosodiphenylamine**	**41**	2.0	ug/L	1	07/11/13	B3G0113	8270	
87-86-5	**Pentachlorophenol**	**66**	20	ug/L	1	07/11/13	B3G0113	8270	
85-01-8	**Phenanthrene**	**37**	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-95-2	**Phenol**	**16**	5.0	ug/L	1	07/11/13	B3G0113	8270	
129-00-0	**Pyrene**	**29**	1.0	ug/L	1	07/11/13	B3G0113	8270	
110-86-1	**Pyridine**	**8.7**	20	ug/L	1	07/11/13	B3G0113	8270	T
632-22-4	**Tetramethylurea**	**21**	1.0	ug/L	1	07/11/13	B3G0113	8270	
Surrogate: 2,4,6-Tribromophenol			*75.8 %*	*33.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorobiphenyl			*68.3 %*	*24.1-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorophenol			*25.5 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Nitrobenzene-d5			*63.1 %*	*17.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Phenol-d6			*15.9 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: p-Terphenyl-d14			*46.8 %*	*41.8-115*		*07/11/13*	B3G0113	*8270*	

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ENVIRONMENTAL LABORATORY

P.O. Box 30270
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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-03(12-16)MS

Lab ID: 1306260-14

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	**Available Cyanide**	**0.074**	0.002	mg/L	1	06/27/13	B3F2707	OIA-1677	
57-12-5	**Total Cyanide**	**1.8**	0.050	mg/L	10	06/26/13	B3F2620	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	**Arsenic**	**48**	1.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-39-3	**Barium**	**82**	5.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-43-9	**Cadmium**	**47**	0.2	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-47-3	**Chromium**	**47**	1.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-50-8	**Copper**	**45**	1.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7439-92-1	**Lead**	**46**	1.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7439-97-6	**Mercury**	**4.0**	0.2	ug/L	1	07/03/13	B3G0211	7470/245.1	
7782-49-2	**Selenium**	**48**	1.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-22-4	**Silver**	**45**	0.2	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-66-6	**Zinc**	**81**	5.0	ug/L	1	07/02/13	B3F2719	6020/200.8	

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Client ID: VAS-03(12-16)MSD

Lab ID: 1306260-15

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	**1,1,1,2-Tetrachloroethane**	**53**	1.0	ug/L	1	06/29/13	B3G0123	8260	
71-55-6	**1,1,1-Trichloroethane**	**50**	1.0	ug/L	1	06/29/13	B3G0123	8260	
79-34-5	**1,1,2,2-Tetrachloroethane**	**63**	1.0	ug/L	1	06/29/13	B3G0123	8260	A06
79-00-5	**1,1,2-Trichloroethane**	**49**	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-34-3	**1,1-Dichloroethane**	**49**	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-35-4	**1,1-Dichloroethylene**	**49**	1.0	ug/L	1	06/29/13	B3G0123	8260	
87-61-6	**1,2,3-Trichlorobenzene**	**53**	5.0	ug/L	1	06/29/13	B3G0123	8260	
96-18-4	**1,2,3-Trichloropropane**	**47**	1.0	ug/L	1	06/29/13	B3G0123	8260	
526-73-8	**1,2,3-Trimethylbenzene**	**51**	1.0	ug/L	1	06/29/13	B3G0123	8260	
120-82-1	**1,2,4-Trichlorobenzene**	**53**	5.0	ug/L	1	06/29/13	B3G0123	8260	
95-63-6	**1,2,4-Trimethylbenzene**	**51**	1.0	ug/L	1	06/29/13	B3G0123	8260	
96-12-8	**1,2-Dibromo-3-chloropropane**	**55**	5.0	ug/L	1	06/29/13	B3G0123	8260	
106-93-4	**1,2-Dibromoethane**	**52**	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-50-1	**1,2-Dichlorobenzene**	**53**	1.0	ug/L	1	06/29/13	B3G0123	8260	
107-06-2	**1,2-Dichloroethane**	**50**	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-87-5	**1,2-Dichloropropane**	**49**	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-67-8	**1,3,5-Trimethylbenzene**	**52**	1.0	ug/L	1	06/29/13	B3G0123	8260	
541-73-1	**1,3-Dichlorobenzene**	**52**	1.0	ug/L	1	06/29/13	B3G0123	8260	
106-46-7	**1,4-Dichlorobenzene**	**52**	1.0	ug/L	1	06/29/13	B3G0123	8260	
78-93-3	**2-Butanone (MEK)**	**37**	5.0	ug/L	1	06/29/13	B3G0123	8260	
591-78-6	**2-Hexanone**	**37**	5.0	ug/L	1	06/29/13	B3G0123	8260	A05
91-57-6	**2-Methylnaphthalene**	**50**	5.0	ug/L	1	06/29/13	B3G0123	8260	X
67-64-1	**2-Propanone (acetone)**	**26**	20	ug/L	1	06/29/13	B3G0123	8260	A03
108-10-1	**4-Methyl-2-pentanone (MIBK)**	**48**	5.0	ug/L	1	06/29/13	B3G0123	8260	
107-13-1	**Acrylonitrile**	**48**	5.0	ug/L	1	06/29/13	B3G0123	8260	
71-43-2	**Benzene**	**50**	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-86-1	**Bromobenzene**	**49**	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-97-5	**Bromochloromethane**	**53**	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-27-4	**Bromodichloromethane**	**50**	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-25-2	**Bromoform**	**53**	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-83-9	**Bromomethane**	**53**	5.0	ug/L	1	06/29/13	B3G0123	8260	
75-15-0	**Carbon disulfide**	**50**	1.0	ug/L	1	06/29/13	B3G0123	8260	
56-23-5	**Carbon tetrachloride**	**50**	1.0	ug/L	1	06/29/13	B3G0123	8260	
108-90-7	**Chlorobenzene**	**51**	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-00-3	**Chloroethane**	**50**	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-66-3	**Chloroform**	**50**	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-87-3	**Chloromethane**	**54**	5.0	ug/L	1	06/29/13	B3G0123	8260	
156-59-2	**cis-1,2-Dichloroethylene**	**45**	1.0	ug/L	1	06/29/13	B3G0123	8260	

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Client ID: VAS-03(12-16)MSD

Lab ID: 1306260-15

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
10061-01-5	**cis-1,3-Dichloropropylene**	**51**	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-82-7	**Cyclohexane**	**44**	5.0	ug/L	1	06/29/13	B3G0123	8260	
124-48-1	**Dibromochloromethane**	**52**	1.0	ug/L	1	06/29/13	B3G0123	8260	
74-95-3	**Dibromomethane**	**51**	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-71-8	**Dichlorodifluoromethane**	**69**	5.0	ug/L	1	06/29/13	B3G0123	8260	A04, A06
60-29-7	**Diethyl ether**	**49**	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-20-3	**Diisopropyl Ether**	**49**	5.0	ug/L	1	06/29/13	B3G0123	8260	
100-41-4	**Ethylbenzene**	**51**	1.0	ug/L	1	06/29/13	B3G0123	8260	
637-92-3	**Ethyltertiarybutylether**	**50**	5.0	ug/L	1	06/29/13	B3G0123	8260	
67-72-1	**Hexachloroethane**	**43**	5.0	ug/L	1	06/29/13	B3G0123	8260	
98-82-8	**Isopropylbenzene**	**53**	1.0	ug/L	1	06/29/13	B3G0123	8260	
1330-20-7	**m & p - Xylene**	**100**	2.0	ug/L	1	06/29/13	B3G0123	8260	
74-88-4	**Methyl iodide**	**46**	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-09-2	**Methylene chloride**	**49**	5.0	ug/L	1	06/29/13	B3G0123	8260	
1634-04-4	**Methyltertiarybutylether**	**50**	1.0	ug/L	1	06/29/13	B3G0123	8260	
91-20-3	**Naphthalene**	**56**	5.0	ug/L	1	06/29/13	B3G0123	8260	X
104-51-8	**n-Butylbenzene**	**49**	1.0	ug/L	1	06/29/13	B3G0123	8260	
103-65-1	**n-Propylbenzene**	**51**	1.0	ug/L	1	06/29/13	B3G0123	8260	
95-47-6	**o-Xylene**	**50**	1.0	ug/L	1	06/29/13	B3G0123	8260	
99-87-6	**p-Isopropyl toluene**	**51**	1.0	ug/L	1	06/29/13	B3G0123	8260	
135-98-8	**sec-Butylbenzene**	**51**	1.0	ug/L	1	06/29/13	B3G0123	8260	
100-42-5	**Styrene**	**59**	1.0	ug/L	1	06/29/13	B3G0123	8260	
98-06-6	**tert-Butylbenzene**	**57**	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-65-0	**tertiary Butyl Alcohol**	**260**	50	ug/L	1	06/29/13	B3G0123	8260	
994-05-8	**tertiaryAmylmethylether**	**49**	5.0	ug/L	1	06/29/13	B3G0123	8260	
127-18-4	**Tetrachloroethylene**	**54**	1.0	ug/L	1	06/29/13	B3G0123	8260	
109-99-9	**Tetrahydrofuran**	**50**	5.0	ug/L	1	06/29/13	B3G0123	8260	
108-88-3	**Toluene**	**50**	1.0	ug/L	1	06/29/13	B3G0123	8260	
156-60-5	**trans-1,2-Dichloroethylene**	**56**	1.0	ug/L	1	06/29/13	B3G0123	8260	
10061-02-6	**trans-1,3-Dichloropropylene**	**51**	1.0	ug/L	1	06/29/13	B3G0123	8260	
110-57-6	**trans-1,4-Dichloro-2-butene**	**38**	5.0	ug/L	1	06/29/13	B3G0123	8260	
79-01-6	**Trichloroethylene**	**47**	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-69-4	**Trichlorofluoromethane**	**50**	1.0	ug/L	1	06/29/13	B3G0123	8260	
75-01-4	**Vinyl chloride**	**61**	1.0	ug/L	1	06/29/13	B3G0123	8260	
Surrogate: Bromofluorobenzene			*97.9 %*	*85-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Dibromofluoromethane			*102 %*	*82.7-115*		*06/29/13*	B3G0123	*8260*	
Surrogate: Toluene-d8			*96.8 %*	*85-115*		*06/29/13*	B3G0123	*8260*	

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Client ID: VAS-03(12-16)MSD

Lab ID: 1306260-15

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	**1,2,4-Trichlorobenzene**	**28**	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-95-4	**2,4,5-Trichlorophenol**	**77**	5.0	ug/L	1	07/11/13	B3G0113	8270	
88-06-2	**2,4,6-Trichlorophenol**	**79**	4.0	ug/L	1	07/11/13	B3G0113	8270	
120-83-2	**2,4-Dichlorophenol**	**66**	10	ug/L	1	07/11/13	B3G0113	8270	
105-67-9	**2,4-Dimethylphenol**	**61**	5.0	ug/L	1	07/11/13	B3G0113	8270	
51-28-5	**2,4-Dinitrophenol**	**62**	25	ug/L	1	07/11/13	B3G0113	8270	
121-14-2	**2,4-Dinitrotoluene**	**41**	5.0	ug/L	1	07/11/13	B3G0113	8270	
606-20-2	**2,6-Dinitrotoluene**	**39**	5.0	ug/L	1	07/11/13	B3G0113	8270	
95-51-2	**2-Chloroaniline**	**31**	5.0	ug/L	1	07/11/13	B3G0113	8270	
91-58-7	**2-Chloronaphthalene**	**31**	2.0	ug/L	1	07/11/13	B3G0113	8270	
95-57-8	**2-Chlorophenol**	**52**	10	ug/L	1	07/11/13	B3G0113	8270	
534-52-1	**2-Methyl-4,6-dinitrophenol**	**75**	20	ug/L	1	07/11/13	B3G0113	8270	
91-57-6	**2-Methylnaphthalene**	**31**	5.0	ug/L	1	07/11/13	B3G0113	8270	
95-48-7	**2-Methylphenol (o-Cresol)**	**42**	10	ug/L	1	07/11/13	B3G0113	8270	
88-74-4	**2-Nitroaniline**	**34**	20	ug/L	1	07/11/13	B3G0113	8270	
88-75-5	**2-Nitrophenol**	**66**	5.0	ug/L	1	07/11/13	B3G0113	8270	
108394,106445	**3 & 4-Methylphenol**	**39**	20	ug/L	1	07/11/13	B3G0113	8270	
99-09-2	**3-Nitroaniline**	**34**	20	ug/L	1	07/11/13	B3G0113	8270	
101-55-3	**4-Bromophenyl phenyl ether**	**34**	2.0	ug/L	1	07/11/13	B3G0113	8270	
59-50-7	**4-Chloro-3-methyl-phenol**	**67**	5.0	ug/L	1	07/11/13	B3G0113	8270	
106-47-8	**4-Chloroaniline**	**29**	10	ug/L	1	07/11/13	B3G0113	8270	
7005-72-3	**4-Chlorodiphenylether**	**34**	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-01-6	**4-Nitroaniline**	**38**	20	ug/L	1	07/11/13	B3G0113	8270	
100-02-7	**4-Nitrophenol**	**29**	25	ug/L	1	07/11/13	B3G0113	8270	
83-32-9	**Acenaphthene**	**34**	1.0	ug/L	1	07/11/13	B3G0113	8270	
208-96-8	**Acenaphthylene**	**36**	1.0	ug/L	1	07/11/13	B3G0113	8270	
62-53-3	**Aniline**	**19**	4.0	ug/L	1	07/11/13	B3G0113	8270	
120-12-7	**Anthracene**	**37**	1.0	ug/L	1	07/11/13	B3G0113	8270	
103-33-3	**Azobenzene**	**38**	2.0	ug/L	1	07/11/13	B3G0113	8270	
56-55-3	**Benz[a]anthracene**	**30**	1.0	ug/L	1	07/11/13	B3G0113	8270	
50-32-8	**Benzo[a]pyrene**	**23**	1.0	ug/L	1	07/11/13	B3G0113	8270	
205-99-2	**Benzo[b]fluoranthene**	**27**	1.0	ug/L	1	07/11/13	B3G0113	8270	
191-24-2	**Benzo[g,h,i]perylene**	**23**	1.0	ug/L	1	07/11/13	B3G0113	8270	
207-08-9	**Benzo[k]fluoranthene**	**26**	1.0	ug/L	1	07/11/13	B3G0113	8270	
100-51-6	**Benzyl Alcohol**	**40**	50	ug/L	1	07/11/13	B3G0113	8270	T
111-91-1	**Bis(2-chloroethoxy)methane**	**29**	2.0	ug/L	1	07/11/13	B3G0113	8270	
111-44-4	**Bis(2-chloroethyl)ether**	**28**	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-60-1	**Bis(2-chloroisopropyl)ether**	**49**	1.0	ug/L	1	07/11/13	B3G0113	8270	A04

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Lab ID: 1306260-15

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
117-81-7	**Bis(2-ethylhexyl)phthalate**	**27**	5.0	ug/L	1	07/11/13	B3G0113	8270	
85-68-7	**Butyl benzyl phthalate**	**30**	5.0	ug/L	1	07/11/13	B3G0113	8270	
86-74-8	**Carbazole**	**40**	5.0	ug/L	1	07/11/13	B3G0113	8270	
218-01-9	**Chrysene**	**29**	1.0	ug/L	1	07/11/13	B3G0113	8270	
53-70-3	**Dibenz[a,h]anthracene**	**26**	2.0	ug/L	1	07/11/13	B3G0113	8270	
132-64-9	**Dibenzofuran**	**34**	4.0	ug/L	1	07/11/13	B3G0113	8270	
84-66-2	**Diethylphthalate**	**42**	5.0	ug/L	1	07/11/13	B3G0113	8270	
131-11-3	**Dimethyl phthalate**	**39**	5.0	ug/L	1	07/11/13	B3G0113	8270	
84-74-2	**Di-n-butyl phthalate**	**39**	5.0	ug/L	1	07/11/13	B3G0113	8270	
117-84-0	**Di-n-octyl phthalate**	**28**	5.0	ug/L	1	07/11/13	B3G0113	8270	
206-44-0	**Fluoranthene**	**36**	1.0	ug/L	1	07/11/13	B3G0113	8270	
86-73-7	**Fluorene**	**35**	1.0	ug/L	1	07/11/13	B3G0113	8270	
118-74-1	**Hexachlorobenzene**	**32**	1.0	ug/L	1	07/11/13	B3G0113	8270	
87-68-3	**Hexachlorobutadiene**	**27**	1.0	ug/L	1	07/11/13	B3G0113	8270	
77-47-4	**Hexachlorocyclopentadiene**	**20**	10	ug/L	1	07/11/13	B3G0113	8270	
67-72-1	**Hexachloroethane**	**24**	1.0	ug/L	1	07/11/13	B3G0113	8270	
193-39-5	**Indeno(1,2,3-c,d)pyrene**	**23**	2.0	ug/L	1	07/11/13	B3G0113	8270	
78-59-1	**Isophorone**	**30**	1.0	ug/L	1	07/11/13	B3G0113	8270	
121-69-7	**N,N-dimethylaniline**	**28**	5.0	ug/L	1	07/11/13	B3G0113	8270	
91-20-3	**Naphthalene**	**29**	1.0	ug/L	1	07/11/13	B3G0113	8270	
98-95-3	**Nitrobenzene**	**31**	2.0	ug/L	1	07/11/13	B3G0113	8270	
100-61-8	**N-methylaniline**	**29**	1.0	ug/L	1	07/11/13	B3G0113	8270	
67-75-9	**N-Nitrosodimethylamine**	**14**	5.0	ug/L	1	07/11/13	B3G0113	8270	
621-64-7	**N-Nitrosodi-n-propylamine**	**33**	2.0	ug/L	1	07/11/13	B3G0113	8270	
86-30-6	**N-Nitrosodiphenylamine**	**39**	2.0	ug/L	1	07/11/13	B3G0113	8270	
87-86-5	**Pentachlorophenol**	**63**	20	ug/L	1	07/11/13	B3G0113	8270	
85-01-8	**Phenanthrene**	**35**	1.0	ug/L	1	07/11/13	B3G0113	8270	
108-95-2	**Phenol**	**15**	5.0	ug/L	1	07/11/13	B3G0113	8270	
129-00-0	**Pyrene**	**32**	1.0	ug/L	1	07/11/13	B3G0113	8270	
110-86-1	**Pyridine**	**11**	20	ug/L	1	07/11/13	B3G0113	8270	T
632-22-4	**Tetramethylurea**	**19**	1.0	ug/L	1	07/11/13	B3G0113	8270	
Surrogate: 2,4,6-Tribromophenol			*72.0 %*	*33.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorobiphenyl			*62.3 %*	*24.1-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: 2-Fluorophenol			*23.2 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Nitrobenzene-d5			*60.6 %*	*17.8-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: Phenol-d6			*14.8 %*	*10-115*		*07/11/13*	B3G0113	*8270*	
Surrogate: p-Terphenyl-d14			*52.7 %*	*41.8-115*		*07/11/13*	B3G0113	*8270*	

STATE OF MICHIGAN
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MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-03(12-16)MSD

Lab ID: 1306260-15

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	**Available Cyanide**	**0.074**	0.002	mg/L	1	06/27/13	B3F2707	OIA-1677	
57-12-5	**Total Cyanide**	**1.9**	0.050	mg/L	10	06/26/13	B3F2620	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	**Arsenic**	**51**	1.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-39-3	**Barium**	**83**	5.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-43-9	**Cadmium**	**49**	0.2	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-47-3	**Chromium**	**49**	1.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-50-8	**Copper**	**47**	1.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7439-92-1	**Lead**	**47**	1.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7439-97-6	**Mercury**	**4.0**	0.2	ug/L	1	07/03/13	B3G0211	7470/245.1	
7782-49-2	**Selenium**	**51**	1.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-22-4	**Silver**	**48**	0.2	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-66-6	**Zinc**	**82**	5.0	ug/L	1	07/02/13	B3F2719	6020/200.8	

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Client ID: VAS-03(16-20)

Lab ID: 1306260-16

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	A03
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	A03
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/29/13	B3G0208	8260	A03
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	

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Client ID: VAS-03(16-20)

Lab ID: 1306260-16

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/29/13	B3G0208	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/29/13	B3G0208	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	A05
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
Surrogate: Bromofluorobenzene			*94.9 %*	*85-115*		*06/29/13*	B3G0208	*8260*	
Surrogate: Dibromofluoromethane			*100 %*	*82.7-115*		*06/29/13*	B3G0208	*8260*	
Surrogate: Toluene-d8			*96.3 %*	*85-115*		*06/29/13*	B3G0208	*8260*	

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-03(16-20)
Lab ID: 1306260-16

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	ug/L	1	07/12/13	B3G0113	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/12/13	B3G0113	8270	
105-67-9	2,4-Dimethylphenol	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
51-28-5	2,4-Dinitrophenol	ND	25	ug/L	1	07/12/13	B3G0113	8270	
121-14-2	2,4-Dinitrotoluene	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
95-51-2	2-Chloroaniline	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
91-58-7	2-Chloronaphthalene	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/12/13	B3G0113	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	20	ug/L	1	07/12/13	B3G0113	8270	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/12/13	B3G0113	8270	
88-74-4	2-Nitroaniline	ND	20	ug/L	1	07/12/13	B3G0113	8270	
88-75-5	2-Nitrophenol	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
108394,106445	3 & 4-Methylphenol	ND	20	ug/L	1	07/12/13	B3G0113	8270	
99-09-2	3-Nitroaniline	ND	20	ug/L	1	07/12/13	B3G0113	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/12/13	B3G0113	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
100-01-6	4-Nitroaniline	ND	20	ug/L	1	07/12/13	B3G0113	8270	
100-02-7	4-Nitrophenol	ND	25	ug/L	1	07/12/13	B3G0113	8270	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
62-53-3	Aniline	ND	4.0	ug/L	1	07/12/13	B3G0113	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
103-33-3	Azobenzene	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
100-51-6	Benzyl Alcohol	ND	50	ug/L	1	07/12/13	B3G0113	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
85-68-7	Butyl benzyl phthalate	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
86-74-8	Carbazole	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	

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Client ID: VAS-03(16-20)

Lab ID: 1306260-16

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
132-64-9	Dibenzofuran	ND	4.0	ug/L	1	07/12/13	B3G0113	8270	
84-66-2	Diethylphthalate	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
131-11-3	Dimethyl phthalate	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
84-74-2	Di-n-butyl phthalate	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
117-84-0	Di-n-octyl phthalate	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
86-73-7	Fluorene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/12/13	B3G0113	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
121-69-7	N,N-dimethylaniline	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
91-20-3	Naphthalene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
98-95-3	Nitrobenzene	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
87-86-5	Pentachlorophenol	ND	20	ug/L	1	07/12/13	B3G0113	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
108-95-2	Phenol	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
110-86-1	Pyridine	ND	20	ug/L	1	07/12/13	B3G0113	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
Surrogate: 2,4,6-Tribromophenol			*81.9 %*	*33.8-115*		*07/12/13*	B3G0113	*8270*	
Surrogate: 2-Fluorobiphenyl			*71.1 %*	*24.1-115*		*07/12/13*	B3G0113	*8270*	
Surrogate: 2-Fluorophenol			*18.6 %*	*10-115*		*07/12/13*	B3G0113	*8270*	
Surrogate: Nitrobenzene-d5			*66.3 %*	*17.8-115*		*07/12/13*	B3G0113	*8270*	
Surrogate: Phenol-d6			*15.1 %*	*10-115*		*07/12/13*	B3G0113	*8270*	
Surrogate: p-Terphenyl-d14			*68.6 %*	*41.8-115*		*07/12/13*	B3G0113	*8270*	

STATE OF MICHIGAN
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ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-03(16-20)

Lab ID: 1306260-16

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	Available Cyanide	ND	0.002	mg/L	1	06/27/13	B3F2707	OIA-1677	
57-12-5	Total Cyanide	ND	0.005	mg/L	1	06/26/13	B3F2620	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	Arsenic	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-39-3	**Barium**	**44**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-47-3	Chromium	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-50-8	Copper	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-92-1	Lead	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	07/03/13	B3G0211	7470/245.1	
7782-49-2	**Selenium**	**1.7**	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-66-6	**Zinc**	**68**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	

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TEL: (517) 335-9800
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Client ID: VAS-03(20-24)

Lab ID: 1306260-17

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	A03
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	A03
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/29/13	B3G0208	8260	A03
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	

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Client ID: VAS-03(20-24)

Lab ID: 1306260-17

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/29/13	B3G0208	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/29/13	B3G0208	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	A05
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
Surrogate: Bromofluorobenzene			*101 %*	*85-115*		*06/29/13*	B3G0208	*8260*	
Surrogate: Dibromofluoromethane			*102 %*	*82.7-115*		*06/29/13*	B3G0208	*8260*	
Surrogate: Toluene-d8			*100 %*	*85-115*		*06/29/13*	B3G0208	*8260*	

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ENVIRONMENTAL LABORATORY

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Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-03(20-24)

Lab ID: 1306260-17

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	ug/L	1	07/12/13	B3G0113	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/12/13	B3G0113	8270	
105-67-9	2,4-Dimethylphenol	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
51-28-5	2,4-Dinitrophenol	ND	25	ug/L	1	07/12/13	B3G0113	8270	
121-14-2	2,4-Dinitrotoluene	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
95-51-2	2-Chloroaniline	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
91-58-7	2-Chloronaphthalene	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/12/13	B3G0113	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	20	ug/L	1	07/12/13	B3G0113	8270	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/12/13	B3G0113	8270	
88-74-4	2-Nitroaniline	ND	20	ug/L	1	07/12/13	B3G0113	8270	
88-75-5	2-Nitrophenol	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
108394,106445	3 & 4-Methylphenol	ND	20	ug/L	1	07/12/13	B3G0113	8270	
99-09-2	3-Nitroaniline	ND	20	ug/L	1	07/12/13	B3G0113	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/12/13	B3G0113	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
100-01-6	4-Nitroaniline	ND	20	ug/L	1	07/12/13	B3G0113	8270	
100-02-7	4-Nitrophenol	ND	25	ug/L	1	07/12/13	B3G0113	8270	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
62-53-3	Aniline	ND	4.0	ug/L	1	07/12/13	B3G0113	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
103-33-3	Azobenzene	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
100-51-6	Benzyl Alcohol	ND	50	ug/L	1	07/12/13	B3G0113	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
85-68-7	Butyl benzyl phthalate	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
86-74-8	Carbazole	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	

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Client ID: VAS-03(20-24)

Lab ID: 1306260-17

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
132-64-9	Dibenzofuran	ND	4.0	ug/L	1	07/12/13	B3G0113	8270	
84-66-2	Diethylphthalate	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
131-11-3	Dimethyl phthalate	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
84-74-2	Di-n-butyl phthalate	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
117-84-0	Di-n-octyl phthalate	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
86-73-7	Fluorene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/12/13	B3G0113	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
121-69-7	N,N-dimethylaniline	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
91-20-3	Naphthalene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
98-95-3	Nitrobenzene	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
87-86-5	Pentachlorophenol	ND	20	ug/L	1	07/12/13	B3G0113	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
108-95-2	Phenol	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
110-86-1	Pyridine	ND	20	ug/L	1	07/12/13	B3G0113	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
Surrogate: 2,4,6-Tribromophenol			*82.7 %*	*33.8-115*		*07/12/13*	B3G0113	*8270*	
Surrogate: 2-Fluorobiphenyl			*66.5 %*	*24.1-115*		*07/12/13*	B3G0113	*8270*	
Surrogate: 2-Fluorophenol			*23.0 %*	*10-115*		*07/12/13*	B3G0113	*8270*	
Surrogate: Nitrobenzene-d5			*61.4 %*	*17.8-115*		*07/12/13*	B3G0113	*8270*	
Surrogate: Phenol-d6			*13.9 %*	*10-115*		*07/12/13*	B3G0113	*8270*	
Surrogate: p-Terphenyl-d14			*51.9 %*	*41.8-115*		*07/12/13*	B3G0113	*8270*	

STATE OF MICHIGAN
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MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-03(20-24)

Lab ID: 1306260-17

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	Available Cyanide	ND	0.002	mg/L	1	06/27/13	B3F2707	OIA-1677	
57-12-5	Total Cyanide	ND	0.005	mg/L	1	06/26/13	B3F2620	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	Arsenic	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-39-3	**Barium**	**50**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-47-3	Chromium	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-50-8	Copper	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-92-1	Lead	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	07/03/13	B3G0211	7470/245.1	
7782-49-2	Selenium	ND	1.0	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/02/13	B3F2716	6020/200.8	
7440-66-6	**Zinc**	**30**	5.0	ug/L	1	07/02/13	B3F2716	6020/200.8	

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TEL: (517) 335-9800
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Client ID: VAS-03(26-30)

Lab ID: 1306260-18

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-35-4	1,1-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
96-18-4	1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
106-93-4	1,2-Dibromoethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	A03
591-78-6	2-Hexanone	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	A03
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	X
67-64-1	2-Propanone (acetone)	ND	20	ug/L	1	06/29/13	B3G0208	8260	A03
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
107-13-1	Acrylonitrile	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
71-43-2	Benzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
108-86-1	Bromobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
74-97-5	Bromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-27-4	Bromodichloromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-25-2	Bromoform	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
74-83-9	Bromomethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
75-15-0	Carbon disulfide	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
56-23-5	Carbon tetrachloride	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
108-90-7	Chlorobenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-00-3	Chloroethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
67-66-3	Chloroform	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
74-87-3	Chloromethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
110-82-7	Cyclohexane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
124-48-1	Dibromochloromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	

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TEL: (517) 335-9800
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Client ID: VAS-03(26-30)

Lab ID: 1306260-18

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-71-8	Dichlorodifluoromethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
60-29-7	Diethyl ether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
108-20-3	Diisopropyl Ether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
100-41-4	Ethylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
637-92-3	Ethyltertiarybutylether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
67-72-1	Hexachloroethane	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
98-82-8	Isopropylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
1330-20-7	m & p - Xylene	ND	2.0	ug/L	1	06/29/13	B3G0208	8260	
74-88-4	Methyl iodide	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-09-2	Methylene chloride	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
1634-04-4	Methyltertiarybutylether	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
91-20-3	Naphthalene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	X
104-51-8	n-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
103-65-1	n-Propylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
95-47-6	o-Xylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
99-87-6	p-Isopropyl toluene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
135-98-8	sec-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
100-42-5	Styrene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
98-06-6	tert-Butylbenzene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-65-0	tertiary Butyl Alcohol	ND	50	ug/L	1	06/29/13	B3G0208	8260	
994-05-8	tertiaryAmylmethylether	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
127-18-4	Tetrachloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
109-99-9	Tetrahydrofuran	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	
108-88-3	Toluene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	1	06/29/13	B3G0208	8260	A05
79-01-6	Trichloroethylene	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
75-01-4	Vinyl chloride	ND	1.0	ug/L	1	06/29/13	B3G0208	8260	
Surrogate: Bromofluorobenzene			*99.2 %*	*85-115*		*06/29/13*	B3G0208	*8260*	
Surrogate: Dibromofluoromethane			*101 %*	*82.7-115*		*06/29/13*	B3G0208	*8260*	
Surrogate: Toluene-d8			*98.5 %*	*85-115*		*06/29/13*	B3G0208	*8260*	

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ENVIRONMENTAL LABORATORY

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TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-03(26-30)
Lab ID: 1306260-18

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
88-06-2	2,4,6-Trichlorophenol	ND	4.0	ug/L	1	07/12/13	B3G0113	8270	
120-83-2	2,4-Dichlorophenol	ND	10	ug/L	1	07/12/13	B3G0113	8270	
105-67-9	2,4-Dimethylphenol	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
51-28-5	2,4-Dinitrophenol	ND	25	ug/L	1	07/12/13	B3G0113	8270	
121-14-2	2,4-Dinitrotoluene	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
606-20-2	2,6-Dinitrotoluene	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
95-51-2	2-Chloroaniline	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
91-58-7	2-Chloronaphthalene	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
95-57-8	2-Chlorophenol	ND	10	ug/L	1	07/12/13	B3G0113	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	20	ug/L	1	07/12/13	B3G0113	8270	
91-57-6	2-Methylnaphthalene	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	10	ug/L	1	07/12/13	B3G0113	8270	
88-74-4	2-Nitroaniline	ND	20	ug/L	1	07/12/13	B3G0113	8270	
88-75-5	2-Nitrophenol	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
108394,106445	3 & 4-Methylphenol	ND	20	ug/L	1	07/12/13	B3G0113	8270	
99-09-2	3-Nitroaniline	ND	20	ug/L	1	07/12/13	B3G0113	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
106-47-8	4-Chloroaniline	ND	10	ug/L	1	07/12/13	B3G0113	8270	
7005-72-3	4-Chlorodiphenylether	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
100-01-6	4-Nitroaniline	ND	20	ug/L	1	07/12/13	B3G0113	8270	
100-02-7	4-Nitrophenol	ND	25	ug/L	1	07/12/13	B3G0113	8270	
83-32-9	Acenaphthene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
208-96-8	Acenaphthylene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
62-53-3	Aniline	ND	4.0	ug/L	1	07/12/13	B3G0113	8270	
120-12-7	Anthracene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
103-33-3	Azobenzene	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
56-55-3	Benz[a]anthracene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
50-32-8	Benzo[a]pyrene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
205-99-2	Benzo[b]fluoranthene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
191-24-2	Benzo[g,h,i]perylene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
207-08-9	Benzo[k]fluoranthene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
100-51-6	Benzyl Alcohol	ND	50	ug/L	1	07/12/13	B3G0113	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
85-68-7	Butyl benzyl phthalate	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
86-74-8	Carbazole	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	

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Client ID: VAS-03(26-30)

Lab ID: 1306260-18

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									
218-01-9	Chrysene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
53-70-3	Dibenz[a,h]anthracene	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
132-64-9	Dibenzofuran	ND	4.0	ug/L	1	07/12/13	B3G0113	8270	
84-66-2	**Diethylphthalate**	**8.5**	5.0	ug/L	1	07/12/13	B3G0113	8270	
131-11-3	Dimethyl phthalate	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
84-74-2	Di-n-butyl phthalate	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
117-84-0	Di-n-octyl phthalate	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
206-44-0	Fluoranthene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
86-73-7	Fluorene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
118-74-1	Hexachlorobenzene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
87-68-3	Hexachlorobutadiene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/L	1	07/12/13	B3G0113	8270	
67-72-1	Hexachloroethane	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
78-59-1	Isophorone	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
121-69-7	N,N-dimethylaniline	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
91-20-3	Naphthalene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
98-95-3	Nitrobenzene	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
100-61-8	N-methylaniline	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
67-75-9	N-Nitrosodimethylamine	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
86-30-6	N-Nitrosodiphenylamine	ND	2.0	ug/L	1	07/12/13	B3G0113	8270	
87-86-5	Pentachlorophenol	ND	20	ug/L	1	07/12/13	B3G0113	8270	
85-01-8	Phenanthrene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
108-95-2	Phenol	ND	5.0	ug/L	1	07/12/13	B3G0113	8270	
129-00-0	Pyrene	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
110-86-1	Pyridine	ND	20	ug/L	1	07/12/13	B3G0113	8270	
632-22-4	Tetramethylurea	ND	1.0	ug/L	1	07/12/13	B3G0113	8270	
Surrogate: 2,4,6-Tribromophenol			*80.2 %*	*33.8-115*		*07/12/13*	B3G0113	*8270*	
Surrogate: 2-Fluorobiphenyl			*57.2 %*	*24.1-115*		*07/12/13*	B3G0113	*8270*	
Surrogate: 2-Fluorophenol			*13.6 %*	*10-115*		*07/12/13*	B3G0113	*8270*	
Surrogate: Nitrobenzene-d5			*53.2 %*	*17.8-115*		*07/12/13*	B3G0113	*8270*	
Surrogate: Phenol-d6			*12.8 %*	*10-115*		*07/12/13*	B3G0113	*8270*	
Surrogate: p-Terphenyl-d14			*76.9 %*	*41.8-115*		*07/12/13*	B3G0113	*8270*	

STATE OF MICHIGAN
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ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: VAS-03(26-30)

Lab ID: 1306260-18

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
57-12-5	Available Cyanide	ND	0.002	mg/L	1	06/27/13	B3F2707	OIA-1677	
57-12-5	Total Cyanide	ND	0.005	mg/L	1	06/26/13	B3F2620	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	Arsenic	ND	1.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-39-3	**Barium**	**78**	5.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-43-9	Cadmium	ND	0.2	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-47-3	Chromium	ND	1.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-50-8	Copper	ND	1.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7439-92-1	Lead	ND	1.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7439-97-6	Mercury	ND	0.2	ug/L	1	07/03/13	B3G0211	7470/245.1	
7782-49-2	Selenium	ND	1.0	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-22-4	Silver	ND	0.2	ug/L	1	07/02/13	B3F2719	6020/200.8	
7440-66-6	**Zinc**	**40**	5.0	ug/L	1	07/02/13	B3F2719	6020/200.8	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0123 - Method: 5030				**Prepared: 06/28/2013**							
Blank (B3G0123-BLK1)											
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							06/28/2013	
1,1,1-Trichloroethane	ND	1.0	ug/L							06/28/2013	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							06/28/2013	
1,1,2-Trichloroethane	ND	1.0	ug/L							06/28/2013	
1,1-Dichloroethane	ND	1.0	ug/L							06/28/2013	
1,1-Dichloroethylene	ND	1.0	ug/L							06/28/2013	
1,2,3-Trichlorobenzene	ND	5.0	ug/L							06/28/2013	
1,2,3-Trichloropropane	ND	1.0	ug/L							06/28/2013	
1,2,3-Trimethylbenzene	ND	1.0	ug/L							06/28/2013	
1,2,4-Trichlorobenzene	ND	5.0	ug/L							06/28/2013	
1,2,4-Trimethylbenzene	ND	1.0	ug/L							06/28/2013	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L							06/28/2013	
1,2-Dibromoethane	ND	1.0	ug/L							06/28/2013	
1,2-Dichlorobenzene	ND	1.0	ug/L							06/28/2013	
1,2-Dichloroethane	ND	1.0	ug/L							06/28/2013	
1,2-Dichloropropane	ND	1.0	ug/L							06/28/2013	
1,3,5-Trimethylbenzene	ND	1.0	ug/L							06/28/2013	
1,3-Dichlorobenzene	ND	1.0	ug/L							06/28/2013	
1,4-Dichlorobenzene	ND	1.0	ug/L							06/28/2013	
2-Butanone (MEK)	ND	5.0	ug/L							06/28/2013	
2-Hexanone	ND	5.0	ug/L							06/28/2013	A05
2-Methylnaphthalene	ND	5.0	ug/L							06/28/2013	X
2-Propanone (acetone)	ND	20	ug/L							06/28/2013	
4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L							06/28/2013	
Acrylonitrile	ND	5.0	ug/L							06/28/2013	
Benzene	ND	1.0	ug/L							06/28/2013	
Bromobenzene	ND	1.0	ug/L							06/28/2013	
Bromochloromethane	ND	1.0	ug/L							06/28/2013	
Bromodichloromethane	ND	1.0	ug/L							06/28/2013	
Bromoform	ND	1.0	ug/L							06/28/2013	
Bromomethane	ND	5.0	ug/L							06/28/2013	
Carbon disulfide	ND	1.0	ug/L							06/28/2013	
Carbon tetrachloride	ND	1.0	ug/L							06/28/2013	
Chlorobenzene	ND	1.0	ug/L							06/28/2013	
Chloroethane	ND	5.0	ug/L							06/28/2013	
Chloroform	ND	1.0	ug/L							06/28/2013	
Chloromethane	ND	5.0	ug/L							06/28/2013	
cis-1,2-Dichloroethylene	ND	1.0	ug/L							06/28/2013	
cis-1,3-Dichloropropylene	ND	1.0	ug/L							06/28/2013	
Cyclohexane	ND	5.0	ug/L							06/28/2013	
Dibromochloromethane	ND	1.0	ug/L							06/28/2013	
Dibromomethane	ND	1.0	ug/L							06/28/2013	
Dichlorodifluoromethane	ND	5.0	ug/L							06/28/2013	
Diethyl ether	ND	5.0	ug/L							06/28/2013	
Diisopropyl Ether	ND	5.0	ug/L							06/28/2013	
Ethylbenzene	ND	1.0	ug/L							06/28/2013	
Ethyltertiarybutylether	ND	5.0	ug/L							06/28/2013	
Hexachloroethane	ND	5.0	ug/L							06/28/2013	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0123 - Method: 5030				**Prepared: 06/28/2013**							
Blank (B3G0123-BLK1)											
Isopropylbenzene	ND	1.0	ug/L							06/28/2013	
m & p - Xylene	ND	2.0	ug/L							06/28/2013	
Methyl iodide	ND	1.0	ug/L							06/28/2013	
Methylene chloride	ND	5.0	ug/L							06/28/2013	
Methyltertiarybutylether	ND	1.0	ug/L							06/28/2013	
Naphthalene	ND	5.0	ug/L							06/28/2013	X
n-Butylbenzene	ND	1.0	ug/L							06/28/2013	
n-Propylbenzene	ND	1.0	ug/L							06/28/2013	
o-Xylene	ND	1.0	ug/L							06/28/2013	
p-Isopropyl toluene	ND	1.0	ug/L							06/28/2013	
sec-Butylbenzene	ND	1.0	ug/L							06/28/2013	
Styrene	ND	1.0	ug/L							06/28/2013	
tert-Butylbenzene	ND	1.0	ug/L							06/28/2013	
tertiary Butyl Alcohol	ND	50	ug/L							06/28/2013	
tertiaryAmylmethylether	ND	5.0	ug/L							06/28/2013	
Tetrachloroethylene	ND	1.0	ug/L							06/28/2013	
Tetrahydrofuran	ND	5.0	ug/L							06/28/2013	
Toluene	ND	1.0	ug/L							06/28/2013	
trans-1,2-Dichloroethylene	ND	1.0	ug/L							06/28/2013	
trans-1,3-Dichloropropylene	ND	1.0	ug/L							06/28/2013	
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L							06/28/2013	
Trichloroethylene	ND	1.0	ug/L							06/28/2013	
Trichlorofluoromethane	ND	1.0	ug/L							06/28/2013	
Vinyl chloride	ND	1.0	ug/L							06/28/2013	
Surrogate: Bromofluorobenzene	*49.3*		ug/L	*50.00*		*98.7*	*85-115*			06/28/2013	
Surrogate: Dibromofluoromethane	*51.2*		ug/L	*50.00*		*102*	*82.7-115*			06/28/2013	
Surrogate: Toluene-d8	*48.9*		ug/L	*50.00*		*97.8*	*85-115*			06/28/2013	
LCS (B3G0123-BS1)											
1,1,1,2-Tetrachloroethane	54.1	1.0	ug/L	50.00		108	70-130			06/28/2013	
1,1,1-Trichloroethane	51.9	1.0	ug/L	50.00		104	70-130			06/28/2013	
1,1,2,2-Tetrachloroethane	62.6	1.0	ug/L	50.00		125	70-130			06/28/2013	A06
1,1,2-Trichloroethane	50.8	1.0	ug/L	50.00		102	70-130			06/28/2013	
1,1-Dichloroethane	49.6	1.0	ug/L	50.00		99.1	70-130			06/28/2013	
1,1-Dichloroethylene	49.3	1.0	ug/L	50.00		98.7	70-130			06/28/2013	
1,2,3-Trichlorobenzene	57.0	5.0	ug/L	50.00		114	70-130			06/28/2013	
1,2,3-Trichloropropane	50.8	1.0	ug/L	50.00		102	70-130			06/28/2013	
1,2,3-Trimethylbenzene	54.0	1.0	ug/L	50.00		108	70-130			06/28/2013	
1,2,4-Trichlorobenzene	57.5	5.0	ug/L	50.00		115	70-130			06/28/2013	
1,2,4-Trimethylbenzene	53.6	1.0	ug/L	50.00		107	70-130			06/28/2013	
1,2-Dibromo-3-chloropropane	57.2	5.0	ug/L	50.00		114	70-130			06/28/2013	
1,2-Dibromoethane	54.4	1.0	ug/L	50.00		109	70-130			06/28/2013	
1,2-Dichlorobenzene	55.8	1.0	ug/L	50.00		112	70-130			06/28/2013	
1,2-Dichloroethane	51.3	1.0	ug/L	50.00		103	70-130			06/28/2013	
1,2-Dichloropropane	50.6	1.0	ug/L	50.00		101	70-130			06/28/2013	
1,3,5-Trimethylbenzene	54.2	1.0	ug/L	50.00		108	70-130			06/28/2013	
1,3-Dichlorobenzene	54.8	1.0	ug/L	50.00		110	70-130			06/28/2013	
1,4-Dichlorobenzene	55.4	1.0	ug/L	50.00		111	70-130			06/28/2013	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0123 - Method: 5030				**Prepared: 06/28/2013**							
LCS (B3G0123-BS1)											
2-Butanone (MEK)	54.3	5.0	ug/L	50.00		109	70-130			06/28/2013	
2-Hexanone	45.3	5.0	ug/L	50.00		90.5	70-130			06/28/2013	A05
2-Methylnaphthalene	52.8	5.0	ug/L	50.00		106	70-130			06/28/2013	X
2-Propanone (acetone)	59.2	20	ug/L	50.00		118	70-130			06/28/2013	
4-Methyl-2-pentanone (MIBK)	49.9	5.0	ug/L	50.00		99.9	70-130			06/28/2013	
Acrylonitrile	48.3	5.0	ug/L	50.00		96.6	70-130			06/28/2013	
Benzene	51.5	1.0	ug/L	50.00		103	70-130			06/28/2013	
Bromobenzene	51.2	1.0	ug/L	50.00		102	70-130			06/28/2013	
Bromochloromethane	53.5	1.0	ug/L	50.00		107	70-130			06/28/2013	
Bromodichloromethane	51.5	1.0	ug/L	50.00		103	70-130			06/28/2013	
Bromoform	54.8	1.0	ug/L	50.00		110	70-130			06/28/2013	
Bromomethane	54.5	5.0	ug/L	50.00		109	70-130			06/28/2013	
Carbon disulfide	50.6	1.0	ug/L	50.00		101	70-130			06/28/2013	
Carbon tetrachloride	53.5	1.0	ug/L	50.00		107	70-130			06/28/2013	
Chlorobenzene	52.7	1.0	ug/L	50.00		105	70-130			06/28/2013	
Chloroethane	50.0	5.0	ug/L	50.00		99.9	70-130			06/28/2013	
Chloroform	50.2	1.0	ug/L	50.00		100	70-130			06/28/2013	
Chloromethane	57.3	5.0	ug/L	50.00		115	70-130			06/28/2013	
cis-1,2-Dichloroethylene	45.2	1.0	ug/L	50.00		90.5	70-130			06/28/2013	
cis-1,3-Dichloropropylene	54.5	1.0	ug/L	50.00		109	70-130			06/28/2013	
Cyclohexane	46.0	5.0	ug/L	50.00		91.9	70-130			06/28/2013	
Dibromochloromethane	53.9	1.0	ug/L	50.00		108	70-130			06/28/2013	
Dibromomethane	52.1	1.0	ug/L	50.00		104	70-130			06/28/2013	
Dichlorodifluoromethane	72.9	5.0	ug/L	50.00		146	70-130			06/28/2013	A06, A09
Diethyl ether	50.1	5.0	ug/L	50.00		100	70-130			06/28/2013	
Diisopropyl Ether	49.5	5.0	ug/L	50.00		98.9	70-130			06/28/2013	
Ethylbenzene	53.0	1.0	ug/L	50.00		106	70-130			06/28/2013	
Ethyltertiarybutylether	50.2	5.0	ug/L	50.00		100	70-130			06/28/2013	
Hexachloroethane	46.9	5.0	ug/L	50.00		93.8	70-130			06/28/2013	
Isopropylbenzene	55.8	1.0	ug/L	50.00		112	70-130			06/28/2013	
m & p - Xylene	105	2.0	ug/L	100.0		105	70-130			06/28/2013	
Methyl iodide	48.8	1.0	ug/L	50.00		97.6	70-130			06/28/2013	
Methylene chloride	49.2	5.0	ug/L	50.00		98.4	70-130			06/28/2013	
Methyltertiarybutylether	50.4	1.0	ug/L	50.00		101	70-130			06/28/2013	
Naphthalene	58.9	5.0	ug/L	50.00		118	70-130			06/28/2013	X
n-Butylbenzene	53.5	1.0	ug/L	50.00		107	70-130			06/28/2013	
n-Propylbenzene	54.5	1.0	ug/L	50.00		109	70-130			06/28/2013	
o-Xylene	52.8	1.0	ug/L	50.00		106	70-130			06/28/2013	
p-Isopropyl toluene	53.5	1.0	ug/L	50.00		107	70-130			06/28/2013	
sec-Butylbenzene	54.5	1.0	ug/L	50.00		109	70-130			06/28/2013	
Styrene	61.9	1.0	ug/L	50.00		124	70-130			06/28/2013	
tert-Butylbenzene	54.2	1.0	ug/L	50.00		108	70-130			06/28/2013	
tertiary Butyl Alcohol	281	50	ug/L	250.0		113	70-130			06/28/2013	
tertiaryAmylmethylether	49.4	5.0	ug/L	50.00		98.8	70-130			06/28/2013	
Tetrachloroethylene	56.5	1.0	ug/L	50.00		113	70-130			06/28/2013	
Tetrahydrofuran	51.3	5.0	ug/L	50.00		103	70-130			06/28/2013	
Toluene	52.2	1.0	ug/L	50.00		104	70-130			06/28/2013	
trans-1,2-Dichloroethylene	57.1	1.0	ug/L	50.00		114	70-130			06/28/2013	

Lab Work Order # 1306260

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0123 - Method: 5030				**Prepared: 06/28/2013**							
LCS (B3G0123-BS1)											
trans-1,3-Dichloropropylene	55.7	1.0	ug/L	50.00		111	70-130			06/28/2013	
trans-1,4-Dichloro-2-butene	43.2	5.0	ug/L	50.00		86.5	70-130			06/28/2013	
Trichloroethylene	51.0	1.0	ug/L	50.00		102	70-130			06/28/2013	
Trichlorofluoromethane	52.2	1.0	ug/L	50.00		104	70-130			06/28/2013	
Vinyl chloride	64.1	1.0	ug/L	50.00		128	70-130			06/28/2013	
Surrogate: Bromofluorobenzene	*49.8*		ug/L	*50.00*		*99.6*	*85-115*			06/28/2013	
Surrogate: Dibromofluoromethane	*51.6*		ug/L	*50.00*		*103*	*82.7-115*			06/28/2013	
Surrogate: Toluene-d8	*49.1*		ug/L	*50.00*		*98.3*	*85-115*			06/28/2013	
Matrix Spike (B3G0123-MS1)	**Source: 1306260-13**										
1,1,1,2-Tetrachloroethane	54.1	1.0	ug/L	50.00	ND	108	70-130			06/29/2013	
1,1,1-Trichloroethane	51.7	1.0	ug/L	50.00	ND	103	70-130			06/29/2013	
1,1,2,2-Tetrachloroethane	63.2	1.0	ug/L	50.00	ND	126	70-130			06/29/2013	A06
1,1,2-Trichloroethane	49.5	1.0	ug/L	50.00	ND	99.1	70-130			06/29/2013	
1,1-Dichloroethane	49.7	1.0	ug/L	50.00	ND	99.4	70-130			06/29/2013	
1,1-Dichloroethylene	49.7	1.0	ug/L	50.00	ND	99.3	70-130			06/29/2013	
1,2,3-Trichlorobenzene	53.4	5.0	ug/L	50.00	ND	107	70-130			06/29/2013	
1,2,3-Trichloropropane	47.3	1.0	ug/L	50.00	ND	94.6	70-130			06/29/2013	
1,2,3-Trimethylbenzene	51.8	1.0	ug/L	50.00	ND	104	70-130			06/29/2013	
1,2,4-Trichlorobenzene	54.2	5.0	ug/L	50.00	ND	108	70-130			06/29/2013	
1,2,4-Trimethylbenzene	52.1	1.0	ug/L	50.00	ND	104	70-130			06/29/2013	
1,2-Dibromo-3-chloropropane	53.4	5.0	ug/L	50.00	ND	107	70-130			06/29/2013	
1,2-Dibromoethane	53.3	1.0	ug/L	50.00	ND	107	70-130			06/29/2013	
1,2-Dichlorobenzene	53.0	1.0	ug/L	50.00	ND	106	70-130			06/29/2013	
1,2-Dichloroethane	50.9	1.0	ug/L	50.00	ND	102	70-130			06/29/2013	
1,2-Dichloropropane	50.8	1.0	ug/L	50.00	ND	102	70-130			06/29/2013	
1,3,5-Trimethylbenzene	51.9	1.0	ug/L	50.00	ND	104	70-130			06/29/2013	
1,3-Dichlorobenzene	52.7	1.0	ug/L	50.00	ND	105	70-130			06/29/2013	
1,4-Dichlorobenzene	53.2	1.0	ug/L	50.00	ND	106	70-130			06/29/2013	
2-Butanone (MEK)	36.6	5.0	ug/L	50.00	ND	73.2	70-130			06/29/2013	
2-Hexanone	37.0	5.0	ug/L	50.00	ND	73.9	70-130			06/29/2013	A05
2-Methylnaphthalene	48.7	5.0	ug/L	50.00	ND	97.3	70-130			06/29/2013	X
2-Propanone (acetone)	25.7	20	ug/L	50.00	ND	51.3	70-130			06/29/2013	A03
4-Methyl-2-pentanone (MIBK)	47.9	5.0	ug/L	50.00	ND	95.9	70-130			06/29/2013	
Acrylonitrile	47.6	5.0	ug/L	50.00	ND	95.3	70-130			06/29/2013	
Benzene	51.7	1.0	ug/L	50.00	ND	103	70-130			06/29/2013	
Bromobenzene	48.7	1.0	ug/L	50.00	ND	97.5	70-130			06/29/2013	
Bromochloromethane	53.4	1.0	ug/L	50.00	ND	107	70-130			06/29/2013	
Bromodichloromethane	51.1	1.0	ug/L	50.00	ND	102	70-130			06/29/2013	
Bromoform	52.4	1.0	ug/L	50.00	ND	105	70-130			06/29/2013	
Bromomethane	55.2	5.0	ug/L	50.00	ND	110	70-130			06/29/2013	
Carbon disulfide	51.7	1.0	ug/L	50.00	ND	103	70-130			06/29/2013	
Carbon tetrachloride	52.9	1.0	ug/L	50.00	ND	106	70-130			06/29/2013	
Chlorobenzene	51.8	1.0	ug/L	50.00	ND	104	70-130			06/29/2013	
Chloroethane	51.2	5.0	ug/L	50.00	ND	102	70-130			06/29/2013	
Chloroform	50.6	1.0	ug/L	50.00	ND	101	70-130			06/29/2013	
Chloromethane	55.1	5.0	ug/L	50.00	ND	110	70-130			06/29/2013	
cis-1,2-Dichloroethylene	45.5	1.0	ug/L	50.00	ND	91.0	70-130			06/29/2013	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0123 - Method: 5030				**Prepared: 06/29/2013**							
Matrix Spike (B3G0123-MS1)	**Source: 1306260-13**										
cis-1,3-Dichloropropylene	52.1	1.0	ug/L	50.00	ND	104	70-130			06/29/2013	
Cyclohexane	45.9	5.0	ug/L	50.00	ND	91.9	70-130			06/29/2013	
Dibromochloromethane	53.0	1.0	ug/L	50.00	ND	106	70-130			06/29/2013	
Dibromomethane	52.0	1.0	ug/L	50.00	ND	104	70-130			06/29/2013	
Dichlorodifluoromethane	67.8	5.0	ug/L	50.00	ND	136	70-130			06/29/2013	A04, A06
Diethyl ether	50.3	5.0	ug/L	50.00	ND	101	70-130			06/29/2013	
Diisopropyl Ether	49.6	5.0	ug/L	50.00	ND	99.2	70-130			06/29/2013	
Ethylbenzene	52.1	1.0	ug/L	50.00	ND	104	70-130			06/29/2013	
Ethyltertiarybutylether	49.9	5.0	ug/L	50.00	ND	99.7	70-130			06/29/2013	
Hexachloroethane	45.0	5.0	ug/L	50.00	ND	90.0	70-130			06/29/2013	
Isopropylbenzene	54.3	1.0	ug/L	50.00	ND	109	70-130			06/29/2013	
m & p - Xylene	103	2.0	ug/L	100.0	ND	103	70-130			06/29/2013	
Methyl iodide	44.1	1.0	ug/L	50.00	ND	88.2	70-130			06/29/2013	
Methylene chloride	49.8	5.0	ug/L	50.00	ND	99.6	70-130			06/29/2013	
Methyltertiarybutylether	50.4	1.0	ug/L	50.00	ND	101	70-130			06/29/2013	
Naphthalene	56.4	5.0	ug/L	50.00	ND	113	70-130			06/29/2013	X
n-Butylbenzene	49.7	1.0	ug/L	50.00	ND	99.3	70-130			06/29/2013	
n-Propylbenzene	52.2	1.0	ug/L	50.00	ND	104	70-130			06/29/2013	
o-Xylene	51.6	1.0	ug/L	50.00	ND	103	70-130			06/29/2013	
p-Isopropyl toluene	50.8	1.0	ug/L	50.00	ND	102	70-130			06/29/2013	
sec-Butylbenzene	51.7	1.0	ug/L	50.00	ND	103	70-130			06/29/2013	
Styrene	59.7	1.0	ug/L	50.00	ND	119	70-130			06/29/2013	
tert-Butylbenzene	57.6	1.0	ug/L	50.00	ND	115	70-130			06/29/2013	
tertiary Butyl Alcohol	243	50	ug/L	250.0	ND	97.3	70-130			06/29/2013	
tertiaryAmylmethylether	49.6	5.0	ug/L	50.00	ND	99.2	70-130			06/29/2013	
Tetrachloroethylene	54.6	1.0	ug/L	50.00	ND	109	70-130			06/29/2013	
Tetrahydrofuran	49.4	5.0	ug/L	50.00	ND	98.8	70-130			06/29/2013	
Toluene	50.8	1.0	ug/L	50.00	ND	102	70-130			06/29/2013	
trans-1,2-Dichloroethylene	57.8	1.0	ug/L	50.00	ND	116	70-130			06/29/2013	
trans-1,3-Dichloropropylene	52.9	1.0	ug/L	50.00	ND	106	70-130			06/29/2013	
trans-1,4-Dichloro-2-butene	37.5	5.0	ug/L	50.00	ND	75.0	70-130			06/29/2013	
Trichloroethylene	48.5	1.0	ug/L	50.00	ND	96.9	70-130			06/29/2013	
Trichlorofluoromethane	52.7	1.0	ug/L	50.00	ND	105	70-130			06/29/2013	
Vinyl chloride	62.9	1.0	ug/L	50.00	ND	126	70-130			06/29/2013	
Surrogate: Bromofluorobenzene	*48.7*		ug/L	*50.00*		*97.4*	*85-115*			06/29/2013	
Surrogate: Dibromofluoromethane	*51.3*		ug/L	*50.00*		*103*	*82.7-115*			06/29/2013	
Surrogate: Toluene-d8	*48.4*		ug/L	*50.00*		*96.8*	*85-115*			06/29/2013	
Matrix Spike Dup (B3G0123-MSD1)	**Source: 1306260-13**										
1,1,1,2-Tetrachloroethane	52.9	1.0	ug/L	50.00	ND	106	70-130	2.10	30	06/29/2013	
1,1,1-Trichloroethane	49.8	1.0	ug/L	50.00	ND	99.6	70-130	3.73	30	06/29/2013	
1,1,2,2-Tetrachloroethane	62.9	1.0	ug/L	50.00	ND	126	70-130	0.471	30	06/29/2013	A06
1,1,2-Trichloroethane	49.2	1.0	ug/L	50.00	ND	98.4	70-130	0.658	30	06/29/2013	
1,1-Dichloroethane	49.1	1.0	ug/L	50.00	ND	98.3	70-130	1.13	30	06/29/2013	
1,1-Dichloroethylene	48.6	1.0	ug/L	50.00	ND	97.3	70-130	2.06	30	06/29/2013	
1,2,3-Trichlorobenzene	53.2	5.0	ug/L	50.00	ND	106	70-130	0.311	30	06/29/2013	
1,2,3-Trichloropropane	47.4	1.0	ug/L	50.00	ND	94.8	70-130	0.156	30	06/29/2013	
1,2,3-Trimethylbenzene	51.3	1.0	ug/L	50.00	ND	103	70-130	0.907	30	06/29/2013	

Lab Work Order # 1306260

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0123 - Method: 5030				**Prepared: 06/29/2013**							
Matrix Spike Dup (B3G0123-MSD1)	**Source: 1306260-13**										
1,2,4-Trichlorobenzene	53.5	5.0	ug/L	50.00	ND	107	70-130	1.33	30	06/29/2013	
1,2,4-Trimethylbenzene	51.0	1.0	ug/L	50.00	ND	102	70-130	1.97	30	06/29/2013	
1,2-Dibromo-3-chloropropane	55.1	5.0	ug/L	50.00	ND	110	70-130	3.02	30	06/29/2013	
1,2-Dibromoethane	52.4	1.0	ug/L	50.00	ND	105	70-130	1.74	30	06/29/2013	
1,2-Dichlorobenzene	53.3	1.0	ug/L	50.00	ND	107	70-130	0.538	30	06/29/2013	
1,2-Dichloroethane	50.0	1.0	ug/L	50.00	ND	100	70-130	1.78	30	06/29/2013	
1,2-Dichloropropane	48.9	1.0	ug/L	50.00	ND	97.8	70-130	3.71	30	06/29/2013	
1,3,5-Trimethylbenzene	51.6	1.0	ug/L	50.00	ND	103	70-130	0.691	30	06/29/2013	
1,3-Dichlorobenzene	52.3	1.0	ug/L	50.00	ND	105	70-130	0.827	30	06/29/2013	
1,4-Dichlorobenzene	52.2	1.0	ug/L	50.00	ND	104	70-130	1.87	30	06/29/2013	
2-Butanone (MEK)	36.8	5.0	ug/L	50.00	ND	73.6	70-130	0.641	30	06/29/2013	
2-Hexanone	36.6	5.0	ug/L	50.00	ND	73.1	70-130	1.13	30	06/29/2013	A05
2-Methylnaphthalene	49.7	5.0	ug/L	50.00	ND	99.3	70-130	2.02	30	06/29/2013	X
2-Propanone (acetone)	26.4	20	ug/L	50.00	ND	52.7	70-130	2.71	30	06/29/2013	A03
4-Methyl-2-pentanone (MIBK)	47.9	5.0	ug/L	50.00	ND	95.9	70-130	0.00855	30	06/29/2013	
Acrylonitrile	47.8	5.0	ug/L	50.00	ND	95.5	70-130	0.267	30	06/29/2013	
Benzene	50.1	1.0	ug/L	50.00	ND	100	70-130	3.23	30	06/29/2013	
Bromobenzene	48.6	1.0	ug/L	50.00	ND	97.2	70-130	0.294	30	06/29/2013	
Bromochloromethane	53.2	1.0	ug/L	50.00	ND	106	70-130	0.370	30	06/29/2013	
Bromodichloromethane	50.5	1.0	ug/L	50.00	ND	101	70-130	1.28	30	06/29/2013	
Bromoform	52.5	1.0	ug/L	50.00	ND	105	70-130	0.293	30	06/29/2013	
Bromomethane	52.7	5.0	ug/L	50.00	ND	105	70-130	4.50	30	06/29/2013	
Carbon disulfide	49.6	1.0	ug/L	50.00	ND	99.3	70-130	4.10	30	06/29/2013	
Carbon tetrachloride	50.4	1.0	ug/L	50.00	ND	101	70-130	4.97	30	06/29/2013	
Chlorobenzene	50.5	1.0	ug/L	50.00	ND	101	70-130	2.44	30	06/29/2013	
Chloroethane	49.9	5.0	ug/L	50.00	ND	99.8	70-130	2.51	30	06/29/2013	
Chloroform	49.7	1.0	ug/L	50.00	ND	99.5	70-130	1.78	30	06/29/2013	
Chloromethane	54.5	5.0	ug/L	50.00	ND	109	70-130	1.15	30	06/29/2013	
cis-1,2-Dichloroethylene	44.9	1.0	ug/L	50.00	ND	89.8	70-130	1.38	30	06/29/2013	
cis-1,3-Dichloropropylene	50.7	1.0	ug/L	50.00	ND	101	70-130	2.58	30	06/29/2013	
Cyclohexane	44.0	5.0	ug/L	50.00	ND	88.0	70-130	4.34	30	06/29/2013	
Dibromochloromethane	52.5	1.0	ug/L	50.00	ND	105	70-130	0.976	30	06/29/2013	
Dibromomethane	50.6	1.0	ug/L	50.00	ND	101	70-130	2.76	30	06/29/2013	
Dichlorodifluoromethane	68.8	5.0	ug/L	50.00	ND	138	70-130	1.39	30	06/29/2013	A04, A06
Diethyl ether	49.3	5.0	ug/L	50.00	ND	98.5	70-130	2.16	30	06/29/2013	
Diisopropyl Ether	49.2	5.0	ug/L	50.00	ND	98.3	70-130	0.893	30	06/29/2013	
Ethylbenzene	51.0	1.0	ug/L	50.00	ND	102	70-130	2.17	30	06/29/2013	
Ethyltertiarybutylether	50.1	5.0	ug/L	50.00	ND	100	70-130	0.374	30	06/29/2013	
Hexachloroethane	43.4	5.0	ug/L	50.00	ND	86.8	70-130	3.67	30	06/29/2013	
Isopropylbenzene	53.2	1.0	ug/L	50.00	ND	106	70-130	2.14	30	06/29/2013	
m & p - Xylene	100	2.0	ug/L	100.0	ND	100	70-130	2.75	30	06/29/2013	
Methyl iodide	46.3	1.0	ug/L	50.00	ND	92.6	70-130	4.86	30	06/29/2013	
Methylene chloride	49.1	5.0	ug/L	50.00	ND	98.3	70-130	1.35	30	06/29/2013	
Methyltertiarybutylether	50.1	1.0	ug/L	50.00	ND	100	70-130	0.711	30	06/29/2013	
Naphthalene	56.0	5.0	ug/L	50.00	ND	112	70-130	0.652	30	06/29/2013	X
n-Butylbenzene	49.4	1.0	ug/L	50.00	ND	98.8	70-130	0.545	30	06/29/2013	
n-Propylbenzene	51.4	1.0	ug/L	50.00	ND	103	70-130	1.51	30	06/29/2013	
o-Xylene	50.2	1.0	ug/L	50.00	ND	100	70-130	2.77	30	06/29/2013	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0123 - Method: 5030				**Prepared: 06/29/2013**							
Matrix Spike Dup (B3G0123-MSD1)	**Source: 1306260-13**										
p-Isopropyl toluene	50.7	1.0	ug/L	50.00	ND	101	70-130	0.205	30	06/29/2013	
sec-Butylbenzene	51.4	1.0	ug/L	50.00	ND	103	70-130	0.473	30	06/29/2013	
Styrene	58.7	1.0	ug/L	50.00	ND	117	70-130	1.60	30	06/29/2013	
tert-Butylbenzene	57.0	1.0	ug/L	50.00	ND	114	70-130	1.04	30	06/29/2013	
tertiary Butyl Alcohol	256	50	ug/L	250.0	ND	102	70-130	5.07	30	06/29/2013	
tertiaryAmylmethylether	49.2	5.0	ug/L	50.00	ND	98.5	70-130	0.713	30	06/29/2013	
Tetrachloroethylene	53.6	1.0	ug/L	50.00	ND	107	70-130	1.83	30	06/29/2013	
Tetrahydrofuran	50.2	5.0	ug/L	50.00	ND	100	70-130	1.66	30	06/29/2013	
Toluene	49.8	1.0	ug/L	50.00	ND	99.6	70-130	2.06	30	06/29/2013	
trans-1,2-Dichloroethylene	56.5	1.0	ug/L	50.00	ND	113	70-130	2.31	30	06/29/2013	
trans-1,3-Dichloropropylene	51.3	1.0	ug/L	50.00	ND	103	70-130	3.22	30	06/29/2013	
trans-1,4-Dichloro-2-butene	37.7	5.0	ug/L	50.00	ND	75.4	70-130	0.591	30	06/29/2013	
Trichloroethylene	47.2	1.0	ug/L	50.00	ND	94.4	70-130	2.61	30	06/29/2013	
Trichlorofluoromethane	50.4	1.0	ug/L	50.00	ND	101	70-130	4.53	30	06/29/2013	
Vinyl chloride	60.5	1.0	ug/L	50.00	ND	121	70-130	3.87	30	06/29/2013	
Surrogate: Bromofluorobenzene	*48.9*		ug/L	*50.00*		*97.9*	*85-115*			06/29/2013	
Surrogate: Dibromofluoromethane	*51.1*		ug/L	*50.00*		*102*	*82.7-115*			06/29/2013	
Surrogate: Toluene-d8	*48.4*		ug/L	*50.00*		*96.8*	*85-115*			06/29/2013	
Batch B3G0208 - Method: 5030				**Prepared: 06/29/2013**							
Blank (B3G0208-BLK1)											
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							06/29/2013	
1,1,1-Trichloroethane	ND	1.0	ug/L							06/29/2013	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							06/29/2013	
1,1,2-Trichloroethane	ND	1.0	ug/L							06/29/2013	
1,1-Dichloroethane	ND	1.0	ug/L							06/29/2013	
1,1-Dichloroethylene	ND	1.0	ug/L							06/29/2013	
1,2,3-Trichlorobenzene	ND	5.0	ug/L							06/29/2013	
1,2,3-Trichloropropane	ND	1.0	ug/L							06/29/2013	
1,2,3-Trimethylbenzene	ND	1.0	ug/L							06/29/2013	
1,2,4-Trichlorobenzene	ND	5.0	ug/L							06/29/2013	
1,2,4-Trimethylbenzene	ND	1.0	ug/L							06/29/2013	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L							06/29/2013	
1,2-Dibromoethane	ND	1.0	ug/L							06/29/2013	
1,2-Dichlorobenzene	ND	1.0	ug/L							06/29/2013	
1,2-Dichloroethane	ND	1.0	ug/L							06/29/2013	
1,2-Dichloropropane	ND	1.0	ug/L							06/29/2013	
1,3,5-Trimethylbenzene	ND	1.0	ug/L							06/29/2013	
1,3-Dichlorobenzene	ND	1.0	ug/L							06/29/2013	
1,4-Dichlorobenzene	ND	1.0	ug/L							06/29/2013	
2-Butanone (MEK)	ND	5.0	ug/L							06/29/2013	A03
2-Hexanone	ND	5.0	ug/L							06/29/2013	A03
2-Methylnaphthalene	ND	5.0	ug/L							06/29/2013	X
2-Propanone (acetone)	ND	20	ug/L							06/29/2013	A03
4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L							06/29/2013	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0208 - Method: 5030				**Prepared: 06/29/2013**							
Blank (B3G0208-BLK1)											
Acrylonitrile	ND	5.0	ug/L							06/29/2013	
Benzene	ND	1.0	ug/L							06/29/2013	
Bromobenzene	ND	1.0	ug/L							06/29/2013	
Bromochloromethane	ND	1.0	ug/L							06/29/2013	
Bromodichloromethane	ND	1.0	ug/L							06/29/2013	
Bromoform	ND	1.0	ug/L							06/29/2013	
Bromomethane	ND	5.0	ug/L							06/29/2013	
Carbon disulfide	ND	1.0	ug/L							06/29/2013	
Carbon tetrachloride	ND	1.0	ug/L							06/29/2013	
Chlorobenzene	ND	1.0	ug/L							06/29/2013	
Chloroethane	ND	5.0	ug/L							06/29/2013	
Chloroform	ND	1.0	ug/L							06/29/2013	
Chloromethane	ND	5.0	ug/L							06/29/2013	
cis-1,2-Dichloroethylene	ND	1.0	ug/L							06/29/2013	
cis-1,3-Dichloropropylene	ND	1.0	ug/L							06/29/2013	
Cyclohexane	ND	5.0	ug/L							06/29/2013	
Dibromochloromethane	ND	1.0	ug/L							06/29/2013	
Dibromomethane	ND	1.0	ug/L							06/29/2013	
Dichlorodifluoromethane	ND	5.0	ug/L							06/29/2013	
Diethyl ether	ND	5.0	ug/L							06/29/2013	
Diisopropyl Ether	ND	5.0	ug/L							06/29/2013	
Ethylbenzene	ND	1.0	ug/L							06/29/2013	
Ethyltertiarybutylether	ND	5.0	ug/L							06/29/2013	
Hexachloroethane	ND	5.0	ug/L							06/29/2013	
Isopropylbenzene	ND	1.0	ug/L							06/29/2013	
m & p - Xylene	ND	2.0	ug/L							06/29/2013	
Methyl iodide	ND	1.0	ug/L							06/29/2013	
Methylene chloride	ND	5.0	ug/L							06/29/2013	
Methyltertiarybutylether	ND	1.0	ug/L							06/29/2013	
Naphthalene	ND	5.0	ug/L							06/29/2013	X
n-Butylbenzene	ND	1.0	ug/L							06/29/2013	
n-Propylbenzene	ND	1.0	ug/L							06/29/2013	
o-Xylene	ND	1.0	ug/L							06/29/2013	
p-Isopropyl toluene	ND	1.0	ug/L							06/29/2013	
sec-Butylbenzene	ND	1.0	ug/L							06/29/2013	
Styrene	ND	1.0	ug/L							06/29/2013	
tert-Butylbenzene	ND	1.0	ug/L							06/29/2013	
tertiary Butyl Alcohol	ND	50	ug/L							06/29/2013	
tertiaryAmylmethylether	ND	5.0	ug/L							06/29/2013	
Tetrachloroethylene	ND	1.0	ug/L							06/29/2013	
Tetrahydrofuran	ND	5.0	ug/L							06/29/2013	
Toluene	ND	1.0	ug/L							06/29/2013	
trans-1,2-Dichloroethylene	ND	1.0	ug/L							06/29/2013	
trans-1,3-Dichloropropylene	ND	1.0	ug/L							06/29/2013	
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L							06/29/2013	A05
Trichloroethylene	ND	1.0	ug/L							06/29/2013	
Trichlorofluoromethane	ND	1.0	ug/L							06/29/2013	
Vinyl chloride	ND	1.0	ug/L							06/29/2013	

Lab Work Order # 1306260

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0208 - Method: 5030				**Prepared: 06/29/2013**							
Blank (B3G0208-BLK1)											
Surrogate: Bromofluorobenzene	*49.9*		ug/L	*50.00*		*99.8*	*85-115*			06/29/2013	
Surrogate: Dibromofluoromethane	*52.0*		ug/L	*50.00*		*104*	*82.7-115*			06/29/2013	
Surrogate: Toluene-d8	*49.4*		ug/L	*50.00*		*98.9*	*85-115*			06/29/2013	
Matrix Spike (B3G0208-MS1)	**Source: 1306260-11**										
1,1,1,2-Tetrachloroethane	52.0	1.0	ug/L	50.00	ND	104	70-130			07/03/2013	
1,1,1-Trichloroethane	49.6	1.0	ug/L	50.00	ND	99.2	70-130			07/03/2013	
1,1,2,2-Tetrachloroethane	57.0	1.0	ug/L	50.00	ND	114	70-130			07/03/2013	
1,1,2-Trichloroethane	47.5	1.0	ug/L	50.00	ND	95.0	70-130			07/03/2013	
1,1-Dichloroethane	47.6	1.0	ug/L	50.00	ND	95.2	70-130			07/03/2013	
1,1-Dichloroethylene	48.2	1.0	ug/L	50.00	ND	96.4	70-130			07/03/2013	
1,2,3-Trichlorobenzene	50.8	5.0	ug/L	50.00	ND	102	70-130			07/03/2013	
1,2,3-Trichloropropane	44.0	1.0	ug/L	50.00	ND	88.0	70-130			07/03/2013	
1,2,3-Trimethylbenzene	51.4	1.0	ug/L	50.00	ND	103	70-130			07/03/2013	
1,2,4-Trichlorobenzene	51.3	5.0	ug/L	50.00	ND	103	70-130			07/03/2013	
1,2,4-Trimethylbenzene	56.7	1.0	ug/L	50.00	ND	113	70-130			07/03/2013	
1,2-Dibromo-3-chloropropane	48.3	5.0	ug/L	50.00	ND	96.6	70-130			07/03/2013	
1,2-Dibromoethane	50.4	1.0	ug/L	50.00	ND	101	70-130			07/03/2013	
1,2-Dichlorobenzene	52.2	1.0	ug/L	50.00	ND	104	70-130			07/03/2013	
1,2-Dichloroethane	49.2	1.0	ug/L	50.00	ND	98.4	70-130			07/03/2013	
1,2-Dichloropropane	48.5	1.0	ug/L	50.00	ND	97.0	70-130			07/03/2013	
1,3,5-Trimethylbenzene	52.1	1.0	ug/L	50.00	ND	104	70-130			07/03/2013	
1,3-Dichlorobenzene	52.0	1.0	ug/L	50.00	ND	104	70-130			07/03/2013	
1,4-Dichlorobenzene	52.6	1.0	ug/L	50.00	ND	105	70-130			07/03/2013	
2-Butanone (MEK)	32.0	5.0	ug/L	50.00	ND	64.0	70-130			07/03/2013	A03
2-Hexanone	31.8	5.0	ug/L	50.00	ND	63.6	70-130			07/03/2013	A03
2-Methylnaphthalene	48.8	5.0	ug/L	50.00	ND	97.7	70-130			07/03/2013	X
2-Propanone (acetone)	21.3	20	ug/L	50.00	ND	42.6	70-130			07/03/2013	A03
4-Methyl-2-pentanone (MIBK)	42.0	5.0	ug/L	50.00	ND	84.0	70-130			07/03/2013	
Acrylonitrile	41.3	5.0	ug/L	50.00	ND	82.5	70-130			07/03/2013	
Benzene	50.0	1.0	ug/L	50.00	ND	100	70-130			07/03/2013	
Bromobenzene	47.7	1.0	ug/L	50.00	ND	95.4	70-130			07/03/2013	
Bromochloromethane	52.1	1.0	ug/L	50.00	ND	104	70-130			07/03/2013	
Bromodichloromethane	49.0	1.0	ug/L	50.00	ND	98.0	70-130			07/03/2013	
Bromoform	48.9	1.0	ug/L	50.00	ND	97.8	70-130			07/03/2013	
Bromomethane	64.5	5.0	ug/L	50.00	ND	129	70-130			07/03/2013	
Carbon disulfide	50.0	1.0	ug/L	50.00	ND	100	70-130			07/03/2013	
Carbon tetrachloride	50.8	1.0	ug/L	50.00	ND	102	70-130			07/03/2013	
Chlorobenzene	50.6	1.0	ug/L	50.00	ND	101	70-130			07/03/2013	
Chloroethane	49.8	5.0	ug/L	50.00	ND	99.6	70-130			07/03/2013	
Chloroform	49.2	1.0	ug/L	50.00	ND	98.5	70-130			07/03/2013	
Chloromethane	52.3	5.0	ug/L	50.00	ND	105	70-130			07/03/2013	
cis-1,2-Dichloroethylene	44.2	1.0	ug/L	50.00	ND	88.5	70-130			07/03/2013	
cis-1,3-Dichloropropylene	50.9	1.0	ug/L	50.00	ND	102	70-130			07/03/2013	
Cyclohexane	43.7	5.0	ug/L	50.00	ND	87.3	70-130			07/03/2013	
Dibromochloromethane	51.7	1.0	ug/L	50.00	ND	103	70-130			07/03/2013	
Dibromomethane	49.6	1.0	ug/L	50.00	ND	99.2	70-130			07/03/2013	
Dichlorodifluoromethane	62.0	5.0	ug/L	50.00	ND	124	70-130			07/03/2013	A06

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0208 - Method: 5030				**Prepared: 07/03/2013**							
Matrix Spike (B3G0208-MS1)	**Source: 1306260-11**										
Diethyl ether	47.0	5.0	ug/L	50.00	ND	94.0	70-130			07/03/2013	
Diisopropyl Ether	47.8	5.0	ug/L	50.00	ND	95.6	70-130			07/03/2013	
Ethylbenzene	52.5	1.0	ug/L	50.00	ND	105	70-130			07/03/2013	
Ethyltertiarybutylether	48.2	5.0	ug/L	50.00	ND	96.4	70-130			07/03/2013	
Hexachloroethane	46.9	5.0	ug/L	50.00	ND	93.9	70-130			07/03/2013	
Isopropylbenzene	52.6	1.0	ug/L	50.00	ND	105	70-130			07/03/2013	
m & p - Xylene	108	2.0	ug/L	100.0	ND	108	70-130			07/03/2013	
Methyl iodide	49.3	1.0	ug/L	50.00	ND	98.5	70-130			07/03/2013	
Methylene chloride	46.5	5.0	ug/L	50.00	ND	93.1	70-130			07/03/2013	
Methyltertiarybutylether	47.0	1.0	ug/L	50.00	ND	94.0	70-130			07/03/2013	
Naphthalene	51.6	5.0	ug/L	50.00	ND	103	70-130			07/03/2013	X
n-Butylbenzene	48.7	1.0	ug/L	50.00	ND	97.5	70-130			07/03/2013	
n-Propylbenzene	51.3	1.0	ug/L	50.00	ND	103	70-130			07/03/2013	
o-Xylene	51.8	1.0	ug/L	50.00	ND	104	70-130			07/03/2013	
p-Isopropyl toluene	50.1	1.0	ug/L	50.00	ND	100	70-130			07/03/2013	
sec-Butylbenzene	50.4	1.0	ug/L	50.00	ND	101	70-130			07/03/2013	
Styrene	57.5	1.0	ug/L	50.00	ND	115	70-130			07/03/2013	
tert-Butylbenzene	51.8	1.0	ug/L	50.00	ND	104	70-130			07/03/2013	
tertiary Butyl Alcohol	199	50	ug/L	250.0	ND	79.7	70-130			07/03/2013	
tertiaryAmylmethylether	47.5	5.0	ug/L	50.00	ND	95.0	70-130			07/03/2013	
Tetrachloroethylene	51.4	1.0	ug/L	50.00	ND	103	70-130			07/03/2013	
Tetrahydrofuran	42.6	5.0	ug/L	50.00	ND	85.2	70-130			07/03/2013	
Toluene	53.1	1.0	ug/L	50.00	ND	106	70-130			07/03/2013	
trans-1,2-Dichloroethylene	55.8	1.0	ug/L	50.00	ND	112	70-130			07/03/2013	
trans-1,3-Dichloropropylene	51.7	1.0	ug/L	50.00	ND	103	70-130			07/03/2013	
trans-1,4-Dichloro-2-butene	37.6	5.0	ug/L	50.00	ND	75.2	70-130			07/03/2013	A05
Trichloroethylene	48.1	1.0	ug/L	50.00	ND	96.1	70-130			07/03/2013	
Trichlorofluoromethane	50.9	1.0	ug/L	50.00	ND	102	70-130			07/03/2013	
Vinyl chloride	60.4	1.0	ug/L	50.00	ND	121	70-130			07/03/2013	
Surrogate: Bromofluorobenzene	*49.6*		ug/L	*50.00*		*99.1*	*85-115*			07/03/2013	
Surrogate: Dibromofluoromethane	*50.9*		ug/L	*50.00*		*102*	*82.7-115*			07/03/2013	
Surrogate: Toluene-d8	*48.8*		ug/L	*50.00*		*97.5*	*85-115*			07/03/2013	
Matrix Spike Dup (B3G0208-MSD1)	**Source: 1306260-11**										
1,1,1,2-Tetrachloroethane	51.5	1.0	ug/L	50.00	ND	103	70-130	1.10	30	07/03/2013	
1,1,1-Trichloroethane	48.0	1.0	ug/L	50.00	ND	96.0	70-130	3.34	30	07/03/2013	
1,1,2,2-Tetrachloroethane	58.0	1.0	ug/L	50.00	ND	116	70-130	1.70	30	07/03/2013	
1,1,2-Trichloroethane	47.9	1.0	ug/L	50.00	ND	95.9	70-130	0.950	30	07/03/2013	
1,1-Dichloroethane	46.6	1.0	ug/L	50.00	ND	93.1	70-130	2.27	30	07/03/2013	
1,1-Dichloroethylene	46.4	1.0	ug/L	50.00	ND	92.8	70-130	3.73	30	07/03/2013	
1,2,3-Trichlorobenzene	49.1	5.0	ug/L	50.00	ND	98.2	70-130	3.35	30	07/03/2013	
1,2,3-Trichloropropane	44.8	1.0	ug/L	50.00	ND	89.5	70-130	1.76	30	07/03/2013	
1,2,3-Trimethylbenzene	50.3	1.0	ug/L	50.00	ND	101	70-130	2.08	30	07/03/2013	
1,2,4-Trichlorobenzene	50.5	5.0	ug/L	50.00	ND	101	70-130	1.58	30	07/03/2013	
1,2,4-Trimethylbenzene	53.9	1.0	ug/L	50.00	ND	108	70-130	5.02	30	07/03/2013	
1,2-Dibromo-3-chloropropane	49.6	5.0	ug/L	50.00	ND	99.3	70-130	2.68	30	07/03/2013	
1,2-Dibromoethane	50.1	1.0	ug/L	50.00	ND	100	70-130	0.570	30	07/03/2013	
1,2-Dichlorobenzene	51.0	1.0	ug/L	50.00	ND	102	70-130	2.40	30	07/03/2013	

Lab Work Order # 1306260

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0208 - Method: 5030				**Prepared: 07/03/2013**							
Matrix Spike Dup (B3G0208-MSD1)	**Source: 1306260-11**										
1,2-Dichloroethane	48.4	1.0	ug/L	50.00	ND	96.7	70-130	1.75	30	07/03/2013	
1,2-Dichloropropane	47.4	1.0	ug/L	50.00	ND	94.7	70-130	2.38	30	07/03/2013	
1,3,5-Trimethylbenzene	50.2	1.0	ug/L	50.00	ND	100	70-130	3.72	30	07/03/2013	
1,3-Dichlorobenzene	50.1	1.0	ug/L	50.00	ND	100	70-130	3.70	30	07/03/2013	
1,4-Dichlorobenzene	51.3	1.0	ug/L	50.00	ND	103	70-130	2.54	30	07/03/2013	
2-Butanone (MEK)	34.2	5.0	ug/L	50.00	ND	68.4	70-130	6.72	30	07/03/2013	A03
2-Hexanone	33.4	5.0	ug/L	50.00	ND	66.7	70-130	4.73	30	07/03/2013	A03
2-Methylnaphthalene	48.1	5.0	ug/L	50.00	ND	96.1	70-130	1.60	30	07/03/2013	X
2-Propanone (acetone)	22.6	20	ug/L	50.00	ND	45.1	70-130	5.68	30	07/03/2013	A03
4-Methyl-2-pentanone (MIBK)	44.2	5.0	ug/L	50.00	ND	88.5	70-130	5.21	30	07/03/2013	
Acrylonitrile	43.0	5.0	ug/L	50.00	ND	86.1	70-130	4.24	30	07/03/2013	
Benzene	48.8	1.0	ug/L	50.00	ND	97.5	70-130	2.52	30	07/03/2013	
Bromobenzene	46.8	1.0	ug/L	50.00	ND	93.5	70-130	1.96	30	07/03/2013	
Bromochloromethane	51.4	1.0	ug/L	50.00	ND	103	70-130	1.41	30	07/03/2013	
Bromodichloromethane	48.9	1.0	ug/L	50.00	ND	97.8	70-130	0.145	30	07/03/2013	
Bromoform	49.1	1.0	ug/L	50.00	ND	98.3	70-130	0.540	30	07/03/2013	
Bromomethane	53.7	5.0	ug/L	50.00	ND	107	70-130	18.2	30	07/03/2013	
Carbon disulfide	48.4	1.0	ug/L	50.00	ND	96.7	70-130	3.33	30	07/03/2013	
Carbon tetrachloride	49.6	1.0	ug/L	50.00	ND	99.3	70-130	2.28	30	07/03/2013	
Chlorobenzene	48.9	1.0	ug/L	50.00	ND	97.8	70-130	3.33	30	07/03/2013	
Chloroethane	47.9	5.0	ug/L	50.00	ND	95.8	70-130	3.92	30	07/03/2013	
Chloroform	47.6	1.0	ug/L	50.00	ND	95.3	70-130	3.31	30	07/03/2013	
Chloromethane	52.2	5.0	ug/L	50.00	ND	104	70-130	0.270	30	07/03/2013	
cis-1,2-Dichloroethylene	43.3	1.0	ug/L	50.00	ND	86.7	70-130	2.05	30	07/03/2013	
cis-1,3-Dichloropropylene	50.1	1.0	ug/L	50.00	ND	100	70-130	1.42	30	07/03/2013	
Cyclohexane	41.9	5.0	ug/L	50.00	ND	83.9	70-130	4.04	30	07/03/2013	
Dibromochloromethane	51.4	1.0	ug/L	50.00	ND	103	70-130	0.638	30	07/03/2013	
Dibromomethane	49.1	1.0	ug/L	50.00	ND	98.2	70-130	1.00	30	07/03/2013	
Dichlorodifluoromethane	60.5	5.0	ug/L	50.00	ND	121	70-130	2.41	30	07/03/2013	A06
Diethyl ether	46.8	5.0	ug/L	50.00	ND	93.6	70-130	0.352	30	07/03/2013	
Diisopropyl Ether	47.1	5.0	ug/L	50.00	ND	94.2	70-130	1.48	30	07/03/2013	
Ethylbenzene	51.1	1.0	ug/L	50.00	ND	102	70-130	2.77	30	07/03/2013	
Ethyltertiarybutylether	47.8	5.0	ug/L	50.00	ND	95.6	70-130	0.836	30	07/03/2013	
Hexachloroethane	45.1	5.0	ug/L	50.00	ND	90.2	70-130	3.95	30	07/03/2013	
Isopropylbenzene	50.9	1.0	ug/L	50.00	ND	102	70-130	3.26	30	07/03/2013	
m & p - Xylene	103	2.0	ug/L	100.0	ND	103	70-130	4.30	30	07/03/2013	
Methyl iodide	46.6	1.0	ug/L	50.00	ND	93.2	70-130	5.52	30	07/03/2013	
Methylene chloride	46.4	5.0	ug/L	50.00	ND	92.8	70-130	0.346	30	07/03/2013	
Methyltertiarybutylether	47.6	1.0	ug/L	50.00	ND	95.1	70-130	1.17	30	07/03/2013	
Naphthalene	51.6	5.0	ug/L	50.00	ND	103	70-130	0.0302	30	07/03/2013	X
n-Butylbenzene	47.2	1.0	ug/L	50.00	ND	94.3	70-130	3.28	30	07/03/2013	
n-Propylbenzene	49.7	1.0	ug/L	50.00	ND	99.4	70-130	3.09	30	07/03/2013	
o-Xylene	50.0	1.0	ug/L	50.00	ND	100	70-130	3.47	30	07/03/2013	
p-Isopropyl toluene	48.2	1.0	ug/L	50.00	ND	96.4	70-130	3.82	30	07/03/2013	
sec-Butylbenzene	48.7	1.0	ug/L	50.00	ND	97.3	70-130	3.47	30	07/03/2013	
Styrene	55.9	1.0	ug/L	50.00	ND	112	70-130	2.70	30	07/03/2013	
tert-Butylbenzene	48.8	1.0	ug/L	50.00	ND	97.7	70-130	5.88	30	07/03/2013	
tertiary Butyl Alcohol	225	50	ug/L	250.0	ND	90.0	70-130	12.1	30	07/03/2013	

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Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0208 - Method: 5030				**Prepared: 07/03/2013**							
Matrix Spike Dup (B3G0208-MSD1)	**Source: 1306260-11**										
tertiaryAmylmethylether	47.2	5.0	ug/L	50.00	ND	94.4	70-130	0.619	30	07/03/2013	
Tetrachloroethylene	49.6	1.0	ug/L	50.00	ND	99.2	70-130	3.53	30	07/03/2013	
Tetrahydrofuran	44.7	5.0	ug/L	50.00	ND	89.3	70-130	4.77	30	07/03/2013	
Toluene	51.2	1.0	ug/L	50.00	ND	102	70-130	3.61	30	07/03/2013	
trans-1,2-Dichloroethylene	54.5	1.0	ug/L	50.00	ND	109	70-130	2.31	30	07/03/2013	
trans-1,3-Dichloropropylene	51.4	1.0	ug/L	50.00	ND	103	70-130	0.653	30	07/03/2013	
trans-1,4-Dichloro-2-butene	38.8	5.0	ug/L	50.00	ND	77.6	70-130	3.18	30	07/03/2013	A05
Trichloroethylene	47.0	1.0	ug/L	50.00	ND	94.0	70-130	2.18	30	07/03/2013	
Trichlorofluoromethane	49.4	1.0	ug/L	50.00	ND	98.8	70-130	3.04	30	07/03/2013	
Vinyl chloride	57.1	1.0	ug/L	50.00	ND	114	70-130	5.59	30	07/03/2013	
Surrogate: Bromofluorobenzene	*49.7*		ug/L	*50.00*		*99.4*	*85-115*			07/03/2013	
Surrogate: Dibromofluoromethane	*50.5*		ug/L	*50.00*		*101*	*82.7-115*			07/03/2013	
Surrogate: Toluene-d8	*48.6*		ug/L	*50.00*		*97.3*	*85-115*			07/03/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2805 - Method: 3510 Water SVOC				**Prepared: 06/28/2013**							
Blank (B3F2805-BLK1)											
1,2,4-Trichlorobenzene	ND	2.0	ug/L							07/03/2013	
2,4,5-Trichlorophenol	ND	5.0	ug/L							07/03/2013	
2,4,6-Trichlorophenol	ND	4.0	ug/L							07/03/2013	
2,4-Dichlorophenol	ND	10	ug/L							07/03/2013	
2,4-Dimethylphenol	ND	5.0	ug/L							07/03/2013	
2,4-Dinitrophenol	ND	25	ug/L							07/03/2013	A05
2,4-Dinitrotoluene	ND	5.0	ug/L							07/03/2013	
2,6-Dinitrotoluene	ND	5.0	ug/L							07/03/2013	
2-Chloroaniline	ND	5.0	ug/L							07/03/2013	
2-Chloronaphthalene	ND	2.0	ug/L							07/03/2013	
2-Chlorophenol	ND	10	ug/L							07/03/2013	
2-Methyl-4,6-dinitrophenol	ND	20	ug/L							07/03/2013	
2-Methylnaphthalene	ND	5.0	ug/L							07/03/2013	
2-Methylphenol (o-Cresol)	ND	10	ug/L							07/03/2013	
2-Nitroaniline	ND	20	ug/L							07/03/2013	
2-Nitrophenol	ND	5.0	ug/L							07/03/2013	
3 & 4-Methylphenol	ND	20	ug/L							07/03/2013	
3-Nitroaniline	ND	20	ug/L							07/03/2013	
4-Bromophenyl phenyl ether	ND	2.0	ug/L							07/03/2013	
4-Chloro-3-methyl-phenol	ND	5.0	ug/L							07/03/2013	
4-Chloroaniline	ND	10	ug/L							07/03/2013	
4-Chlorodiphenylether	ND	1.0	ug/L							07/03/2013	
4-Nitroaniline	ND	20	ug/L							07/03/2013	
4-Nitrophenol	ND	25	ug/L							07/03/2013	
Acenaphthene	ND	1.0	ug/L							07/03/2013	
Acenaphthylene	ND	1.0	ug/L							07/03/2013	
Aniline	ND	4.0	ug/L							07/03/2013	
Anthracene	ND	1.0	ug/L							07/03/2013	
Azobenzene	ND	2.0	ug/L							07/03/2013	
Benz[a]anthracene	ND	1.0	ug/L							07/03/2013	
Benzo[a]pyrene	ND	1.0	ug/L							07/03/2013	
Benzo[b]fluoranthene	ND	1.0	ug/L							07/03/2013	
Benzo[g,h,i]perylene	ND	1.0	ug/L							07/03/2013	
Benzo[k]fluoranthene	ND	1.0	ug/L							07/03/2013	
Benzyl Alcohol	ND	50	ug/L							07/03/2013	
Bis(2-chloroethoxy)methane	ND	2.0	ug/L							07/03/2013	
Bis(2-chloroethyl)ether	ND	1.0	ug/L							07/03/2013	
Bis(2-chloroisopropyl)ether	ND	1.0	ug/L							07/03/2013	
Bis(2-ethylhexyl)phthalate	ND	5.0	ug/L							07/03/2013	
Butyl benzyl phthalate	ND	5.0	ug/L							07/03/2013	
Carbazole	ND	5.0	ug/L							07/03/2013	
Chrysene	ND	1.0	ug/L							07/03/2013	
Dibenz[a,h]anthracene	ND	2.0	ug/L							07/03/2013	
Dibenzofuran	ND	4.0	ug/L							07/03/2013	
Diethylphthalate	ND	5.0	ug/L							07/03/2013	
Dimethyl phthalate	ND	5.0	ug/L							07/03/2013	
Di-n-butyl phthalate	ND	5.0	ug/L							07/03/2013	
Di-n-octyl phthalate	ND	5.0	ug/L							07/03/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2805 - Method: 3510 Water SVOC				**Prepared: 06/28/2013**							
Blank (B3F2805-BLK1)											
Fluoranthene	ND	1.0	ug/L							07/03/2013	
Fluorene	ND	1.0	ug/L							07/03/2013	
Hexachlorobenzene	ND	1.0	ug/L							07/03/2013	
Hexachlorobutadiene	ND	1.0	ug/L							07/03/2013	
Hexachlorocyclopentadiene	ND	10	ug/L							07/03/2013	
Hexachloroethane	ND	1.0	ug/L							07/03/2013	
Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L							07/03/2013	
Isophorone	ND	1.0	ug/L							07/03/2013	
N,N-dimethylaniline	ND	5.0	ug/L							07/03/2013	
Naphthalene	ND	1.0	ug/L							07/03/2013	
Nitrobenzene	ND	2.0	ug/L							07/03/2013	
N-methylaniline	ND	1.0	ug/L							07/03/2013	
N-Nitrosodimethylamine	ND	5.0	ug/L							07/03/2013	
N-Nitrosodi-n-propylamine	ND	2.0	ug/L							07/03/2013	
N-Nitrosodiphenylamine	ND	2.0	ug/L							07/03/2013	
Pentachlorophenol	ND	20	ug/L							07/03/2013	
Phenanthrene	ND	1.0	ug/L							07/03/2013	
Phenol	ND	5.0	ug/L							07/03/2013	
Pyrene	ND	1.0	ug/L							07/03/2013	
Pyridine	ND	20	ug/L							07/03/2013	
Tetramethylurea	ND	1.0	ug/L							07/03/2013	
Surrogate: 2,4,6-Tribromophenol	*39.9*		ug/L	*50.00*		*79.8*	*33.8-115*			07/03/2013	
Surrogate: 2-Fluorobiphenyl	*14.7*		ug/L	*25.00*		*58.8*	*24.1-115*			07/03/2013	
Surrogate: 2-Fluorophenol	*10.4*		ug/L	*50.00*		*20.9*	*10-115*			07/03/2013	
Surrogate: Nitrobenzene-d5	*14.7*		ug/L	*25.00*		*58.8*	*17.8-115*			07/03/2013	
Surrogate: Phenol-d6	*7.16*		ug/L	*50.00*		*14.3*	*10-115*			07/03/2013	
Surrogate: p-Terphenyl-d14	*21.0*		ug/L	*25.00*		*84.0*	*41.8-115*			07/03/2013	
LCS (B3F2805-BS1)											
1,2,4-Trichlorobenzene	20.3	2.0	ug/L	50.00		40.7	17-70.9			07/03/2013	
2,4,5-Trichlorophenol	68.8	5.0	ug/L	100.0		68.8	42-109.1			07/03/2013	
2,4,6-Trichlorophenol	66.1	4.0	ug/L	100.0		66.1	37.7-104.6			07/03/2013	
2,4-Dichlorophenol	58.2	10	ug/L	100.0		58.2	30.2-96.9			07/03/2013	
2,4-Dimethylphenol	53.7	5.0	ug/L	100.0		53.7	29.9-97.6			07/03/2013	
2,4-Dinitrophenol	45.4	25	ug/L	100.0		45.4	34.3-113			07/03/2013	A05
2,4-Dinitrotoluene	34.6	5.0	ug/L	50.00		69.2	52.9-115.4			07/03/2013	
2,6-Dinitrotoluene	32.9	5.0	ug/L	50.00		65.9	54.6-109.4			07/03/2013	
2-Chloroaniline	26.9	5.0	ug/L	50.00		53.9	51.9-89.3			07/03/2013	
2-Chloronaphthalene	23.8	2.0	ug/L	50.00		47.6	28.2-85.3			07/03/2013	
2-Chlorophenol	39.7	10	ug/L	100.0		39.7	18.4-84.6			07/03/2013	
2-Methyl-4,6-dinitrophenol	56.9	20	ug/L	100.0		56.9	52.1-117.9			07/03/2013	
2-Methylnaphthalene	25.5	5.0	ug/L	50.00		50.9	25.3-79.1			07/03/2013	
2-Methylphenol (o-Cresol)	38.2	10	ug/L	100.0		38.2	22.9-83.2			07/03/2013	
2-Nitroaniline	31.3	20	ug/L	50.00		62.5	51.1-108.1			07/03/2013	
2-Nitrophenol	54.1	5.0	ug/L	100.0		54.1	24.8-94.7			07/03/2013	
3 & 4-Methylphenol	35.4	20	ug/L	100.0		35.4	20.4-80			07/03/2013	
3-Nitroaniline	30.2	20	ug/L	50.00		60.4	51.8-112.1			07/03/2013	
4-Bromophenyl phenyl ether	28.7	2.0	ug/L	50.00		57.4	48.6-102.4			07/03/2013	

Lab Work Order # 1306260

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2805 - Method: 3510 Water SVOC				**Prepared: 06/28/2013**							
LCS (B3F2805-BS1)											
4-Chloro-3-methyl-phenol	60.5	5.0	ug/L	100.0		60.5	40.3-104.7			07/03/2013	
4-Chloroaniline	26.2	10	ug/L	50.00		52.4	46.4-106.3			07/03/2013	
4-Chlorodiphenylether	29.7	1.0	ug/L	50.00		59.4	40-98.2			07/03/2013	
4-Nitroaniline	32.7	20	ug/L	50.00		65.4	47.6-127.5			07/03/2013	
4-Nitrophenol	19.9	25	ug/L	100.0		19.9	15.1-52			07/03/2013	T
Acenaphthene	26.8	1.0	ug/L	50.00		53.7	35.2-90.9			07/03/2013	
Acenaphthylene	28.6	1.0	ug/L	50.00		57.2	38.7-99.1			07/03/2013	
Aniline	13.2	4.0	ug/L	50.00		26.3	10-88.7			07/03/2013	
Anthracene	32.3	1.0	ug/L	50.00		64.6	53.9-106.8			07/03/2013	
Azobenzene	28.1	2.0	ug/L	50.00		56.2	39.7-109.3			07/03/2013	
Benz[a]anthracene	29.8	1.0	ug/L	50.00		59.7	52.5-113.7			07/03/2013	
Benzo[a]pyrene	26.6	1.0	ug/L	50.00		53.2	43.7-118			07/03/2013	
Benzo[b]fluoranthene	32.8	1.0	ug/L	50.00		65.5	44.1-118.6			07/03/2013	
Benzo[g,h,i]perylene	21.8	1.0	ug/L	50.00		43.7	25.8-127			07/03/2013	
Benzo[k]fluoranthene	31.5	1.0	ug/L	50.00		63.1	41.9-117.7			07/03/2013	
Benzyl Alcohol	37.3	50	ug/L	100.0		37.3	22.1-175			07/03/2013	T
Bis(2-chloroethoxy)methane	26.8	2.0	ug/L	50.00		53.6	27-96.8			07/03/2013	
Bis(2-chloroethyl)ether	23.8	1.0	ug/L	50.00		47.5	19.9-89.6			07/03/2013	
Bis(2-chloroisopropyl)ether	22.9	1.0	ug/L	50.00		45.7	14.2-92.7			07/03/2013	
Bis(2-ethylhexyl)phthalate	27.8	5.0	ug/L	50.00		55.6	41.1-120.2			07/03/2013	
Butyl benzyl phthalate	31.9	5.0	ug/L	50.00		63.9	54.6-118.5			07/03/2013	
Carbazole	31.8	5.0	ug/L	50.00		63.6	55.7-113.9			07/03/2013	
Chrysene	28.7	1.0	ug/L	50.00		57.3	53.1-114.9			07/03/2013	
Dibenz[a,h]anthracene	23.6	2.0	ug/L	50.00		47.2	23.4-134.7			07/03/2013	
Dibenzofuran	26.9	4.0	ug/L	50.00		53.8	37.7-92			07/03/2013	
Diethylphthalate	37.3	5.0	ug/L	50.00		74.6	56.6-111.9			07/03/2013	
Dimethyl phthalate	32.6	5.0	ug/L	50.00		65.2	56.9-106.4			07/03/2013	
Di-n-butyl phthalate	32.5	5.0	ug/L	50.00		65.0	55.1-115.8			07/03/2013	
Di-n-octyl phthalate	24.1	5.0	ug/L	50.00		48.3	43.6-120.8			07/03/2013	
Fluoranthene	33.4	1.0	ug/L	50.00		66.7	55-112.1			07/03/2013	
Fluorene	30.4	1.0	ug/L	50.00		60.8	42-98			07/03/2013	
Hexachlorobenzene	29.5	1.0	ug/L	50.00		59.1	49.5-103.4			07/03/2013	
Hexachlorobutadiene	20.2	1.0	ug/L	50.00		40.5	14.2-71.4			07/03/2013	
Hexachlorocyclopentadiene	13.8	10	ug/L	50.00		27.7	10-58.9			07/03/2013	
Hexachloroethane	15.9	1.0	ug/L	50.00		31.9	10.9-61.4			07/03/2013	
Indeno(1,2,3-c,d)pyrene	19.1	2.0	ug/L	50.00		38.2	29.1-133.2			07/03/2013	
Isophorone	26.8	1.0	ug/L	50.00		53.6	29.3-98.9			07/03/2013	
N,N-dimethylaniline	24.4	5.0	ug/L	50.00		48.9	38.2-91.2			07/03/2013	
Naphthalene	22.6	1.0	ug/L	50.00		45.3	22-76.8			07/03/2013	
Nitrobenzene	26.8	2.0	ug/L	50.00		53.6	26-89.7			07/03/2013	
N-methylaniline	23.8	1.0	ug/L	50.00		47.6	29.6-98.5			07/03/2013	
N-Nitrosodimethylamine	11.6	5.0	ug/L	50.00		23.1	10-72.1			07/03/2013	
N-Nitrosodi-n-propylamine	30.2	2.0	ug/L	50.00		60.4	29.5-96.3			07/03/2013	
N-Nitrosodiphenylamine	30.3	2.0	ug/L	50.00		60.6	57.3-112.2			07/03/2013	
Pentachlorophenol	60.6	20	ug/L	100.0		60.6	45.5-108.7			07/03/2013	
Phenanthrene	30.4	1.0	ug/L	50.00		60.7	54.5-102.4			07/03/2013	
Phenol	16.1	5.0	ug/L	100.0		16.1	10-40.3			07/03/2013	
Pyrene	30.1	1.0	ug/L	50.00		60.3	54.2-110.5			07/03/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2805 - Method: 3510 Water SVOC				**Prepared: 06/28/2013**							
LCS (B3F2805-BS1)											
Pyridine	6.82	20	ug/L	50.00		13.6	10-63.2			07/03/2013	T
Tetramethylurea	18.9	1.0	ug/L	50.00		37.7	13.9-94.9			07/03/2013	
Surrogate: 2,4,6-Tribromophenol	*38.1*		ug/L	*50.00*		*76.2*	*33.8-115*			07/03/2013	
Surrogate: 2-Fluorobiphenyl	*13.6*		ug/L	*25.00*		*54.3*	*24.1-115*			07/03/2013	
Surrogate: 2-Fluorophenol	*11.5*		ug/L	*50.00*		*23.0*	*10-115*			07/03/2013	
Surrogate: Nitrobenzene-d5	*12.8*		ug/L	*25.00*		*51.4*	*17.8-115*			07/03/2013	
Surrogate: Phenol-d6	*8.99*		ug/L	*50.00*		*18.0*	*10-115*			07/03/2013	
Surrogate: p-Terphenyl-d14	*14.6*		ug/L	*25.00*		*58.6*	*41.8-115*			07/03/2013	
LCS Dup (B3F2805-BSD1)											
1,2,4-Trichlorobenzene	21.0	2.0	ug/L	50.00		41.9	17-70.9	2.95	28	07/03/2013	
2,4,5-Trichlorophenol	66.1	5.0	ug/L	100.0		66.1	42-109.1	3.91	19.9	07/03/2013	
2,4,6-Trichlorophenol	64.0	4.0	ug/L	100.0		64.0	37.7-104.6	3.22	19.8	07/03/2013	
2,4-Dichlorophenol	56.8	10	ug/L	100.0		56.8	30.2-96.9	2.49	21.7	07/03/2013	
2,4-Dimethylphenol	54.0	5.0	ug/L	100.0		54.0	29.9-97.6	0.467	24.2	07/03/2013	
2,4-Dinitrophenol	45.0	25	ug/L	100.0		45.0	34.3-113	0.863	32.4	07/03/2013	A05
2,4-Dinitrotoluene	34.0	5.0	ug/L	50.00		67.9	52.9-115.4	1.96	20.9	07/03/2013	
2,6-Dinitrotoluene	33.6	5.0	ug/L	50.00		67.2	54.6-109.4	1.94	16.5	07/03/2013	
2-Chloroaniline	26.9	5.0	ug/L	50.00		53.9	51.9-89.3	0.0334	20	07/03/2013	
2-Chloronaphthalene	24.5	2.0	ug/L	50.00		48.9	28.2-85.3	2.73	22.4	07/03/2013	
2-Chlorophenol	41.4	10	ug/L	100.0		41.4	18.4-84.6	4.14	29.8	07/03/2013	
2-Methyl-4,6-dinitrophenol	59.3	20	ug/L	100.0		59.3	52.1-117.9	4.12	15	07/03/2013	
2-Methylnaphthalene	25.3	5.0	ug/L	50.00		50.5	25.3-79.1	0.755	21.8	07/03/2013	
2-Methylphenol (o-Cresol)	38.1	10	ug/L	100.0		38.1	22.9-83.2	0.139	30.2	07/03/2013	
2-Nitroaniline	31.6	20	ug/L	50.00		63.2	51.1-108.1	1.04	15.9	07/03/2013	
2-Nitrophenol	55.5	5.0	ug/L	100.0		55.5	24.8-94.7	2.67	24.3	07/03/2013	
3 & 4-Methylphenol	34.8	20	ug/L	100.0		34.8	20.4-80	1.85	30.2	07/03/2013	
3-Nitroaniline	30.3	20	ug/L	50.00		60.5	51.8-112.1	0.291	20.5	07/03/2013	
4-Bromophenyl phenyl ether	29.9	2.0	ug/L	50.00		59.7	48.6-102.4	4.04	15.9	07/03/2013	
4-Chloro-3-methyl-phenol	58.6	5.0	ug/L	100.0		58.6	40.3-104.7	3.25	20	07/03/2013	
4-Chloroaniline	27.3	10	ug/L	50.00		54.5	46.4-106.3	3.91	33.6	07/03/2013	
4-Chlorodiphenylether	30.1	1.0	ug/L	50.00		60.2	40-98.2	1.37	17	07/03/2013	
4-Nitroaniline	32.6	20	ug/L	50.00		65.2	47.6-127.5	0.411	27.5	07/03/2013	
4-Nitrophenol	19.1	25	ug/L	100.0		19.1	15.1-52	4.25	28.2	07/03/2013	T
Acenaphthene	27.9	1.0	ug/L	50.00		55.7	35.2-90.9	3.73	19.1	07/03/2013	
Acenaphthylene	29.8	1.0	ug/L	50.00		59.5	38.7-99.1	4.05	18	07/03/2013	
Aniline	16.6	4.0	ug/L	50.00		33.2	10-88.7	22.9	55.7	07/03/2013	
Anthracene	31.8	1.0	ug/L	50.00		63.6	53.9-106.8	1.55	15	07/03/2013	
Azobenzene	29.0	2.0	ug/L	50.00		58.1	39.7-109.3	3.34	17.4	07/03/2013	
Benz[a]anthracene	29.5	1.0	ug/L	50.00		59.0	52.5-113.7	1.11	16	07/03/2013	
Benzo[a]pyrene	26.5	1.0	ug/L	50.00		53.0	43.7-118	0.368	22.8	07/03/2013	
Benzo[b]fluoranthene	31.9	1.0	ug/L	50.00		63.8	44.1-118.6	2.62	23.4	07/03/2013	
Benzo[g,h,i]perylene	24.1	1.0	ug/L	50.00		48.2	25.8-127	9.85	32.2	07/03/2013	
Benzo[k]fluoranthene	30.4	1.0	ug/L	50.00		60.7	41.9-117.7	3.79	22.8	07/03/2013	
Benzyl Alcohol	37.4	50	ug/L	100.0		37.4	22.1-175	0.165	32.9	07/03/2013	T
Bis(2-chloroethoxy)methane	27.7	2.0	ug/L	50.00		55.5	27-96.8	3.51	25.6	07/03/2013	
Bis(2-chloroethyl)ether	24.5	1.0	ug/L	50.00		49.0	19.9-89.6	3.12	32	07/03/2013	
Bis(2-chloroisopropyl)ether	24.4	1.0	ug/L	50.00		48.9	14.2-92.7	6.66	28.2	07/03/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2805 - Method: 3510 Water SVOC				**Prepared: 06/28/2013**							
LCS Dup (B3F2805-BSD1)											
Bis(2-ethylhexyl)phthalate	27.4	5.0	ug/L	50.00		54.9	41.1-120.2	1.31	25.7	07/03/2013	
Butyl benzyl phthalate	31.5	5.0	ug/L	50.00		63.0	54.6-118.5	1.36	15.1	07/03/2013	
Carbazole	31.2	5.0	ug/L	50.00		62.4	55.7-113.9	1.81	15	07/03/2013	
Chrysene	28.7	1.0	ug/L	50.00		57.4	53.1-114.9	0.122	16.3	07/03/2013	
Dibenz[a,h]anthracene	25.5	2.0	ug/L	50.00		51.0	23.4-134.7	7.69	29.8	07/03/2013	
Dibenzofuran	28.2	4.0	ug/L	50.00		56.3	37.7-92	4.56	17	07/03/2013	
Diethylphthalate	36.8	5.0	ug/L	50.00		73.6	56.6-111.9	1.27	17.7	07/03/2013	
Dimethyl phthalate	33.2	5.0	ug/L	50.00		66.4	56.9-106.4	1.92	15	07/03/2013	
Di-n-butyl phthalate	31.8	5.0	ug/L	50.00		63.5	55.1-115.8	2.37	15	07/03/2013	
Di-n-octyl phthalate	23.7	5.0	ug/L	50.00		47.4	43.6-120.8	1.69	26.2	07/03/2013	
Fluoranthene	31.5	1.0	ug/L	50.00		62.9	55-112.1	5.89	16.3	07/03/2013	
Fluorene	30.6	1.0	ug/L	50.00		61.2	42-98	0.653	16.4	07/03/2013	
Hexachlorobenzene	30.3	1.0	ug/L	50.00		60.6	49.5-103.4	2.56	15	07/03/2013	
Hexachlorobutadiene	20.9	1.0	ug/L	50.00		41.7	14.2-71.4	3.04	29	07/03/2013	
Hexachlorocyclopentadiene	15.7	10	ug/L	50.00		31.4	10-58.9	12.8	36.7	07/03/2013	
Hexachloroethane	16.4	1.0	ug/L	50.00		32.9	10.9-61.4	3.04	33.6	07/03/2013	
Indeno(1,2,3-c,d)pyrene	20.4	2.0	ug/L	50.00		40.8	29.1-133.2	6.63	29.3	07/03/2013	
Isophorone	27.5	1.0	ug/L	50.00		54.9	29.3-98.9	2.52	25.6	07/03/2013	
N,N-dimethylaniline	24.3	5.0	ug/L	50.00		48.6	38.2-91.2	0.700	19.6	07/03/2013	
Naphthalene	23.4	1.0	ug/L	50.00		46.7	22-76.8	3.12	24.2	07/03/2013	
Nitrobenzene	27.1	2.0	ug/L	50.00		54.3	26-89.7	1.27	25	07/03/2013	
N-methylaniline	25.7	1.0	ug/L	50.00		51.5	29.6-98.5	7.84	40.7	07/03/2013	
N-Nitrosodimethylamine	10.9	5.0	ug/L	50.00		21.8	10-72.1	5.78	45.8	07/03/2013	
N-Nitrosodi-n-propylamine	31.3	2.0	ug/L	50.00		62.6	29.5-96.3	3.55	27.6	07/03/2013	
N-Nitrosodiphenylamine	30.8	2.0	ug/L	50.00		61.7	57.3-112.2	1.77	16.7	07/03/2013	
Pentachlorophenol	61.0	20	ug/L	100.0		61.0	45.5-108.7	0.615	15	07/03/2013	
Phenanthrene	30.5	1.0	ug/L	50.00		61.0	54.5-102.4	0.404	15	07/03/2013	
Phenol	15.7	5.0	ug/L	100.0		15.7	10-40.3	2.06	34.4	07/03/2013	
Pyrene	30.6	1.0	ug/L	50.00		61.2	54.2-110.5	1.56	18.6	07/03/2013	
Pyridine	8.07	20	ug/L	50.00		16.1	10-63.2	16.9	94.9	07/03/2013	T
Tetramethylurea	18.8	1.0	ug/L	50.00		37.7	13.9-94.9	0.167	30.3	07/03/2013	
Surrogate: 2,4,6-Tribromophenol	*38.1*		ug/L	*50.00*		*76.3*	*33.8-115*			07/03/2013	
Surrogate: 2-Fluorobiphenyl	*13.5*		ug/L	*25.00*		*54.2*	*24.1-115*			07/03/2013	
Surrogate: 2-Fluorophenol	*10.1*		ug/L	*50.00*		*20.2*	*10-115*			07/03/2013	
Surrogate: Nitrobenzene-d5	*13.1*		ug/L	*25.00*		*52.3*	*17.8-115*			07/03/2013	
Surrogate: Phenol-d6	*8.74*		ug/L	*50.00*		*17.5*	*10-115*			07/03/2013	
Surrogate: p-Terphenyl-d14	*15.0*		ug/L	*25.00*		*60.0*	*41.8-115*			07/03/2013	
Matrix Spike (B3F2805-MS1)	**Source: 1306260-03**										
1,2,4-Trichlorobenzene	61.4	4.0	ug/L	101.0	ND	60.8	12.6-78.2			07/03/2013	
2,4,5-Trichlorophenol	180	10	ug/L	202.0	ND	89.1	35.7-118.6			07/03/2013	
2,4,6-Trichlorophenol	173	8.1	ug/L	202.0	ND	85.6	32.7-108.7			07/03/2013	
2,4-Dichlorophenol	158	20	ug/L	202.0	ND	78.0	24.7-98.5			07/03/2013	
2,4-Dimethylphenol	156	10	ug/L	202.0	ND	77.4	25.2-99.7			07/03/2013	
2,4-Dinitrophenol	128	51	ug/L	202.0	ND	63.6	32.9-131.3			07/03/2013	A05
2,4-Dinitrotoluene	92.0	10	ug/L	101.0	ND	91.1	52.9-115.3			07/03/2013	
2,6-Dinitrotoluene	92.2	10	ug/L	101.0	ND	91.3	54-109.4			07/03/2013	
2-Chloroaniline	71.1	10	ug/L	101.0	ND	70.4	30.4-97.2			07/03/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2805 - Method: 3510 Water SVOC				**Prepared: 06/28/2013**							
Matrix Spike (B3F2805-MS1)	**Source: 1306260-03**										
2-Chloronaphthalene	73.9	4.0	ug/L	101.0	ND	73.2	26.2-92.3			07/03/2013	
2-Chlorophenol	119	20	ug/L	202.0	ND	58.8	13.1-87.2			07/03/2013	
2-Methyl-4,6-dinitrophenol	160	40	ug/L	202.0	ND	79.3	52.3-119.8			07/03/2013	
2-Methylnaphthalene	72.9	10	ug/L	101.0	ND	72.2	13.4-95.1			07/03/2013	
2-Methylphenol (o-Cresol)	124	20	ug/L	202.0	ND	61.4	14.6-92.5			07/03/2013	
2-Nitroaniline	87.8	40	ug/L	101.0	ND	86.9	49.2-108.4			07/03/2013	
2-Nitrophenol	151	10	ug/L	202.0	ND	74.9	18.3-95.6			07/03/2013	
3 & 4-Methylphenol	119	40	ug/L	202.0	ND	59.1	12.1-93			07/03/2013	
3-Nitroaniline	84.4	40	ug/L	101.0	ND	83.6	40.2-113.5			07/03/2013	
4-Bromophenyl phenyl ether	85.1	4.0	ug/L	101.0	ND	84.2	49.8-106.2			07/03/2013	
4-Chloro-3-methyl-phenol	167	10	ug/L	202.0	ND	82.8	37.1-109.2			07/03/2013	
4-Chloroaniline	70.3	20	ug/L	101.0	ND	69.6	27.2-109.5			07/03/2013	
4-Chlorodiphenylether	86.6	2.0	ug/L	101.0	ND	85.7	42.6-101.8			07/03/2013	
4-Nitroaniline	89.7	40	ug/L	101.0	ND	88.8	33-129.4			07/03/2013	
4-Nitrophenol	73.4	51	ug/L	202.0	ND	36.3	10-86.9			07/03/2013	
Acenaphthene	83.5	2.0	ug/L	101.0	ND	82.7	35.2-95.8			07/03/2013	
Acenaphthylene	86.3	2.0	ug/L	101.0	ND	85.4	38.3-103.1			07/03/2013	
Aniline	48.5	8.1	ug/L	101.0	ND	48.0	10-85.1			07/03/2013	
Anthracene	86.4	2.0	ug/L	101.0	ND	85.5	54.2-105.4			07/03/2013	
Azobenzene	79.6	4.0	ug/L	101.0	ND	78.8	45.7-105.9			07/03/2013	
Benz[a]anthracene	85.4	2.0	ug/L	101.0	ND	84.6	39.8-119.3			07/03/2013	
Benzo[a]pyrene	83.1	2.0	ug/L	101.0	ND	82.2	30-125.5			07/03/2013	
Benzo[b]fluoranthene	97.3	2.0	ug/L	101.0	ND	96.3	29.9-124.8			07/03/2013	
Benzo[g,h,i]perylene	69.9	2.0	ug/L	101.0	ND	69.2	10-133.9			07/03/2013	
Benzo[k]fluoranthene	95.7	2.0	ug/L	101.0	ND	94.8	28.6-120.8			07/03/2013	
Benzyl Alcohol	122	100	ug/L	202.0	ND	60.2	10-193.5			07/03/2013	
Bis(2-chloroethoxy)methane	73.7	4.0	ug/L	101.0	ND	73.0	18.2-97.2			07/03/2013	
Bis(2-chloroethyl)ether	65.5	2.0	ug/L	101.0	ND	64.9	13-89.7			07/03/2013	
Bis(2-chloroisopropyl)ether	64.3	2.0	ug/L	101.0	ND	63.7	11.9-90.2			07/03/2013	
Bis(2-ethylhexyl)phthalate	80.9	10	ug/L	101.0	ND	80.1	24.7-129.2			07/03/2013	
Butyl benzyl phthalate	85.3	10	ug/L	101.0	ND	84.5	50.3-121.1			07/03/2013	
Carbazole	84.8	10	ug/L	101.0	ND	83.9	53.6-115.9			07/03/2013	
Chrysene	83.2	2.0	ug/L	101.0	ND	82.4	39.3-119.7			07/03/2013	
Dibenz[a,h]anthracene	71.4	4.0	ug/L	101.0	ND	70.7	10-140.4			07/03/2013	
Dibenzofuran	79.8	8.1	ug/L	101.0	ND	79.0	39.1-95.8			07/03/2013	
Diethylphthalate	99.9	10	ug/L	101.0	ND	98.9	56-112.5			07/03/2013	
Dimethyl phthalate	89.9	10	ug/L	101.0	ND	89.0	56.7-104.3			07/03/2013	
Di-n-butyl phthalate	85.7	10	ug/L	101.0	ND	84.8	53.6-114.7			07/03/2013	
Di-n-octyl phthalate	67.8	10	ug/L	101.0	ND	67.1	25.6-129.5			07/03/2013	
Fluoranthene	85.1	2.0	ug/L	101.0	ND	84.3	53.7-110.6			07/03/2013	
Fluorene	87.6	2.0	ug/L	101.0	ND	86.8	43.6-100.7			07/03/2013	
Hexachlorobenzene	83.3	2.0	ug/L	101.0	ND	82.4	45.8-105.9			07/03/2013	
Hexachlorobutadiene	61.4	2.0	ug/L	101.0	ND	60.8	10.8-78.6			07/03/2013	
Hexachlorocyclopentadiene	46.9	20	ug/L	101.0	ND	46.4	10-79.7			07/03/2013	
Hexachloroethane	48.0	2.0	ug/L	101.0	ND	47.6	10-76.7			07/03/2013	
Indeno(1,2,3-c,d)pyrene	57.6	4.0	ug/L	101.0	ND	57.1	12.4-140.5			07/03/2013	
Isophorone	71.0	2.0	ug/L	101.0	ND	70.3	23.1-96.1			07/03/2013	
N,N-dimethylaniline	62.9	10	ug/L	101.0	ND	62.3	26.8-92.2			07/03/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2805 - Method: 3510 Water SVOC				**Prepared: 06/28/2013**							
Matrix Spike (B3F2805-MS1)	**Source: 1306260-03**										
Naphthalene	66.4	2.0	ug/L	101.0	ND	65.7	10-104.5			07/03/2013	
Nitrobenzene	72.8	4.0	ug/L	101.0	ND	72.1	19.2-91.4			07/03/2013	
N-methylaniline	66.2	2.0	ug/L	101.0	ND	65.5	17.2-101.8			07/03/2013	
N-Nitrosodimethylamine	42.7	10	ug/L	101.0	ND	42.2	10-85.9			07/03/2013	
N-Nitrosodi-n-propylamine	81.7	4.0	ug/L	101.0	ND	80.9	21.8-95			07/03/2013	
N-Nitrosodiphenylamine	88.0	4.0	ug/L	101.0	ND	87.2	58.3-114.6			07/03/2013	
Pentachlorophenol	180	40	ug/L	202.0	ND	88.9	45.2-121.4			07/03/2013	
Phenanthrene	83.7	2.0	ug/L	101.0	ND	82.8	55.4-103.2			07/03/2013	
Phenol	66.7	10	ug/L	202.0	ND	33.0	10-59.7			07/03/2013	
Pyrene	84.5	2.0	ug/L	101.0	ND	83.6	49.1-113.8			07/03/2013	
Pyridine	31.6	40	ug/L	101.0	ND	31.2	10-72.3			07/03/2013	T
Tetramethylurea	66.0	2.0	ug/L	101.0	ND	65.3	23.6-99.1			07/03/2013	
Surrogate: 2,4,6-Tribromophenol	*104*		ug/L	*101.0*		*103*	*33.8-115*			07/03/2013	
Surrogate: 2-Fluorobiphenyl	*37.1*		ug/L	*50.51*		*73.4*	*24.1-115*			07/03/2013	
Surrogate: 2-Fluorophenol	*41.8*		ug/L	*101.0*		*41.4*	*10-115*			07/03/2013	
Surrogate: Nitrobenzene-d5	*34.6*		ug/L	*50.51*		*68.4*	*17.8-115*			07/03/2013	
Surrogate: Phenol-d6	*35.2*		ug/L	*101.0*		*34.8*	*10-115*			07/03/2013	
Surrogate: p-Terphenyl-d14	*41.8*		ug/L	*50.51*		*82.8*	*41.8-115*			07/03/2013	
Matrix Spike Dup (B3F2805-MSD1)	**Source: 1306260-03**										
1,2,4-Trichlorobenzene	62.6	4.0	ug/L	101.0	ND	62.0	12.6-78.2	1.98	67.7	07/03/2013	
2,4,5-Trichlorophenol	181	10	ug/L	202.0	ND	89.7	35.7-118.6	0.635	35.6	07/03/2013	
2,4,6-Trichlorophenol	172	8.1	ug/L	202.0	ND	85.0	32.7-108.7	0.791	38.9	07/03/2013	
2,4-Dichlorophenol	157	20	ug/L	202.0	ND	77.9	24.7-98.5	0.149	53.7	07/03/2013	
2,4-Dimethylphenol	149	10	ug/L	202.0	ND	73.6	25.2-99.7	5.04	51.7	07/03/2013	
2,4-Dinitrophenol	122	51	ug/L	202.0	ND	60.5	32.9-131.3	4.88	27.1	07/03/2013	A05
2,4-Dinitrotoluene	90.0	10	ug/L	101.0	ND	89.1	52.9-115.3	2.18	20.8	07/03/2013	
2,6-Dinitrotoluene	87.6	10	ug/L	101.0	ND	86.8	54-109.4	5.09	19.4	07/03/2013	
2-Chloroaniline	71.3	10	ug/L	101.0	ND	70.6	30.4-97.2	0.367	35	07/03/2013	
2-Chloronaphthalene	73.6	4.0	ug/L	101.0	ND	72.9	26.2-92.3	0.388	45.4	07/03/2013	
2-Chlorophenol	114	20	ug/L	202.0	ND	56.4	13.1-87.2	4.08	78.4	07/03/2013	
2-Methyl-4,6-dinitrophenol	153	40	ug/L	202.0	ND	75.7	52.3-119.8	4.68	15	07/03/2013	
2-Methylnaphthalene	73.1	10	ug/L	101.0	ND	72.3	13.4-95.1	0.227	54.2	07/03/2013	
2-Methylphenol (o-Cresol)	118	20	ug/L	202.0	ND	58.6	14.6-92.5	4.68	64.8	07/03/2013	
2-Nitroaniline	83.4	40	ug/L	101.0	ND	82.6	49.2-108.4	5.12	23.2	07/03/2013	
2-Nitrophenol	150	10	ug/L	202.0	ND	74.5	18.3-95.6	0.554	63.5	07/03/2013	
3 & 4-Methylphenol	115	40	ug/L	202.0	ND	57.0	12.1-93	3.49	56.8	07/03/2013	
3-Nitroaniline	81.3	40	ug/L	101.0	ND	80.5	40.2-113.5	3.77	53	07/03/2013	
4-Bromophenyl phenyl ether	82.9	4.0	ug/L	101.0	ND	82.0	49.8-106.2	2.67	19.9	07/03/2013	
4-Chloro-3-methyl-phenol	164	10	ug/L	202.0	ND	81.3	37.1-109.2	1.83	35.1	07/03/2013	
4-Chloroaniline	67.1	20	ug/L	101.0	ND	66.5	27.2-109.5	4.60	48.7	07/03/2013	
4-Chlorodiphenylether	83.4	2.0	ug/L	101.0	ND	82.6	42.6-101.8	3.75	26.3	07/03/2013	
4-Nitroaniline	88.1	40	ug/L	101.0	ND	87.2	33-129.4	1.82	28.4	07/03/2013	
4-Nitrophenol	71.0	51	ug/L	202.0	ND	35.2	10-86.9	3.31	35.1	07/03/2013	
Acenaphthene	81.1	2.0	ug/L	101.0	ND	80.3	35.2-95.8	2.89	34.5	07/03/2013	
Acenaphthylene	84.2	2.0	ug/L	101.0	ND	83.3	38.3-103.1	2.46	35	07/03/2013	
Aniline	32.0	8.1	ug/L	101.0	ND	31.7	10-85.1	41.0	88.2	07/03/2013	
Anthracene	86.1	2.0	ug/L	101.0	ND	85.3	54.2-105.4	0.330	15	07/03/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2805 - Method: 3510 Water SVOC				**Prepared: 06/28/2013**							
Matrix Spike Dup (B3F2805-MSD1)	**Source: 1306260-03**										
Azobenzene	78.5	4.0	ug/L	101.0	ND	77.7	45.7-105.9	1.41	24.8	07/03/2013	
Benz[a]anthracene	85.1	2.0	ug/L	101.0	ND	84.3	39.8-119.3	0.334	21.1	07/03/2013	
Benzo[a]pyrene	82.1	2.0	ug/L	101.0	ND	81.3	30-125.5	1.17	27.1	07/03/2013	
Benzo[b]fluoranthene	98.2	2.0	ug/L	101.0	ND	97.3	29.9-124.8	0.962	27.2	07/03/2013	
Benzo[g,h,i]perylene	69.1	2.0	ug/L	101.0	ND	68.4	10-133.9	1.20	35.9	07/03/2013	
Benzo[k]fluoranthene	92.1	2.0	ug/L	101.0	ND	91.2	28.6-120.8	3.82	26.7	07/03/2013	
Benzyl Alcohol	119	100	ug/L	202.0	ND	58.9	10-193.5	2.17	54	07/03/2013	
Bis(2-chloroethoxy)methane	72.1	4.0	ug/L	101.0	ND	71.4	18.2-97.2	2.18	57.8	07/03/2013	
Bis(2-chloroethyl)ether	63.2	2.0	ug/L	101.0	ND	62.6	13-89.7	3.62	77.1	07/03/2013	
Bis(2-chloroisopropyl)ether	62.3	2.0	ug/L	101.0	ND	61.7	11.9-90.2	3.17	78.2	07/03/2013	
Bis(2-ethylhexyl)phthalate	84.2	10	ug/L	101.0	ND	83.4	24.7-129.2	4.03	29.8	07/03/2013	
Butyl benzyl phthalate	89.5	10	ug/L	101.0	ND	88.6	50.3-121.1	4.75	17.7	07/03/2013	
Carbazole	86.4	10	ug/L	101.0	ND	85.5	53.6-115.9	1.91	15	07/03/2013	
Chrysene	83.7	2.0	ug/L	101.0	ND	82.8	39.3-119.7	0.570	22.2	07/03/2013	
Dibenz[a,h]anthracene	72.0	4.0	ug/L	101.0	ND	71.2	10-140.4	0.806	39.2	07/03/2013	
Dibenzofuran	78.7	8.1	ug/L	101.0	ND	77.9	39.1-95.8	1.41	30.4	07/03/2013	
Diethylphthalate	95.5	10	ug/L	101.0	ND	94.5	56-112.5	4.55	17.9	07/03/2013	
Dimethyl phthalate	86.3	10	ug/L	101.0	ND	85.4	56.7-104.3	4.14	18.2	07/03/2013	
Di-n-butyl phthalate	88.2	10	ug/L	101.0	ND	87.3	53.6-114.7	2.82	15.1	07/03/2013	
Di-n-octyl phthalate	69.7	10	ug/L	101.0	ND	69.0	25.6-129.5	2.84	29.6	07/03/2013	
Fluoranthene	87.6	2.0	ug/L	101.0	ND	86.8	53.7-110.6	2.91	18.2	07/03/2013	
Fluorene	85.2	2.0	ug/L	101.0	ND	84.4	43.6-100.7	2.80	24.7	07/03/2013	
Hexachlorobenzene	84.5	2.0	ug/L	101.0	ND	83.6	45.8-105.9	1.44	18.6	07/03/2013	
Hexachlorobutadiene	61.2	2.0	ug/L	101.0	ND	60.6	10.8-78.6	0.283	78.9	07/03/2013	
Hexachlorocyclopentadiene	41.7	20	ug/L	101.0	ND	41.3	10-79.7	11.7	74.7	07/03/2013	
Hexachloroethane	46.7	2.0	ug/L	101.0	ND	46.2	10-76.7	2.83	95.4	07/03/2013	
Indeno(1,2,3-c,d)pyrene	58.2	4.0	ug/L	101.0	ND	57.6	12.4-140.5	0.983	33.5	07/03/2013	
Isophorone	68.6	2.0	ug/L	101.0	ND	67.9	23.1-96.1	3.40	47.1	07/03/2013	
N,N-dimethylaniline	63.6	10	ug/L	101.0	ND	62.9	26.8-92.2	1.08	29.9	07/03/2013	
Naphthalene	66.8	2.0	ug/L	101.0	ND	66.1	10-104.5	0.613	71.1	07/03/2013	
Nitrobenzene	72.9	4.0	ug/L	101.0	ND	72.2	19.2-91.4	0.0987	64.6	07/03/2013	
N-methylaniline	58.2	2.0	ug/L	101.0	ND	57.6	17.2-101.8	12.9	55.6	07/03/2013	
N-Nitrosodimethylamine	45.0	10	ug/L	101.0	ND	44.6	10-85.9	5.35	85.3	07/03/2013	
N-Nitrosodi-n-propylamine	76.6	4.0	ug/L	101.0	ND	75.9	21.8-95	6.36	52	07/03/2013	
N-Nitrosodiphenylamine	88.5	4.0	ug/L	101.0	ND	87.6	58.3-114.6	0.492	15.9	07/03/2013	
Pentachlorophenol	181	40	ug/L	202.0	ND	89.8	45.2-121.4	0.971	18.3	07/03/2013	
Phenanthrene	84.1	2.0	ug/L	101.0	ND	83.2	55.4-103.2	0.508	15	07/03/2013	
Phenol	68.9	10	ug/L	202.0	ND	34.1	10-59.7	3.28	75	07/03/2013	
Pyrene	85.1	2.0	ug/L	101.0	ND	84.2	49.1-113.8	0.704	18.9	07/03/2013	
Pyridine	16.8	40	ug/L	101.0	ND	16.6	10-72.3	61.1	156.3	07/03/2013	T
Tetramethylurea	62.3	2.0	ug/L	101.0	ND	61.7	23.6-99.1	5.71	33.3	07/03/2013	
Surrogate: 2,4,6-Tribromophenol	*104*		ug/L	*101.0*		*103*	*33.8-115*			07/03/2013	
Surrogate: 2-Fluorobiphenyl	*36.3*		ug/L	*50.51*		*71.9*	*24.1-115*			07/03/2013	
Surrogate: 2-Fluorophenol	*42.8*		ug/L	*101.0*		*42.3*	*10-115*			07/03/2013	
Surrogate: Nitrobenzene-d5	*34.5*		ug/L	*50.51*		*68.4*	*17.8-115*			07/03/2013	
Surrogate: Phenol-d6	*35.8*		ug/L	*101.0*		*35.4*	*10-115*			07/03/2013	
Surrogate: p-Terphenyl-d14	*42.5*		ug/L	*50.51*		*84.2*	*41.8-115*			07/03/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0113 - Method: 3510 Water SVOC				**Prepared: 07/01/2013**							
Blank (B3G0113-BLK1)											
1,2,4-Trichlorobenzene	ND	2.0	ug/L							07/11/2013	
2,4,5-Trichlorophenol	ND	5.0	ug/L							07/11/2013	
2,4,6-Trichlorophenol	ND	4.0	ug/L							07/11/2013	
2,4-Dichlorophenol	ND	10	ug/L							07/11/2013	
2,4-Dimethylphenol	ND	5.0	ug/L							07/11/2013	
2,4-Dinitrophenol	ND	25	ug/L							07/11/2013	
2,4-Dinitrotoluene	ND	5.0	ug/L							07/11/2013	
2,6-Dinitrotoluene	ND	5.0	ug/L							07/11/2013	
2-Chloroaniline	ND	5.0	ug/L							07/11/2013	
2-Chloronaphthalene	ND	2.0	ug/L							07/11/2013	
2-Chlorophenol	ND	10	ug/L							07/11/2013	
2-Methyl-4,6-dinitrophenol	ND	20	ug/L							07/11/2013	
2-Methylnaphthalene	ND	5.0	ug/L							07/11/2013	
2-Methylphenol (o-Cresol)	ND	10	ug/L							07/11/2013	
2-Nitroaniline	ND	20	ug/L							07/11/2013	
2-Nitrophenol	ND	5.0	ug/L							07/11/2013	
3 & 4-Methylphenol	ND	20	ug/L							07/11/2013	
3-Nitroaniline	ND	20	ug/L							07/11/2013	
4-Bromophenyl phenyl ether	ND	2.0	ug/L							07/11/2013	
4-Chloro-3-methyl-phenol	ND	5.0	ug/L							07/11/2013	
4-Chloroaniline	ND	10	ug/L							07/11/2013	
4-Chlorodiphenylether	ND	1.0	ug/L							07/11/2013	
4-Nitroaniline	ND	20	ug/L							07/11/2013	
4-Nitrophenol	ND	25	ug/L							07/11/2013	
Acenaphthene	ND	1.0	ug/L							07/11/2013	
Acenaphthylene	ND	1.0	ug/L							07/11/2013	
Aniline	ND	4.0	ug/L							07/11/2013	
Anthracene	ND	1.0	ug/L							07/11/2013	
Azobenzene	ND	2.0	ug/L							07/11/2013	
Benz[a]anthracene	ND	1.0	ug/L							07/11/2013	
Benzo[a]pyrene	ND	1.0	ug/L							07/11/2013	
Benzo[b]fluoranthene	ND	1.0	ug/L							07/11/2013	
Benzo[g,h,i]perylene	ND	1.0	ug/L							07/11/2013	
Benzo[k]fluoranthene	ND	1.0	ug/L							07/11/2013	
Benzyl Alcohol	ND	50	ug/L							07/11/2013	
Bis(2-chloroethoxy)methane	ND	2.0	ug/L							07/11/2013	
Bis(2-chloroethyl)ether	ND	1.0	ug/L							07/11/2013	
Bis(2-chloroisopropyl)ether	ND	1.0	ug/L							07/11/2013	
Bis(2-ethylhexyl)phthalate	ND	5.0	ug/L							07/11/2013	
Butyl benzyl phthalate	ND	5.0	ug/L							07/11/2013	
Carbazole	ND	5.0	ug/L							07/11/2013	
Chrysene	ND	1.0	ug/L							07/11/2013	
Dibenz[a,h]anthracene	ND	2.0	ug/L							07/11/2013	
Dibenzofuran	ND	4.0	ug/L							07/11/2013	
Diethylphthalate	ND	5.0	ug/L							07/11/2013	
Dimethyl phthalate	ND	5.0	ug/L							07/11/2013	
Di-n-butyl phthalate	ND	5.0	ug/L							07/11/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0113 - Method: 3510 Water SVOC				**Prepared: 07/01/2013**							
Blank (B3G0113-BLK1)											
Di-n-octyl phthalate	ND	5.0	ug/L							07/11/2013	
Fluoranthene	ND	1.0	ug/L							07/11/2013	
Fluorene	ND	1.0	ug/L							07/11/2013	
Hexachlorobenzene	ND	1.0	ug/L							07/11/2013	
Hexachlorobutadiene	ND	1.0	ug/L							07/11/2013	
Hexachlorocyclopentadiene	ND	10	ug/L							07/11/2013	
Hexachloroethane	ND	1.0	ug/L							07/11/2013	
Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L							07/11/2013	
Isophorone	ND	1.0	ug/L							07/11/2013	
N,N-dimethylaniline	ND	5.0	ug/L							07/11/2013	
Naphthalene	ND	1.0	ug/L							07/11/2013	
Nitrobenzene	ND	2.0	ug/L							07/11/2013	
N-methylaniline	ND	1.0	ug/L							07/11/2013	
N-Nitrosodimethylamine	ND	5.0	ug/L							07/11/2013	
N-Nitrosodi-n-propylamine	ND	2.0	ug/L							07/11/2013	
N-Nitrosodiphenylamine	ND	2.0	ug/L							07/11/2013	
Pentachlorophenol	ND	20	ug/L							07/11/2013	
Phenanthrene	ND	1.0	ug/L							07/11/2013	
Phenol	ND	5.0	ug/L							07/11/2013	
Pyrene	ND	1.0	ug/L							07/11/2013	
Pyridine	ND	20	ug/L							07/11/2013	
Tetramethylurea	ND	1.0	ug/L							07/11/2013	
Surrogate: 2,4,6-Tribromophenol	*34.5*		ug/L	*50.00*		*69.1*	*33.8-115*			07/11/2013	
Surrogate: 2-Fluorobiphenyl	*14.2*		ug/L	*25.00*		*56.7*	*24.1-115*			07/11/2013	
Surrogate: 2-Fluorophenol	*12.6*		ug/L	*50.00*		*25.2*	*10-115*			07/11/2013	
Surrogate: Nitrobenzene-d5	*14.9*		ug/L	*25.00*		*59.7*	*17.8-115*			07/11/2013	
Surrogate: Phenol-d6	*8.58*		ug/L	*50.00*		*17.2*	*10-115*			07/11/2013	
Surrogate: p-Terphenyl-d14	*17.7*		ug/L	*25.00*		*70.6*	*41.8-115*			07/11/2013	
LCS (B3G0113-BS1)											
1,2,4-Trichlorobenzene	24.5	2.0	ug/L	50.00		49.0	17-70.9			07/11/2013	
2,4,5-Trichlorophenol	82.5	5.0	ug/L	100.0		82.5	42-109.1			07/11/2013	
2,4,6-Trichlorophenol	84.0	4.0	ug/L	100.0		84.0	37.7-104.6			07/11/2013	
2,4-Dichlorophenol	69.2	10	ug/L	100.0		69.2	30.2-96.9			07/11/2013	
2,4-Dimethylphenol	64.3	5.0	ug/L	100.0		64.3	29.9-97.6			07/11/2013	
2,4-Dinitrophenol	63.3	25	ug/L	100.0		63.3	34.3-113			07/11/2013	
2,4-Dinitrotoluene	42.8	5.0	ug/L	50.00		85.6	52.9-115.4			07/11/2013	
2,6-Dinitrotoluene	41.5	5.0	ug/L	50.00		83.0	54.6-109.4			07/11/2013	
2-Chloroaniline	32.4	5.0	ug/L	50.00		64.7	51.9-89.3			07/11/2013	
2-Chloronaphthalene	30.0	2.0	ug/L	50.00		59.9	28.2-85.3			07/11/2013	
2-Chlorophenol	53.7	10	ug/L	100.0		53.7	18.4-84.6			07/11/2013	
2-Methyl-4,6-dinitrophenol	75.5	20	ug/L	100.0		75.5	52.1-117.9			07/11/2013	
2-Methylnaphthalene	29.1	5.0	ug/L	50.00		58.3	25.3-79.1			07/11/2013	
2-Methylphenol (o-Cresol)	46.1	10	ug/L	100.0		46.1	22.9-83.2			07/11/2013	
2-Nitroaniline	37.8	20	ug/L	50.00		75.5	51.1-108.1			07/11/2013	
2-Nitrophenol	66.7	5.0	ug/L	100.0		66.7	24.8-94.7			07/11/2013	
3 & 4-Methylphenol	43.3	20	ug/L	100.0		43.3	20.4-80			07/11/2013	
3-Nitroaniline	37.0	20	ug/L	50.00		74.1	51.8-112.1			07/11/2013	

Lab Work Order # 1306260

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0113 - Method: 3510 Water SVOC				**Prepared: 07/01/2013**							
LCS (B3G0113-BS1)											
4-Bromophenyl phenyl ether	35.4	2.0	ug/L	50.00		70.8	48.6-102.4			07/11/2013	
4-Chloro-3-methyl-phenol	70.8	5.0	ug/L	100.0		70.8	40.3-104.7			07/11/2013	
4-Chloroaniline	30.3	10	ug/L	50.00		60.6	46.4-106.3			07/11/2013	
4-Chlorodiphenylether	36.8	1.0	ug/L	50.00		73.6	40-98.2			07/11/2013	
4-Nitroaniline	42.5	20	ug/L	50.00		85.0	47.6-127.5			07/11/2013	
4-Nitrophenol	29.9	25	ug/L	100.0		29.9	15.1-52			07/11/2013	
Acenaphthene	34.0	1.0	ug/L	50.00		67.9	35.2-90.9			07/11/2013	
Acenaphthylene	36.1	1.0	ug/L	50.00		72.2	38.7-99.1			07/11/2013	
Aniline	16.0	4.0	ug/L	50.00		32.0	10-88.7			07/11/2013	
Anthracene	40.0	1.0	ug/L	50.00		80.0	53.9-106.8			07/11/2013	
Azobenzene	39.7	2.0	ug/L	50.00		79.4	39.7-109.3			07/11/2013	
Benz[a]anthracene	35.2	1.0	ug/L	50.00		70.4	52.5-113.7			07/11/2013	
Benzo[a]pyrene	28.1	1.0	ug/L	50.00		56.2	43.7-118			07/11/2013	
Benzo[b]fluoranthene	33.8	1.0	ug/L	50.00		67.7	44.1-118.6			07/11/2013	
Benzo[g,h,i]perylene	26.3	1.0	ug/L	50.00		52.6	25.8-127			07/11/2013	
Benzo[k]fluoranthene	32.4	1.0	ug/L	50.00		64.8	41.9-117.7			07/11/2013	
Benzyl Alcohol	45.1	50	ug/L	100.0		45.1	22.1-175			07/11/2013	T
Bis(2-chloroethoxy)methane	31.2	2.0	ug/L	50.00		62.5	27-96.8			07/11/2013	
Bis(2-chloroethyl)ether	28.5	1.0	ug/L	50.00		57.1	19.9-89.6			07/11/2013	
Bis(2-chloroisopropyl)ether	51.4	1.0	ug/L	50.00		103	14.2-92.7			07/11/2013	A09
Bis(2-ethylhexyl)phthalate	33.5	5.0	ug/L	50.00		67.1	41.1-120.2			07/11/2013	
Butyl benzyl phthalate	32.6	5.0	ug/L	50.00		65.2	54.6-118.5			07/11/2013	
Carbazole	42.0	5.0	ug/L	50.00		84.1	55.7-113.9			07/11/2013	
Chrysene	33.1	1.0	ug/L	50.00		66.2	53.1-114.9			07/11/2013	
Dibenz[a,h]anthracene	28.7	2.0	ug/L	50.00		57.5	23.4-134.7			07/11/2013	
Dibenzofuran	35.1	4.0	ug/L	50.00		70.1	37.7-92			07/11/2013	
Diethylphthalate	44.8	5.0	ug/L	50.00		89.6	56.6-111.9			07/11/2013	
Dimethyl phthalate	41.6	5.0	ug/L	50.00		83.2	56.9-106.4			07/11/2013	
Di-n-butyl phthalate	41.8	5.0	ug/L	50.00		83.6	55.1-115.8			07/11/2013	
Di-n-octyl phthalate	34.0	5.0	ug/L	50.00		67.9	43.6-120.8			07/11/2013	
Fluoranthene	39.4	1.0	ug/L	50.00		78.7	55-112.1			07/11/2013	
Fluorene	36.9	1.0	ug/L	50.00		73.8	42-98			07/11/2013	
Hexachlorobenzene	35.1	1.0	ug/L	50.00		70.3	49.5-103.4			07/11/2013	
Hexachlorobutadiene	24.1	1.0	ug/L	50.00		48.3	14.2-71.4			07/11/2013	
Hexachlorocyclopentadiene	14.8	10	ug/L	50.00		29.7	10-58.9			07/11/2013	
Hexachloroethane	20.5	1.0	ug/L	50.00		41.0	10.9-61.4			07/11/2013	
Indeno(1,2,3-c,d)pyrene	25.3	2.0	ug/L	50.00		50.6	29.1-133.2			07/11/2013	
Isophorone	31.4	1.0	ug/L	50.00		62.9	29.3-98.9			07/11/2013	
N,N-dimethylaniline	30.5	5.0	ug/L	50.00		61.0	38.2-91.2			07/11/2013	
Naphthalene	27.3	1.0	ug/L	50.00		54.6	22-76.8			07/11/2013	
Nitrobenzene	31.0	2.0	ug/L	50.00		62.1	26-89.7			07/11/2013	
N-methylaniline	30.0	1.0	ug/L	50.00		60.0	29.6-98.5			07/11/2013	
N-Nitrosodimethylamine	14.6	5.0	ug/L	50.00		29.2	10-72.1			07/11/2013	
N-Nitrosodi-n-propylamine	35.9	2.0	ug/L	50.00		71.9	29.5-96.3			07/11/2013	
N-Nitrosodiphenylamine	37.1	2.0	ug/L	50.00		74.2	57.3-112.2			07/11/2013	
Pentachlorophenol	63.6	20	ug/L	100.0		63.6	45.5-108.7			07/11/2013	
Phenanthrene	37.7	1.0	ug/L	50.00		75.4	54.5-102.4			07/11/2013	
Phenol	16.5	5.0	ug/L	100.0		16.5	10-40.3			07/11/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0113 - Method: 3510 Water SVOC				**Prepared: 07/01/2013**							
LCS (B3G0113-BS1)											
Pyrene	34.0	1.0	ug/L	50.00		68.0	54.2-110.5			07/11/2013	
Pyridine	9.37	20	ug/L	50.00		18.7	10-63.2			07/11/2013	T
Tetramethylurea	21.3	1.0	ug/L	50.00		42.6	13.9-94.9			07/11/2013	
Surrogate: 2,4,6-Tribromophenol	*37.8*		ug/L	*50.00*		*75.7*	*33.8-115*			07/11/2013	
Surrogate: 2-Fluorobiphenyl	*15.5*		ug/L	*25.00*		*61.9*	*24.1-115*			07/11/2013	
Surrogate: 2-Fluorophenol	*13.2*		ug/L	*50.00*		*26.3*	*10-115*			07/11/2013	
Surrogate: Nitrobenzene-d5	*15.8*		ug/L	*25.00*		*63.3*	*17.8-115*			07/11/2013	
Surrogate: Phenol-d6	*8.10*		ug/L	*50.00*		*16.2*	*10-115*			07/11/2013	
Surrogate: p-Terphenyl-d14	*15.1*		ug/L	*25.00*		*60.4*	*41.8-115*			07/11/2013	
LCS Dup (B3G0113-BSD1)											
1,2,4-Trichlorobenzene	25.6	2.0	ug/L	50.00		51.2	17-70.9	4.32	28	07/11/2013	
2,4,5-Trichlorophenol	80.6	5.0	ug/L	100.0		80.6	42-109.1	2.41	19.9	07/11/2013	
2,4,6-Trichlorophenol	82.7	4.0	ug/L	100.0		82.7	37.7-104.6	1.55	19.8	07/11/2013	
2,4-Dichlorophenol	68.4	10	ug/L	100.0		68.4	30.2-96.9	1.22	21.7	07/11/2013	
2,4-Dimethylphenol	64.0	5.0	ug/L	100.0		64.0	29.9-97.6	0.505	24.2	07/11/2013	
2,4-Dinitrophenol	57.8	25	ug/L	100.0		57.8	34.3-113	9.03	32.4	07/11/2013	
2,4-Dinitrotoluene	41.4	5.0	ug/L	50.00		82.7	52.9-115.4	3.46	20.9	07/11/2013	
2,6-Dinitrotoluene	39.4	5.0	ug/L	50.00		78.8	54.6-109.4	5.13	16.5	07/11/2013	
2-Chloroaniline	31.8	5.0	ug/L	50.00		63.5	51.9-89.3	1.83	20	07/11/2013	
2-Chloronaphthalene	30.9	2.0	ug/L	50.00		61.8	28.2-85.3	3.08	22.4	07/11/2013	
2-Chlorophenol	53.1	10	ug/L	100.0		53.1	18.4-84.6	1.11	29.8	07/11/2013	
2-Methyl-4,6-dinitrophenol	75.2	20	ug/L	100.0		75.2	52.1-117.9	0.416	15	07/11/2013	
2-Methylnaphthalene	30.5	5.0	ug/L	50.00		61.0	25.3-79.1	4.64	21.8	07/11/2013	
2-Methylphenol (o-Cresol)	47.0	10	ug/L	100.0		47.0	22.9-83.2	1.78	30.2	07/11/2013	
2-Nitroaniline	35.9	20	ug/L	50.00		71.9	51.1-108.1	4.94	15.9	07/11/2013	
2-Nitrophenol	67.4	5.0	ug/L	100.0		67.4	24.8-94.7	0.915	24.3	07/11/2013	
3 & 4-Methylphenol	43.7	20	ug/L	100.0		43.7	20.4-80	0.790	30.2	07/11/2013	
3-Nitroaniline	36.2	20	ug/L	50.00		72.5	51.8-112.1	2.23	20.5	07/11/2013	
4-Bromophenyl phenyl ether	35.8	2.0	ug/L	50.00		71.6	48.6-102.4	1.15	15.9	07/11/2013	
4-Chloro-3-methyl-phenol	70.0	5.0	ug/L	100.0		70.0	40.3-104.7	1.12	20	07/11/2013	
4-Chloroaniline	31.5	10	ug/L	50.00		62.9	46.4-106.3	3.83	33.6	07/11/2013	
4-Chlorodiphenylether	36.2	1.0	ug/L	50.00		72.4	40-98.2	1.63	17	07/11/2013	
4-Nitroaniline	41.2	20	ug/L	50.00		82.3	47.6-127.5	3.22	27.5	07/11/2013	
4-Nitrophenol	30.4	25	ug/L	100.0		30.4	15.1-52	1.56	28.2	07/11/2013	
Acenaphthene	33.8	1.0	ug/L	50.00		67.5	35.2-90.9	0.585	19.1	07/11/2013	
Acenaphthylene	36.1	1.0	ug/L	50.00		72.2	38.7-99.1	0.0615	18	07/11/2013	
Aniline	20.2	4.0	ug/L	50.00		40.4	10-88.7	23.3	55.7	07/11/2013	
Anthracene	39.0	1.0	ug/L	50.00		78.0	53.9-106.8	2.61	15	07/11/2013	
Azobenzene	39.2	2.0	ug/L	50.00		78.4	39.7-109.3	1.23	17.4	07/11/2013	
Benz[a]anthracene	33.2	1.0	ug/L	50.00		66.4	52.5-113.7	5.82	16	07/11/2013	
Benzo[a]pyrene	26.1	1.0	ug/L	50.00		52.3	43.7-118	7.20	22.8	07/11/2013	
Benzo[b]fluoranthene	30.8	1.0	ug/L	50.00		61.5	44.1-118.6	9.51	23.4	07/11/2013	
Benzo[g,h,i]perylene	26.1	1.0	ug/L	50.00		52.3	25.8-127	0.649	32.2	07/11/2013	
Benzo[k]fluoranthene	30.1	1.0	ug/L	50.00		60.3	41.9-117.7	7.28	22.8	07/11/2013	
Benzyl Alcohol	43.4	50	ug/L	100.0		43.4	22.1-175	3.82	32.9	07/11/2013	T
Bis(2-chloroethoxy)methane	30.4	2.0	ug/L	50.00		60.9	27-96.8	2.56	25.6	07/11/2013	
Bis(2-chloroethyl)ether	26.8	1.0	ug/L	50.00		53.5	19.9-89.6	6.42	32	07/11/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0113 - Method: 3510 Water SVOC				**Prepared: 07/01/2013**							
LCS Dup (B3G0113-BSD1)											
Bis(2-chloroisopropyl)ether	49.4	1.0	ug/L	50.00		98.7	14.2-92.7	3.98	28.2	07/11/2013	A09
Bis(2-ethylhexyl)phthalate	31.0	5.0	ug/L	50.00		62.1	41.1-120.2	7.74	25.7	07/11/2013	
Butyl benzyl phthalate	31.4	5.0	ug/L	50.00		62.8	54.6-118.5	3.78	15.1	07/11/2013	
Carbazole	40.6	5.0	ug/L	50.00		81.1	55.7-113.9	3.58	15	07/11/2013	
Chrysene	31.1	1.0	ug/L	50.00		62.2	53.1-114.9	6.17	16.3	07/11/2013	
Dibenz[a,h]anthracene	29.4	2.0	ug/L	50.00		58.7	23.4-134.7	2.14	29.8	07/11/2013	
Dibenzofuran	34.5	4.0	ug/L	50.00		69.1	37.7-92	1.49	17	07/11/2013	
Diethylphthalate	42.9	5.0	ug/L	50.00		85.8	56.6-111.9	4.38	17.7	07/11/2013	
Dimethyl phthalate	39.8	5.0	ug/L	50.00		79.6	56.9-106.4	4.35	15	07/11/2013	
Di-n-butyl phthalate	40.1	5.0	ug/L	50.00		80.2	55.1-115.8	4.15	15	07/11/2013	
Di-n-octyl phthalate	32.5	5.0	ug/L	50.00		65.1	43.6-120.8	4.23	26.2	07/11/2013	
Fluoranthene	37.6	1.0	ug/L	50.00		75.2	55-112.1	4.60	16.3	07/11/2013	
Fluorene	36.4	1.0	ug/L	50.00		72.9	42-98	1.28	16.4	07/11/2013	
Hexachlorobenzene	34.5	1.0	ug/L	50.00		69.0	49.5-103.4	1.74	15	07/11/2013	
Hexachlorobutadiene	24.9	1.0	ug/L	50.00		49.8	14.2-71.4	3.15	29	07/11/2013	
Hexachlorocyclopentadiene	15.9	10	ug/L	50.00		31.8	10-58.9	6.92	36.7	07/11/2013	
Hexachloroethane	20.8	1.0	ug/L	50.00		41.7	10.9-61.4	1.53	33.6	07/11/2013	
Indeno(1,2,3-c,d)pyrene	25.6	2.0	ug/L	50.00		51.1	29.1-133.2	1.09	29.3	07/11/2013	
Isophorone	31.2	1.0	ug/L	50.00		62.5	29.3-98.9	0.622	25.6	07/11/2013	
N,N-dimethylaniline	29.9	5.0	ug/L	50.00		59.8	38.2-91.2	2.07	19.6	07/11/2013	
Naphthalene	28.0	1.0	ug/L	50.00		55.9	22-76.8	2.41	24.2	07/11/2013	
Nitrobenzene	31.2	2.0	ug/L	50.00		62.5	26-89.7	0.695	25	07/11/2013	
N-methylaniline	31.7	1.0	ug/L	50.00		63.4	29.6-98.5	5.50	40.7	07/11/2013	
N-Nitrosodimethylamine	8.20	5.0	ug/L	50.00		16.4	10-72.1	56.2	45.8	07/11/2013	A07
N-Nitrosodi-n-propylamine	34.6	2.0	ug/L	50.00		69.3	29.5-96.3	3.68	27.6	07/11/2013	
N-Nitrosodiphenylamine	37.1	2.0	ug/L	50.00		74.2	57.3-112.2	0.0194	16.7	07/11/2013	
Pentachlorophenol	60.3	20	ug/L	100.0		60.3	45.5-108.7	5.35	15	07/11/2013	
Phenanthrene	36.8	1.0	ug/L	50.00		73.5	54.5-102.4	2.46	15	07/11/2013	
Phenol	19.2	5.0	ug/L	100.0		19.2	10-40.3	15.2	34.4	07/11/2013	
Pyrene	32.2	1.0	ug/L	50.00		64.4	54.2-110.5	5.41	18.6	07/11/2013	
Pyridine	5.90	20	ug/L	50.00		11.8	10-63.2	45.4	94.9	07/11/2013	T
Tetramethylurea	21.2	1.0	ug/L	50.00		42.3	13.9-94.9	0.728	30.3	07/11/2013	
Surrogate: 2,4,6-Tribromophenol	*38.1*		ug/L	*50.00*		*76.2*	*33.8-115*			07/11/2013	
Surrogate: 2-Fluorobiphenyl	*15.2*		ug/L	*25.00*		*60.8*	*24.1-115*			07/11/2013	
Surrogate: 2-Fluorophenol	*11.2*		ug/L	*50.00*		*22.5*	*10-115*			07/11/2013	
Surrogate: Nitrobenzene-d5	*15.8*		ug/L	*25.00*		*63.3*	*17.8-115*			07/11/2013	
Surrogate: Phenol-d6	*8.13*		ug/L	*50.00*		*16.3*	*10-115*			07/11/2013	
Surrogate: p-Terphenyl-d14	*14.4*		ug/L	*25.00*		*57.6*	*41.8-115*			07/11/2013	
Matrix Spike (B3G0113-MS1)	**Source: 1306260-13**										
1,2,4-Trichlorobenzene	28.2	2.0	ug/L	50.00	ND	56.5	12.6-78.2			07/11/2013	
2,4,5-Trichlorophenol	83.6	5.0	ug/L	100.0	ND	83.6	35.7-118.6			07/11/2013	
2,4,6-Trichlorophenol	84.5	4.0	ug/L	100.0	ND	84.5	32.7-108.7			07/11/2013	
2,4-Dichlorophenol	69.6	10	ug/L	100.0	ND	69.6	24.7-98.5			07/11/2013	
2,4-Dimethylphenol	62.7	5.0	ug/L	100.0	ND	62.7	25.2-99.7			07/11/2013	
2,4-Dinitrophenol	65.8	25	ug/L	100.0	ND	65.8	32.9-131.3			07/11/2013	
2,4-Dinitrotoluene	42.3	5.0	ug/L	50.00	ND	84.7	52.9-115.3			07/11/2013	
2,6-Dinitrotoluene	41.0	5.0	ug/L	50.00	ND	81.9	54-109.4			07/11/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0113 - Method: 3510 Water SVOC				**Prepared: 07/01/2013**							
Matrix Spike (B3G0113-MS1)	**Source: 1306260-13**										
2-Chloroaniline	31.1	5.0	ug/L	50.00	ND	62.2	30.4-97.2			07/11/2013	
2-Chloronaphthalene	32.9	2.0	ug/L	50.00	ND	65.8	26.2-92.3			07/11/2013	
2-Chlorophenol	55.2	10	ug/L	100.0	ND	55.2	13.1-87.2			07/11/2013	
2-Methyl-4,6-dinitrophenol	80.6	20	ug/L	100.0	ND	80.6	52.3-119.8			07/11/2013	
2-Methylnaphthalene	33.1	5.0	ug/L	50.00	ND	66.1	13.4-95.1			07/11/2013	
2-Methylphenol (o-Cresol)	45.9	10	ug/L	100.0	ND	45.9	14.6-92.5			07/11/2013	
2-Nitroaniline	35.2	20	ug/L	50.00	ND	70.4	49.2-108.4			07/11/2013	
2-Nitrophenol	68.4	5.0	ug/L	100.0	ND	68.4	18.3-95.6			07/11/2013	
3 & 4-Methylphenol	44.2	20	ug/L	100.0	ND	44.2	12.1-93			07/11/2013	
3-Nitroaniline	34.8	20	ug/L	50.00	ND	69.7	40.2-113.5			07/11/2013	
4-Bromophenyl phenyl ether	35.7	2.0	ug/L	50.00	ND	71.5	49.8-106.2			07/11/2013	
4-Chloro-3-methyl-phenol	71.2	5.0	ug/L	100.0	ND	71.2	37.1-109.2			07/11/2013	
4-Chloroaniline	29.2	10	ug/L	50.00	ND	58.4	27.2-109.5			07/11/2013	
4-Chlorodiphenylether	36.3	1.0	ug/L	50.00	ND	72.6	42.6-101.8			07/11/2013	
4-Nitroaniline	37.2	20	ug/L	50.00	ND	74.4	33-129.4			07/11/2013	
4-Nitrophenol	30.1	25	ug/L	100.0	ND	30.1	10-86.9			07/11/2013	
Acenaphthene	35.7	1.0	ug/L	50.00	ND	71.3	35.2-95.8			07/11/2013	
Acenaphthylene	37.9	1.0	ug/L	50.00	ND	75.9	38.3-103.1			07/11/2013	
Aniline	16.6	4.0	ug/L	50.00	ND	33.3	10-85.1			07/11/2013	
Anthracene	38.8	1.0	ug/L	50.00	ND	77.5	54.2-105.4			07/11/2013	
Azobenzene	40.7	2.0	ug/L	50.00	ND	81.4	45.7-105.9			07/11/2013	
Benz[a]anthracene	26.6	1.0	ug/L	50.00	ND	53.2	39.8-119.3			07/11/2013	
Benzo[a]pyrene	20.9	1.0	ug/L	50.00	ND	41.8	30-125.5			07/11/2013	
Benzo[b]fluoranthene	25.4	1.0	ug/L	50.00	ND	50.8	29.9-124.8			07/11/2013	
Benzo[g,h,i]perylene	19.5	1.0	ug/L	50.00	ND	39.1	10-133.9			07/11/2013	
Benzo[k]fluoranthene	24.2	1.0	ug/L	50.00	ND	48.4	28.6-120.8			07/11/2013	
Benzyl Alcohol	44.3	50	ug/L	100.0	ND	44.3	10-193.5			07/11/2013	T
Bis(2-chloroethoxy)methane	31.3	2.0	ug/L	50.00	ND	62.7	18.2-97.2			07/11/2013	
Bis(2-chloroethyl)ether	29.9	1.0	ug/L	50.00	ND	59.7	13-89.7			07/11/2013	
Bis(2-chloroisopropyl)ether	54.1	1.0	ug/L	50.00	ND	108	11.9-90.2			07/11/2013	A04
Bis(2-ethylhexyl)phthalate	22.5	5.0	ug/L	50.00	ND	45.1	24.7-129.2			07/11/2013	
Butyl benzyl phthalate	28.8	5.0	ug/L	50.00	ND	57.6	50.3-121.1			07/11/2013	
Carbazole	42.3	5.0	ug/L	50.00	ND	84.6	53.6-115.9			07/11/2013	
Chrysene	24.4	1.0	ug/L	50.00	ND	48.8	39.3-119.7			07/11/2013	
Dibenz[a,h]anthracene	21.3	2.0	ug/L	50.00	ND	42.6	10-140.4			07/11/2013	
Dibenzofuran	35.3	4.0	ug/L	50.00	ND	70.6	39.1-95.8			07/11/2013	
Diethylphthalate	45.0	5.0	ug/L	50.00	ND	89.9	56-112.5			07/11/2013	
Dimethyl phthalate	40.4	5.0	ug/L	50.00	ND	80.8	56.7-104.3			07/11/2013	
Di-n-butyl phthalate	40.0	5.0	ug/L	50.00	ND	79.9	53.6-114.7			07/11/2013	
Di-n-octyl phthalate	24.1	5.0	ug/L	50.00	ND	48.3	25.6-129.5			07/11/2013	
Fluoranthene	36.2	1.0	ug/L	50.00	ND	72.4	53.7-110.6			07/11/2013	
Fluorene	37.0	1.0	ug/L	50.00	ND	74.0	43.6-100.7			07/11/2013	
Hexachlorobenzene	30.6	1.0	ug/L	50.00	ND	61.1	45.8-105.9			07/11/2013	
Hexachlorobutadiene	26.9	1.0	ug/L	50.00	ND	53.7	10.8-78.6			07/11/2013	
Hexachlorocyclopentadiene	19.3	10	ug/L	50.00	ND	38.5	10-79.7			07/11/2013	
Hexachloroethane	24.5	1.0	ug/L	50.00	ND	49.0	10-76.7			07/11/2013	
Indeno(1,2,3-c,d)pyrene	19.0	2.0	ug/L	50.00	ND	37.9	12.4-140.5			07/11/2013	
Isophorone	31.3	1.0	ug/L	50.00	ND	62.7	23.1-96.1			07/11/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0113 - Method: 3510 Water SVOC				**Prepared: 07/01/2013**							
Matrix Spike (B3G0113-MS1)	**Source: 1306260-13**										
N,N-dimethylaniline	26.8	5.0	ug/L	50.00	ND	53.6	26.8-92.2			07/11/2013	
Naphthalene	30.3	1.0	ug/L	50.00	ND	60.7	10-104.5			07/11/2013	
Nitrobenzene	32.9	2.0	ug/L	50.00	ND	65.8	19.2-91.4			07/11/2013	
N-methylaniline	31.6	1.0	ug/L	50.00	ND	63.2	17.2-101.8			07/11/2013	
N-Nitrosodimethylamine	14.2	5.0	ug/L	50.00	ND	28.5	10-85.9			07/11/2013	
N-Nitrosodi-n-propylamine	36.9	2.0	ug/L	50.00	ND	73.8	21.8-95			07/11/2013	
N-Nitrosodiphenylamine	40.8	2.0	ug/L	50.00	ND	81.6	58.3-114.6			07/11/2013	
Pentachlorophenol	65.5	20	ug/L	100.0	ND	65.5	45.2-121.4			07/11/2013	
Phenanthrene	37.4	1.0	ug/L	50.00	ND	74.9	55.4-103.2			07/11/2013	
Phenol	16.5	5.0	ug/L	100.0	ND	16.5	10-59.7			07/11/2013	
Pyrene	29.1	1.0	ug/L	50.00	ND	58.3	49.1-113.8			07/11/2013	
Pyridine	8.70	20	ug/L	50.00	ND	17.4	10-72.3			07/11/2013	T
Tetramethylurea	21.5	1.0	ug/L	50.00	ND	43.0	23.6-99.1			07/11/2013	
Surrogate: 2,4,6-Tribromophenol	*37.9*		ug/L	*50.00*		*75.8*	*33.8-115*			07/11/2013	
Surrogate: 2-Fluorobiphenyl	*17.1*		ug/L	*25.00*		*68.3*	*24.1-115*			07/11/2013	
Surrogate: 2-Fluorophenol	*12.7*		ug/L	*50.00*		*25.5*	*10-115*			07/11/2013	
Surrogate: Nitrobenzene-d5	*15.8*		ug/L	*25.00*		*63.1*	*17.8-115*			07/11/2013	
Surrogate: Phenol-d6	*7.95*		ug/L	*50.00*		*15.9*	*10-115*			07/11/2013	
Surrogate: p-Terphenyl-d14	*11.7*		ug/L	*25.00*		*46.8*	*41.8-115*			07/11/2013	
Matrix Spike Dup (B3G0113-MSD1)	**Source: 1306260-13**										
1,2,4-Trichlorobenzene	27.7	2.0	ug/L	50.00	ND	55.3	12.6-78.2	2.05	67.7	07/11/2013	
2,4,5-Trichlorophenol	76.9	5.0	ug/L	100.0	ND	76.9	35.7-118.6	8.31	35.6	07/11/2013	
2,4,6-Trichlorophenol	78.6	4.0	ug/L	100.0	ND	78.6	32.7-108.7	7.22	38.9	07/11/2013	
2,4-Dichlorophenol	66.3	10	ug/L	100.0	ND	66.3	24.7-98.5	4.77	53.7	07/11/2013	
2,4-Dimethylphenol	60.7	5.0	ug/L	100.0	ND	60.7	25.2-99.7	3.28	51.7	07/11/2013	
2,4-Dinitrophenol	62.5	25	ug/L	100.0	ND	62.5	32.9-131.3	5.24	27.1	07/11/2013	
2,4-Dinitrotoluene	41.4	5.0	ug/L	50.00	ND	82.8	52.9-115.3	2.18	20.8	07/11/2013	
2,6-Dinitrotoluene	38.7	5.0	ug/L	50.00	ND	77.5	54-109.4	5.59	19.4	07/11/2013	
2-Chloroaniline	30.8	5.0	ug/L	50.00	ND	61.5	30.4-97.2	1.05	35	07/11/2013	
2-Chloronaphthalene	31.4	2.0	ug/L	50.00	ND	62.7	26.2-92.3	4.86	45.4	07/11/2013	
2-Chlorophenol	51.7	10	ug/L	100.0	ND	51.7	13.1-87.2	6.57	78.4	07/11/2013	
2-Methyl-4,6-dinitrophenol	74.9	20	ug/L	100.0	ND	74.9	52.3-119.8	7.30	15	07/11/2013	
2-Methylnaphthalene	31.4	5.0	ug/L	50.00	ND	62.7	13.4-95.1	5.30	54.2	07/11/2013	
2-Methylphenol (o-Cresol)	41.9	10	ug/L	100.0	ND	41.9	14.6-92.5	9.13	64.8	07/11/2013	
2-Nitroaniline	33.7	20	ug/L	50.00	ND	67.4	49.2-108.4	4.29	23.2	07/11/2013	
2-Nitrophenol	66.1	5.0	ug/L	100.0	ND	66.1	18.3-95.6	3.47	63.5	07/11/2013	
3 & 4-Methylphenol	39.4	20	ug/L	100.0	ND	39.4	12.1-93	11.6	56.8	07/11/2013	
3-Nitroaniline	34.0	20	ug/L	50.00	ND	68.0	40.2-113.5	2.49	53	07/11/2013	
4-Bromophenyl phenyl ether	34.3	2.0	ug/L	50.00	ND	68.5	49.8-106.2	4.23	19.9	07/11/2013	
4-Chloro-3-methyl-phenol	66.8	5.0	ug/L	100.0	ND	66.8	37.1-109.2	6.33	35.1	07/11/2013	
4-Chloroaniline	29.0	10	ug/L	50.00	ND	58.0	27.2-109.5	0.756	48.7	07/11/2013	
4-Chlorodiphenylether	34.4	1.0	ug/L	50.00	ND	68.9	42.6-101.8	5.34	26.3	07/11/2013	
4-Nitroaniline	38.3	20	ug/L	50.00	ND	76.6	33-129.4	2.89	28.4	07/11/2013	
4-Nitrophenol	29.0	25	ug/L	100.0	ND	29.0	10-86.9	3.72	35.1	07/11/2013	
Acenaphthene	33.6	1.0	ug/L	50.00	ND	67.2	35.2-95.8	6.01	34.5	07/11/2013	
Acenaphthylene	35.6	1.0	ug/L	50.00	ND	71.3	38.3-103.1	6.26	35	07/11/2013	
Aniline	19.4	4.0	ug/L	50.00	ND	38.8	10-85.1	15.2	88.2	07/11/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0113 - Method: 3510 Water SVOC				**Prepared: 07/01/2013**							
Matrix Spike Dup (B3G0113-MSD1)	**Source: 1306260-13**										
Anthracene	36.6	1.0	ug/L	50.00	ND	73.2	54.2-105.4	5.73	15	07/11/2013	
Azobenzene	38.1	2.0	ug/L	50.00	ND	76.1	45.7-105.9	6.71	24.8	07/11/2013	
Benz[a]anthracene	30.2	1.0	ug/L	50.00	ND	60.3	39.8-119.3	12.5	21.1	07/11/2013	
Benzo[a]pyrene	23.4	1.0	ug/L	50.00	ND	46.8	30-125.5	11.3	27.1	07/11/2013	
Benzo[b]fluoranthene	27.2	1.0	ug/L	50.00	ND	54.4	29.9-124.8	6.87	27.2	07/11/2013	
Benzo[g,h,i]perylene	22.9	1.0	ug/L	50.00	ND	45.8	10-133.9	15.9	35.9	07/11/2013	
Benzo[k]fluoranthene	26.4	1.0	ug/L	50.00	ND	52.8	28.6-120.8	8.70	26.7	07/11/2013	
Benzyl Alcohol	40.1	50	ug/L	100.0	ND	40.1	10-193.5	10.1	54	07/11/2013	T
Bis(2-chloroethoxy)methane	29.0	2.0	ug/L	50.00	ND	58.0	18.2-97.2	7.73	57.8	07/11/2013	
Bis(2-chloroethyl)ether	28.1	1.0	ug/L	50.00	ND	56.1	13-89.7	6.18	77.1	07/11/2013	
Bis(2-chloroisopropyl)ether	49.2	1.0	ug/L	50.00	ND	98.4	11.9-90.2	9.41	78.2	07/11/2013	A04
Bis(2-ethylhexyl)phthalate	26.8	5.0	ug/L	50.00	ND	53.6	24.7-129.2	17.2	29.8	07/11/2013	
Butyl benzyl phthalate	30.4	5.0	ug/L	50.00	ND	60.9	50.3-121.1	5.49	17.7	07/11/2013	
Carbazole	40.1	5.0	ug/L	50.00	ND	80.3	53.6-115.9	5.27	15	07/11/2013	
Chrysene	28.5	1.0	ug/L	50.00	ND	57.1	39.3-119.7	15.5	22.2	07/11/2013	
Dibenz[a,h]anthracene	25.7	2.0	ug/L	50.00	ND	51.5	10-140.4	18.8	39.2	07/11/2013	
Dibenzofuran	33.9	4.0	ug/L	50.00	ND	67.8	39.1-95.8	3.97	30.4	07/11/2013	
Diethylphthalate	42.4	5.0	ug/L	50.00	ND	84.7	56-112.5	5.95	17.9	07/11/2013	
Dimethyl phthalate	38.6	5.0	ug/L	50.00	ND	77.2	56.7-104.3	4.55	18.2	07/11/2013	
Di-n-butyl phthalate	39.1	5.0	ug/L	50.00	ND	78.2	53.6-114.7	2.21	15.1	07/11/2013	
Di-n-octyl phthalate	28.0	5.0	ug/L	50.00	ND	56.1	25.6-129.5	15.0	29.6	07/11/2013	
Fluoranthene	35.9	1.0	ug/L	50.00	ND	71.7	53.7-110.6	0.889	18.2	07/11/2013	
Fluorene	34.8	1.0	ug/L	50.00	ND	69.6	43.6-100.7	6.18	24.7	07/11/2013	
Hexachlorobenzene	32.2	1.0	ug/L	50.00	ND	64.4	45.8-105.9	5.19	18.6	07/11/2013	
Hexachlorobutadiene	26.9	1.0	ug/L	50.00	ND	53.7	10.8-78.6	0.0208	78.9	07/11/2013	
Hexachlorocyclopentadiene	19.6	10	ug/L	50.00	ND	39.2	10-79.7	1.72	74.7	07/11/2013	
Hexachloroethane	23.6	1.0	ug/L	50.00	ND	47.3	10-76.7	3.55	95.4	07/11/2013	
Indeno(1,2,3-c,d)pyrene	22.7	2.0	ug/L	50.00	ND	45.4	12.4-140.5	17.9	33.5	07/11/2013	
Isophorone	29.8	1.0	ug/L	50.00	ND	59.5	23.1-96.1	5.14	47.1	07/11/2013	
N,N-dimethylaniline	27.7	5.0	ug/L	50.00	ND	55.4	26.8-92.2	3.21	29.9	07/11/2013	
Naphthalene	29.3	1.0	ug/L	50.00	ND	58.6	10-104.5	3.52	71.1	07/11/2013	
Nitrobenzene	31.3	2.0	ug/L	50.00	ND	62.6	19.2-91.4	5.06	64.6	07/11/2013	
N-methylaniline	29.4	1.0	ug/L	50.00	ND	58.9	17.2-101.8	7.12	55.6	07/11/2013	
N-Nitrosodimethylamine	13.6	5.0	ug/L	50.00	ND	27.2	10-85.9	4.59	85.3	07/11/2013	
N-Nitrosodi-n-propylamine	33.4	2.0	ug/L	50.00	ND	66.9	21.8-95	9.89	52	07/11/2013	
N-Nitrosodiphenylamine	38.9	2.0	ug/L	50.00	ND	77.9	58.3-114.6	4.64	15.9	07/11/2013	
Pentachlorophenol	62.6	20	ug/L	100.0	ND	62.6	45.2-121.4	4.62	18.3	07/11/2013	
Phenanthrene	35.2	1.0	ug/L	50.00	ND	70.5	55.4-103.2	6.03	15	07/11/2013	
Phenol	15.2	5.0	ug/L	100.0	ND	15.2	10-59.7	8.10	75	07/11/2013	
Pyrene	31.8	1.0	ug/L	50.00	ND	63.5	49.1-113.8	8.60	18.9	07/11/2013	
Pyridine	10.9	20	ug/L	50.00	ND	21.7	10-72.3	22.1	156.3	07/11/2013	T
Tetramethylurea	18.6	1.0	ug/L	50.00	ND	37.1	23.6-99.1	14.6	33.3	07/11/2013	
Surrogate: 2,4,6-Tribromophenol	*36.0*		ug/L	*50.00*		*72.0*	*33.8-115*			07/11/2013	
Surrogate: 2-Fluorobiphenyl	*15.6*		ug/L	*25.00*		*62.3*	*24.1-115*			07/11/2013	
Surrogate: 2-Fluorophenol	*11.6*		ug/L	*50.00*		*23.2*	*10-115*			07/11/2013	
Surrogate: Nitrobenzene-d5	*15.1*		ug/L	*25.00*		*60.6*	*17.8-115*			07/11/2013	
Surrogate: Phenol-d6	*7.39*		ug/L	*50.00*		*14.8*	*10-115*			07/11/2013	

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Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0113 - Method: 3510 Water SVOC				**Prepared: 07/01/2013**							
Matrix Spike Dup (B3G0113-MSD1)	**Source: 1306260-13**										
Surrogate: p-Terphenyl-d14	*13.2*		ug/L	*25.00*		*52.7*	*41.8-115*			07/11/2013	

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Inorganics-General Chemistry - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2620											
Blank (B3F2620-BLK1)											
Total Cyanide	ND	0.005	mg/L							06/26/2013	
LCS (B3F2620-BS1)											
Total Cyanide	0.172	0.005	mg/L	0.2000		85.9	80-120			06/26/2013	
Matrix Spike (B3F2620-MS1)	**Source: 1306260-18**										
Total Cyanide	0.101	0.005	mg/L	0.1005	ND	101	80-120			06/26/2013	
Matrix Spike Dup (B3F2620-MSD1)	**Source: 1306260-18**										
Total Cyanide	0.101	0.005	mg/L	0.1005	ND	101	80-120	0.474	20	06/26/2013	
Batch B3F2707											
Blank (B3F2707-BLK1)											
Available Cyanide	ND	0.002	mg/L							06/27/2013	
LCS (B3F2707-BS1)											
Available Cyanide	0.051	0.002	mg/L	0.05025		101	80-120			06/27/2013	
Matrix Spike (B3F2707-MS1)	**Source: 1306260-18**										
Available Cyanide	0.051	0.002	mg/L	0.05025	ND	102	80-120			06/27/2013	
Matrix Spike Dup (B3F2707-MSD1)	**Source: 1306260-18**										
Available Cyanide	0.052	0.002	mg/L	0.05025	ND	103	80-120	1.14	20	06/27/2013	

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Inorganics-Metals - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2716 - Method: 3010				**Prepared: 06/27/2013**							
Blank (B3F2716-BLK1)											
Arsenic	ND	1.0	ug/L							07/02/2013	
Barium	ND	5.0	ug/L							07/02/2013	
Cadmium	ND	0.2	ug/L							07/02/2013	
Chromium	ND	1.0	ug/L							07/02/2013	
Copper	ND	1.0	ug/L							07/02/2013	
Lead	ND	1.0	ug/L							07/02/2013	
Selenium	ND	1.0	ug/L							07/02/2013	
Silver	ND	0.2	ug/L							07/02/2013	
Zinc	ND	5.0	ug/L							07/02/2013	
LCS (B3F2716-BS1)											
Arsenic	48.5	1.0	ug/L	50.00		96.9	85-115			07/02/2013	
Barium	50.5	5.0	ug/L	50.00		101	85-115			07/02/2013	
Cadmium	48.8	0.2	ug/L	50.00		97.7	85-115			07/02/2013	
Chromium	49.4	1.0	ug/L	50.00		98.8	85-115			07/02/2013	
Copper	48.7	1.0	ug/L	50.00		97.4	85-115			07/02/2013	
Lead	49.9	1.0	ug/L	50.00		99.8	85-115			07/02/2013	
Selenium	47.9	1.0	ug/L	50.00		95.7	85-115			07/02/2013	
Silver	49.5	0.2	ug/L	50.00		99.1	85-115			07/02/2013	
Zinc	46.7	5.0	ug/L	50.00		93.3	85-115			07/02/2013	
Matrix Spike (B3F2716-MS1)	**Source: 1306260-17**										
Arsenic	49.0	1.0	ug/L	50.00	ND	98.1	80-120			07/02/2013	
Barium	96.6	5.0	ug/L	50.00	49.6	93.9	80-120			07/02/2013	
Cadmium	48.1	0.2	ug/L	50.00	ND	96.3	80-120			07/02/2013	
Chromium	48.4	1.0	ug/L	50.00	ND	96.8	80-120			07/02/2013	
Copper	47.5	1.0	ug/L	50.00	ND	95.1	80-120			07/02/2013	
Lead	48.9	1.0	ug/L	50.00	ND	97.8	80-120			07/02/2013	
Selenium	47.1	1.0	ug/L	50.00	ND	94.3	80-120			07/02/2013	
Silver	48.2	0.2	ug/L	50.00	ND	96.3	80-120			07/02/2013	
Zinc	74.3	5.0	ug/L	50.00	29.9	88.7	80-120			07/02/2013	
Matrix Spike Dup (B3F2716-MSD1)	**Source: 1306260-17**										
Arsenic	49.2	1.0	ug/L	50.00	ND	98.4	80-120	0.381	20	07/02/2013	
Barium	97.3	5.0	ug/L	50.00	49.6	95.4	80-120	0.740	20	07/02/2013	
Cadmium	48.1	0.2	ug/L	50.00	ND	96.2	80-120	0.0769	20	07/02/2013	
Chromium	48.9	1.0	ug/L	50.00	ND	97.8	80-120	1.10	20	07/02/2013	
Copper	48.2	1.0	ug/L	50.00	ND	96.4	80-120	1.34	20	07/02/2013	
Lead	48.9	1.0	ug/L	50.00	ND	97.9	80-120	0.0961	20	07/02/2013	
Selenium	48.2	1.0	ug/L	50.00	ND	96.5	80-120	2.31	20	07/02/2013	
Silver	47.9	0.2	ug/L	50.00	ND	95.9	80-120	0.458	20	07/02/2013	
Zinc	73.9	5.0	ug/L	50.00	29.9	88.0	80-120	0.482	20	07/02/2013	
Batch B3F2719 - Method: 3010				**Prepared: 06/27/2013**							
Blank (B3F2719-BLK1)											
Arsenic	ND	1.0	ug/L							07/02/2013	
Barium	ND	5.0	ug/L							07/02/2013	

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Inorganics-Metals - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3F2719 - Method: 3010				**Prepared: 06/27/2013**							
Blank (B3F2719-BLK1)											
Cadmium	ND	0.2	ug/L							07/02/2013	
Chromium	ND	1.0	ug/L							07/02/2013	
Copper	ND	1.0	ug/L							07/02/2013	
Lead	ND	1.0	ug/L							07/02/2013	
Selenium	ND	1.0	ug/L							07/02/2013	
Silver	ND	0.2	ug/L							07/02/2013	
Zinc	ND	5.0	ug/L							07/02/2013	
LCS (B3F2719-BS1)											
Arsenic	49.0	1.0	ug/L	50.00		98.0	85-115			07/02/2013	
Barium	49.7	5.0	ug/L	50.00		99.5	85-115			07/02/2013	
Cadmium	49.8	0.2	ug/L	50.00		99.6	85-115			07/02/2013	
Chromium	48.9	1.0	ug/L	50.00		97.9	85-115			07/02/2013	
Copper	48.2	1.0	ug/L	50.00		96.3	85-115			07/02/2013	
Lead	49.2	1.0	ug/L	50.00		98.3	85-115			07/02/2013	
Selenium	48.8	1.0	ug/L	50.00		97.6	85-115			07/02/2013	
Silver	49.2	0.2	ug/L	50.00		98.5	85-115			07/02/2013	
Zinc	48.3	5.0	ug/L	50.00		96.6	85-115			07/02/2013	
Matrix Spike (B3F2719-MS1)	**Source: 1306275-06**										
Arsenic	49.3	1.0	ug/L	50.00	ND	98.6	80-120			07/02/2013	
Barium	98.7	5.0	ug/L	50.00	49.2	98.8	80-120			07/02/2013	
Cadmium	49.0	0.2	ug/L	50.00	ND	98.0	80-120			07/02/2013	
Chromium	49.0	1.0	ug/L	50.00	ND	98.0	80-120			07/02/2013	
Copper	47.6	1.0	ug/L	50.00	ND	95.1	80-120			07/02/2013	
Lead	47.4	1.0	ug/L	50.00	ND	94.9	80-120			07/02/2013	
Selenium	48.4	1.0	ug/L	50.00	ND	96.9	80-120			07/02/2013	
Silver	48.4	0.2	ug/L	50.00	ND	96.9	80-120			07/02/2013	
Zinc	50.5	5.0	ug/L	50.00	ND	101	80-120			07/02/2013	
Matrix Spike Dup (B3F2719-MSD1)	**Source: 1306275-06**										
Arsenic	49.1	1.0	ug/L	50.00	ND	98.1	80-120	0.527	20	07/02/2013	
Barium	98.0	5.0	ug/L	50.00	49.2	97.6	80-120	0.631	20	07/02/2013	
Cadmium	48.4	0.2	ug/L	50.00	ND	96.7	80-120	1.28	20	07/02/2013	
Chromium	49.0	1.0	ug/L	50.00	ND	98.0	80-120	0.0653	20	07/02/2013	
Copper	47.4	1.0	ug/L	50.00	ND	94.7	80-120	0.461	20	07/02/2013	
Lead	47.9	1.0	ug/L	50.00	ND	95.8	80-120	0.961	20	07/02/2013	
Selenium	48.7	1.0	ug/L	50.00	ND	97.5	80-120	0.609	20	07/02/2013	
Silver	47.7	0.2	ug/L	50.00	ND	95.5	80-120	1.45	20	07/02/2013	
Zinc	49.8	5.0	ug/L	50.00	ND	99.6	80-120	1.38	20	07/02/2013	
Batch B3G0211 - Method: 7470				**Prepared: 07/02/2013**							
Blank (B3G0211-BLK1)											
Mercury	ND	0.2	ug/L							07/03/2013	
LCS (B3G0211-BS1)											
Mercury	4.1	0.2	ug/L	4.000		102	85-115			07/03/2013	

Lab Work Order # 1306260

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Inorganics-Metals - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B3G0211 - Method: 7470				**Prepared: 07/02/2013**							
Matrix Spike (B3G0211-MS1)	**Source: 1306260-11**										
Mercury	4.1	0.2	ug/L	4.000	ND	103	80-120			07/03/2013	
Matrix Spike Dup (B3G0211-MSD1)	**Source: 1306260-11**										
Mercury	4.0	0.2	ug/L	4.000	ND	99.0	80-120	3.96	20	07/03/2013	

MICHIGAN DEPT. OF NATURAL RESOURCES AND ENVIRONMENT
ENVIRONMENTAL LABORATORY
ANALYSIS REQUEST SHEET

White

LAB WORK ORDER # 1306260

MATRIX=WATER

SITE CODE NUMBER	SITE NAME	ACCEPT HT CODES? Y/N
MIB000000180	TCPBPA - Traverse City Place Brownfield Plan Area	If yes which parameters?

DIVISION	DISTRICT/OFFICE	MDNRE PROJECT MANAGER	E-MAIL ADDRESS	PHONE
RD	Superfund	Teressa Ducsay	Ducsayt@michigan.gov	373-4809

PRIMARY CONTACT PERSON	CONTRACT FIRM NAME (if applicable)	PHONE	AY: 12	INDEX: 44092	PCA:
Teressa Ducsay		373-4809	PROJECT: 456842		PH: 19

OVERFLOW LAB (Required)
1ST CHOICE: TriMatrix
2ND CHOICE:

E-MAIL ADDRESSES TO SEND ADDITIONAL REPORTS TO:
1.)
2.)

COLLECTED BY: Teressa Ducsay PHONE: 373-4809

**** SAFETY INFORMATION REQUIRED ****
SEE BACK OF FORM

LAB USE ONLY			FIELD ID (Sample Identification)	SAMPLE COLLECTED DATE MM/DD/YY	SAMPLE COLLECTED TIME MILITARY	GPS COORDINATES LATITUDE	GPS COORDINATES LONGITUDE	COMMENTS
1	AB	01	TMW-07	6/25/13	17:15			
2	AB	02	TMW-08	"	16:10			
3	AB	03	TMW-10	6/24/13	17:30			
4	AB	04	VAS-01 (12-16)	6/25/13	11:10			
5	AB	05	VAS-01 (16-20)	"	10:40			
6	AB	06	VAS-01 (20-24)	"	10:15			
7	AB	07	VAS-01 (26-30)	"	09:30			
8	AB	08	VAS-02 (12-16)	"	15:20			
9	AB	09	VAS-02 (12-16) DUP	"	15:20			
10	AB	10	VAS-02 (16-20)	"	14:50			CN - only

ORGANIC

VOA VOLATILES (8260)

Full List	1 2 3 4 5 6 7 8 9 10
BTEX/MTBE/TMB only	1 2 3 4 5 6 7 8 9 10
Chlorinated only	1 2 3 4 5 6 7 8 9 10
GRO	1 2 3 4 5 6 7 8 9 10
1,4 Dioxane	1 2 3 4 5 6 7 8 9 10

METH METHANE, ETHENE, ETHANE (Modified 8015)

Methane, ethane, ethene	1 2 3 4 5 6 7 8 9 10

ON PESTICIDES/PCBS (8081/8082)

Pesticides & PCBs	1 2 3 4 5 6 7 8 9 10
Pesticides only	1 2 3 4 5 6 7 8 9 10
PCBs only	1 2 3 4 5 6 7 8 9 10
Toxaphene	1 2 3 4 5 6 7 8 9 10
Specialty Pesticides	1 2 3 4 5 6 7 8 9 10

BNA BASE NEUTRAL & ACIDS (8270)

BNAs	1 2 3 4 5 6 7 8 9 10
Benzidines	1 2 3 4 5 6 7 8 9 10
PNAs only	1 2 3 4 5 6 7 8 9 10
BNs only	1 2 3 4 5 6 7 8 9 10
ACIDs only	1 2 3 4 5 6 7 8 9 10

ORGANIC SPECIAL REQUESTS

Library Search - Volatiles	1 2 3 4 5 6 7 8 9 10
Library Search - Semi-Vols	1 2 3 4 5 6 7 8 9 10
FingerPrint	1 2 3 4 5 6 7 8 9 10
DRO/ORO (8015)	1 2 3 4 5 6 7 8 9 10

GENERAL CHEMISTRY

GN	NO_2, O-Phos	1 2 3 4 5 6 7 8 9 10
	NO_3 Calc (NO_2+NO_3, NO_2)	1 2 3 4 5 6 7 8 9 10
	Residue SS	1 2 3 4 5 6 7 8 9 10
	Residue TDS	1 2 3 4 5 6 7 8 9 10
	BOD Tot 5 day	1 2 3 4 5 6 7 8 9 10
	BOD Carb 5 day	1 2 3 4 5 6 7 8 9 10
	Turbidity	1 2 3 4 5 6 7 8 9 10
CA	Chlorophyll	1 2 3 4 5 6 7 8 9 10
GA	COD	1 2 3 4 5 6 7 8 9 10
	TOC	1 2 3 4 5 6 7 8 9 10
	NO_3 + NO_2, NH_3	1 2 3 4 5 6 7 8 9 10
	KJEL N, Tot P	1 2 3 4 5 6 7 8 9 10
S	Sulfide	1 2 3 4 5 6 7 8 9 10
GP	Phenolics	1 2 3 4 5 6 7 8 9 10
GB	Total CN	1 2 3 4 5 6 7 8 9 10
	Amenable CN	1 2 3 4 5 6 7 8 9 10
GCN	Available CN	1 2 3 4 5 6 7 8 9 10

INORGANIC

MN	pH, Conductance	1 2 3 4 5 6 7 8 9 10
	Cl, SO_4, Total Alk	1 2 3 4 5 6 7 8 9 10
	HCO_3, CO_3	1 2 3 4 5 6 7 8 9 10
	Cr^{+5}	1 2 3 4 5 6 7 8 9 10
OG	Oil & Grease	1 2 3 4 5 6 7 8 9 10

INORGANIC

MA - Total Metals

MICH TEN METALS (As, Ba, Cd, Cr, Cu, Pb, Hg, Se, Ag, Zn)	1 2 3 4 5 6 7 8 9 10
OP MEMO 2 METALS (Sb,As,Ba,Be,Cd,Cr,Cu,Co,Fe,Pb,Mn,Hg,Mo,Ni,Se,Ag,Tl,V,Zn)	1 2 3 4 5 6 7 8 9 10

↓Circle Metal and Corresponding Sample No. Below↓

Al Sb As Ba Be B Cd Cr	1 2 3 4 5 6 7 8 9 10
Co Cu Fe Pb Li Mn Hg Mo	
Ni Se Ag Sr Tl Ti V Zn	
Ca Mg K Na	1 2 3 4 5 6 7 8 9 10
Hardness Calc (Ca Mg)	1 2 3 4 5 6 7 8 9 10
LL Hg Low Level Mercury	1 2 3 4 5 6 7 8 9 10

MAD or MD - Dissolved Metals

Lab Filtration	1 2 3 4 5 6 7 8 9 10
MICH TEN METALS (As, Ba, Cd, Cr, Cu, Pb, Hg, Se, Ag, Zn)	1 2 3 4 5 6 7 8 9 10
OP MEMO 2 Metals (Sb,As,Ba,Be,Cd,Cr,Cu,Co,Fe,Pb,Mn,Hg,Mo,Ni,Se,Ag,Tl,V,Zn)	1 2 3 4 5 6 7 8 9 10

↓Circle Metal and Corresponding Sample No. Below↓

Al Sb As Ba Be B Cd Cr	1 2 3 4 5 6 7 8 9 10
Co Cu Fe Pb Li Mn Hg Mo	
Ni Se Ag Sr Tl Ti V Zn	
Ca Mg K Na	1 2 3 4 5 6 7 8 9 10
Hardness Calc (Ca Mg)	1 2 3 4 5 6 7 8 9 10
LL Hg Low Level Mercury	1 2 3 4 5 6 7 8 9 10

Chain-of-Custody

	RELEASED BY / ORGANIZATION	RECEIVED BY / ORGANIZATION	DATE	TIME
Print Name & Organization	Teresa Duesay, MDEQ	Michael Smith	6/26/13	1235
Signature	Teresa Duesay	[signature]		
Print Name & Organization				
Signature				
Print Name & Organization				
Signature				

Revised January 2010

MICHIGAN DEPT. OF NATURAL RESOURCES AND ENVIRONMENT
ENVIRONMENTAL LABORATORY
ANALYSIS REQUEST SHEET

White

LAB WORK ORDER # 1306260

MATRIX=WATER

SITE CODE NUMBER	SITE NAME	ACCEPT HT CODES? (Y) N If yes which parameters?
MIB000000180	TCPBPA - Traverse City Place Brownfield Plan Area	

DIVISION	DISTRICT/OFFICE	MDNRE PROJECT MANAGER	E-MAIL ADDRESS	PHONE
RD	Superfund	Teressa Ducsay	Ducsayt@michigan.gov	373-4809

PRIMARY CONTACT PERSON	CONTRACT FIRM NAME (if applicable)	PHONE	AY: 12	INDEX: 44092	PCA:
Teressa Ducsay		373-4809	PROJECT: 456842		PH: 19

OVERFLOW LAB (Required)
1ST CHOICE: TnMatrix
2ND CHOICE:

E-MAIL ADDRESSES TO SEND ADDITIONAL REPORTS TO:
1.)
2.)

COLLECTED BY: Teressa Ducsay PHONE: 373-4809

**** SAFETY INFORMATION REQUIRED ****
SEE BACK OF FORM

LAB USE ONLY			FIELD ID (Sample Identification)	SAMPLE COLLECTED DATE MM/DD/YY	SAMPLE COLLECTED TIME MILITARY	GPS COORDINATES LATITUDE	GPS COORDINATES LONGITUDE	COMMENTS
1	AB	11	VAS-02 (20-24)	6/25/13	14:10			
2	AB	12	VAS-02 (26-30)	"	13:30			
3	AB	13	VAS-03 (12-16)	"	18:35			
4	AB	14	VAS-03 (12-16) MS	"	18:35			
5	AB	15	VAS-03 (12-16) MSD	"	18:35			
6	AB	16	VAS-03 (16-20)	"	18:10			
7	AB	17	VAS-03 (20-24)	"	17:40			
8	AB	18	VAS-03 (26-30)	"	17:10			
9	AB							
10	AB							

ORGANIC

VOA VOLATILES (8260)
- Full List 1 2 3 4 5 6 7 8 9 10
- BTEX/MTBE/TMB only 1 2 3 4 5 6 7 8 9 10
- Chlorinated only 1 2 3 4 5 6 7 8 9 10
- GRO 1 2 3 4 5 6 7 8 9 10
- 1,4 Dioxane 1 2 3 4 5 6 7 8 9 10

METH METHANE, ETHENE, ETHANE (Modified 8015)
- Methane, ethane, ethene 1 2 3 4 5 6 7 8 9 10

ON PESTICIDES/PCBS (8081/8082)
- Pesticides & PCBs 1 2 3 4 5 6 7 8 9 10
- Pesticides only 1 2 3 4 5 6 7 8 9 10
- PCBs only 1 2 3 4 5 6 7 8 9 10
- Toxaphene 1 2 3 4 5 6 7 8 9 10
- Specialty Pesticides 1 2 3 4 5 6 7 8 9 10

BNA BASE NEUTRAL & ACIDS (8270)
- BNAs 1 2 3 4 5 6 7 8 9 10
- Benzidines 1 2 3 4 5 6 7 8 9 10
- PNAs only 1 2 3 4 5 6 7 8 9 10
- BNs only 1 2 3 4 5 6 7 8 9 10
- ACIDs only 1 2 3 4 5 6 7 8 9 10

ORGANIC SPECIAL REQUESTS
- Library Search - Volatiles 1 2 3 4 5 6 7 8 9 10
- Library Search - Semi-Vols 1 2 3 4 5 6 7 8 9 10
- FingerPrint 1 2 3 4 5 6 7 8 9 10
- DRO/ORO (8015) 1 2 3 4 5 6 7 8 9 10

GENERAL CHEMISTRY

- GN NO_2, O-Phos 1 2 3 4 5 6 7 8 9 10
- NO_3 Calc (NO_2+NO_3, NO_2) 1 2 3 4 5 6 7 8 9 10
- Residue SS 1 2 3 4 5 6 7 8 9 10
- Residue TDS 1 2 3 4 5 6 7 8 9 10
- BOD Tot 5 day 1 2 3 4 5 6 7 8 9 10
- BOD Carb 5 day 1 2 3 4 5 6 7 8 9 10
- Turbidity 1 2 3 4 5 6 7 8 9 10
- CA Chlorophyll 1 2 3 4 5 6 7 8 9 10
- GA COD 1 2 3 4 5 6 7 8 9 10
- TOC 1 2 3 4 5 6 7 8 9 10
- NO_3 + NO_2, NH_3 1 2 3 4 5 6 7 8 9 10
- KJEL N, Tot P 1 2 3 4 5 6 7 8 9 10
- S Sulfide 1 2 3 4 5 6 7 8 9 10
- GP Phenolics 1 2 3 4 5 6 7 8 9 10
- GB Total CN 1 2 3 4 5 6 7 8 9 10
- Amenable CN 1 2 3 4 5 6 7 8 9 10
- GCN Available CN 1 2 3 4 5 6 7 8 9 10

INORGANIC
- MN pH, Conductance 1 2 3 4 5 6 7 8 9 10
- Cl, SO_4, Total Alk 1 2 3 4 5 6 7 8 9 10
- HCO_3, CO_3 1 2 3 4 5 6 7 8 9 10
- Cr^{+6} 1 2 3 4 5 6 7 8 9 10

- OG Oil & Grease 1 2 3 4 5 6 7 8 9 10

INORGANIC

MA - Total Metals
- MICH TEN METALS 1 2 3 4 5 6 7 8 9 10
  (As, Ba, Cd, Cr, Cu, Pb, Hg, Se, Ag, Zn)
- OP MEMO 2 METALS 1 2 3 4 5 6 7 8 9 10
  (Sb,As,Ba,Be,Cd,Cr,Cu,Co,Fe,Pb,Mn,Hg,Mo,Ni,Se,Ag,Tl,V,Zn)

↓Circle Metal and Corresponding Sample No. Below↓
- Al Sb As Ba Be B Cd Cr 1 2 3 4 5 6 7 8 9 10
- Co Cu Fe Pb Li Mn Hg Mo
- Ni Se Ag Sr Tl Ti V Zn
- Ca Mg K Na 1 2 3 4 5 6 7 8 9 10
- Hardness Calc (Ca Mg) 1 2 3 4 5 6 7 8 9 10

LL Hg
- Low Level Mercury 1 2 3 4 5 6 7 8 9 10

MAD or MD - Dissolved Metals
- Lab Filtration 1 2 3 4 5 6 7 8 9 10
- MICH TEN METALS 1 2 3 4 5 6 7 8 9 10
  (As, Ba, Cd, Cr, Cu, Pb, Hg, Se, Ag, Zn)
- OP MEMO 2 Metals 1 2 3 4 5 6 7 8 9 10
  (Sb,As,Ba,Be,Cd,Cr,Cu,Co,Fe,Pb,Mn,Hg,Mo,Ni,Se,Ag,Tl,V,Zn)

↓Circle Metal and Corresponding Sample No. Below↓
- Al Sb As Ba Be B Cd Cr 1 2 3 4 5 6 7 8 9 10
- Co Cu Fe Pb Li Mn Hg Mo
- Ni Se Ag Sr Tl Ti V Zn
- Ca Mg K Na 1 2 3 4 5 6 7 8 9 10
- Hardness Calc (Ca Mg) 1 2 3 4 5 6 7 8 9 10

LL Hg
- Low Level Mercury 1 2 3 4 5 6 7 8 9 10

Chain-of-Custody

RELEASED BY / ORGANIZATION	RECEIVED BY / ORGANIZATION	DATE	TIME
Print Name & Organization: Teresa Ducsay, MDEQ	Print Name & Organization: Melissa Smith	6/26/13	1235
Signature: Teresa Ducsay	Signature: [illegible]		
Print Name & Organization	Print Name & Organization		
Signature	Signature		
Print Name & Organization	Print Name & Organization		
Signature	Signature		

Revised January 2010

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

11 July 2013

Work Order: 1306261

Price: $308.00

Teresa Ducsay
MDEQ-RRD-LANSING
525 W. Allegan Street
Lansing, MI 48909

RE: TCPBPA-TRAVERSE CITY PLACE BROWNFIELD I

I certify that the analyses performed by the MDEQ Environmental Laboratory were conducted by methods approved by the U.S. Environmental Protection Agency and other appropriate regulatory agencies.

Sincerely,

George Krisztian
Laboratory Director

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

MDEQ-RRD-LANSING	Project: TCPBPA-TRAVERSE CITY PLACE BROWNFIELD PLAN AREA	
525 W. Allegan Street	Site Code: MIB000000180	**Reported:**
Lansing MI, 48909	Project Manager: Teresa Ducsay	07/11/2013

Analytical Report for Samples

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Qualifier
SB-11	1306261-01	Soil/Sediment	06/25/2013	06/26/2013	

Notes and Definitions

ND	Indicates compound analyzed for but not detected
RL	Reporting Limit
NA	Not Applicable

Lab Work Order # 1306261

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
Lansing, MI 48909
TEL: (517) 335-9800
FAX: (517) 335-9600

Client ID: SB-11

Lab ID: 1306261-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
TS	**% Total Solids**	**91.6**	0.1	%	1	07/01/13	B3F2825	2540 B	
57-12-5	**Available Cyanide**	**1.1**	0.11	mg/kg dry	1	07/03/13	B3G0312	OIA-1677	
57-12-5	**Total Cyanide**	**240**	11	mg/kg dry	100	07/03/13	B3G0314	ASTM D 7511-09	
Inorganics-Metals									
7440-38-2	**Arsenic**	**3.7**	0.5	mg/kg dry	10	07/05/13	B3G0114	6020/200.8	
7440-39-3	**Barium**	**36**	1.0	mg/kg dry	10	07/05/13	B3G0114	6020/200.8	
7440-43-9	Cadmium	ND	0.2	mg/kg dry	10	07/05/13	B3G0114	6020/200.8	
7440-47-3	**Chromium**	**2.2**	2.0	mg/kg dry	10	07/05/13	B3G0114	6020/200.8	
7440-50-8	**Copper**	**9.3**	1.0	mg/kg dry	10	07/05/13	B3G0114	6020/200.8	
7439-92-1	**Lead**	**49**	1.0	mg/kg dry	10	07/05/13	B3G0114	6020/200.8	
7439-97-6	**Mercury**	**0.3**	0.05	mg/kg dry	1	07/03/13	B3G0214	7471	
7782-49-2	**Selenium**	**0.3**	0.2	mg/kg dry	10	07/05/13	B3G0114	6020/200.8	
7440-22-4	Silver	ND	0.1	mg/kg dry	10	07/05/13	B3G0114	6020/200.8	
7440-66-6	**Zinc**	**9.5**	1.0	mg/kg dry	10	07/05/13	B3G0114	6020/200.8	

MICHIGAN DEPT. OF NATURAL RESOURCES AND ENVIRONMENT
ENVIRONMENTAL LABORATORY
ANALYSIS REQUEST SHEET

Goldenrod
Page 4 of 4

LAB ORDER # 1306261

MATRIX=SEDIMENT/SOIL/SOLIDS

SITE CODE NUMBER	SITE NAME	ACCEPT HT CODES? YES / NO If yes, which parameters?
MIB000000180	TCPBPA - Traverse City Place Brownfield Plan Area	

DIVISION	DISTRICT/OFFICE	MDNRE PROJECT MANAGER	E-MAIL ADDRESS	PHONE
RD	Superfund	Teresa Ducsay	Ducsayt@michigan.gov	373-4809

PRIMARY CONTACT PERSON	CONTRACT FIRM NAME (if applicable)	PHONE	AY: 12 INDEX: 44092 PCA:
Teresa Ducsay		373-4809	PROJECT: 456842 PH: 19

OVERFLOW LAB (Required)
1ST CHOICE: Trimatrix
2ND CHOICE:

E-MAIL ADDRESSES TO SEND ADDITIONAL REPORTS TO:
1.)
2.)

COLLECTED BY: Teresa Ducsay PHONE: 373-4809

**** SAFETY INFORMATION REQUIRED ****
SEE BACK OF FORM

LAB USE ONLY		FIELD ID (Sample Identification)	SAMPLE COLLECTED DATE MM/DD/YY	SAMPLE COLLECTED TIME MILITARY	GPS COORDINATES LATITUDE	GPS COORDINATES LONGITUDE	COMMENT
1	AB 01	SB-11	6/25/13	0835			
2	AB						
3	AB						
4	AB						
5	AB						
6	AB						
7	AB						
8	AB						
9	AB						
10	AB						

ORGANIC

VOA VOLATILES *(MeOH/8260)

VOC - Full List	1 2 3 4 5 6 7 8 9 10
BTEX/MTBE/TMB only	1 2 3 4 5 6 7 8 9 10
Chlorinated only	1 2 3 4 5 6 7 8 9 10
GRO	1 2 3 4 5 6 7 8 9 10
1,4 Dioxane	1 2 3 4 5 6 7 8 9 10

OS PESTICIDES/PCBS (8081/8082)

Pesticides & PCBs	1 2 3 4 5 6 7 8 9 10
Pesticides only	1 2 3 4 5 6 7 8 9 10
Specialty Pesticides	1 2 3 4 5 6 7 8 9 10
Toxaphene	1 2 3 4 5 6 7 8 9 10
PCBs only	1 2 3 4 5 6 7 8 9 10

BNA BASE NEUTRAL & ACIDS (8270)

BNAs	1 2 3 4 5 6 7 8 9 10
PNAs only	1 2 3 4 5 6 7 8 9 10
BNs only	1 2 3 4 5 6 7 8 9 10

ORGANIC SPECIAL REQUESTS

Library Search - Volatiles	1 2 3 4 5 6 7 8 9 10
Library Search - Semi-Vols	1 2 3 4 5 6 7 8 9 10
FingerPrint	1 2 3 4 5 6 7 8 9 10
DRO/ORO (8015)	1 2 3 4 5 6 7 8 9 10
Low Level PNA	1 2 3 4 5 6 7 8 9 10

GENERAL CHEMISTRY

GS

COD	1 2 3 4 5 6 7 8 9 10
TOC	1 2 3 4 5 6 7 8 9 10
KJEL N, Tot. P	1 2 3 4 5 6 7 8 9 10
Phenolics	1 2 3 4 5 6 7 8 9 10
Total CN	1 2 3 4 5 6 7 8 9 10
Available Cyanide	1 2 3 4 5 6 7 8 9 10
Flash Point (1030)	1 2 3 4 5 6 7 8 9 10
Other _____	1 2 3 4 5 6 7 8 9 10

INORGANIC

MICH TEN METALS (As, Ba, Cd, Cr, Cu, Pb, Hg, Se, Ag, Zn)	1 2 3 4 5 6 7 8 9 10
OP MEMO 2 Metals (Sb,As,Ba,Be,Cd,Cr,Co,Cu,Fe,Pb,Mn,Hg,Mo,Ni,Se,Ag,Tl,V,Zn)	1 2 3 4 5 6 7 8 9 10

↓Circle Requested Metal and Corresponding Sample No.↓

Al Sb As Ba Be Cd Cr Co Cu Fe Pb Li Mn Hg Mo Ni Se Ag Sr Tl Ti V Zn	1 2 3 4 5 6 7 8 9 10
Pb (BOTH COARSE & FINE)	1 2 3 4 5 6 7 8 9 10
Low Level Mercury	1 2 3 4 5 6 7 8 9 10
Ca Mg K Na	1 2 3 4 5 6 7 8 9 10
% Total Solids	1 2 3 4 5 6 7 8 9 10

Chain-of-Custody

RELEASED BY / ORGANIZATION	RECEIVED BY / ORGANIZATION	DATE	TIME
Print Name & Organization: Teresa Ducsay, MDEQ	Print Name & Organization: Melissa Smith	6/26/13	1305
Signature: Teresa Ducsay	Signature: [illegible]		
Print Name & Organization	Print Name & Organization		
Signature	Signature		
Print Name & Organization	Print Name & Organization		
Signature	Signature		

AKTPEERLESS environmental & energy services

Table 1, Summary of Soil Analytical Results
GTCBRA Traverse City Place
Traverse City, Michigan
8229B-4-20

Guidesheet Number →		#10	#11	#12	#13	#14	#19			
Parameters*	**Chemical Abstract Service Number**	**Statewide Default Background Levels**	**Residential Drinking Water Protection Criteria and RBSLs**	**Groundwater Surface Water Interface Protection Criteria & RBSLs**	**Groundwater Contact Protection Criteria & RBSLs**	**Residential Soil Volatilization to Indoor Air Inhalation Criteria and RBSLs**	**Residential Direct Contact Criteria and RBSLs**	Sample Location	SB-01	SB-01
								Collection Date	6/21/2013	6/21/2013
**(Refer to detailed laboratory report for method reference data)*								Depth (feet bgs)	1-2'	9-10'
Nonspecific Grouping ug/Kg										
Cyanide, Total (P,R)	CNTOTAL	390 (total)	**4,000**	**100**	2.5E+5	NLV	**12,000**		NS	NS
Metals ug/Kg										
Mercury, Total	7439-97-6	130	1,700	50 (M); 1.2*	47,000	48,000	1.6E+5		< 50	< 50
Arsenic	7440-38-2	5,800	4,600	4,600	2.0E+6	NLV	7,600		**570**	**420**
Barium (B)	7440-39-3	75,000	1.3E+6	(G)	1.0E+9 (D)	NLV	3.7E+7		**2,100**	**2,600**
Cadmium (B)	7440-43-9	1,200	6,000	(G,X)	2.3E+8	NLV	5.5E+5		< 200	< 200
Chromium, Total	7440-47-3	18,000 (total)	30,000	**3,300**	1.4E+8	NLV	2.5E+6		< 2000	< 2000
Copper (B)	7440-50-8	32,000	5.8E+6	(G)	1.0E+9 (D)	NLV	2.0E+7		< 1000	< 1000
Lead (B)	7439-92-1	21,000	7.0E+5	(G,X)	ID	NLV	4.0E+5		< 1000	< 1000
Selenium (B)	7782-49-2	410	4,000	400	7.8E+7	NLV	2.6E+6		< 200	< 200
Zinc (B)	7440-66-6	47,000	2.4E+6	(G)	1.0E+9 (D)	NLV	1.7E+8		**2,300**	**1,500**
Semivolatiles, ug/Kg										
Fluoranthene	206-44-0	NA	7.3E+5	5,500	7.3E+5	1.0E+9 (D)	4.6E+7		< 330	< 330
Naphthalene	91-20-3	NA	35,000	730	2.1E+6	2.5E+5	1.6E+7		< 330	< 330
Phenanthrene	85-01-8	NA	56,000	2,100	1.1E+6	2.8E+6	1.6E+6		< 330	< 330
Pyrene	129-00-0	NA	4.8E+5	ID	4.8E+5	1.0E+9 (D)	2.9E+7		< 330	< 330

AKTPEERLESS environmental & energy services

Table 1, Summary of Soil Analytical Results
GTCBRA Traverse City Place
Traverse City, Michigan
8229B-4-20

Guidesheet Number →		#10	#11	#12	#13	#14	#19			
Parameters*	**Chemical Abstract Service Number**	**Statewide Default Background Levels**	**Residential Drinking Water Protection Criteria and RBSLs**	**Groundwater Surface Water Interface Protection Criteria & RBSLs**	**Groundwater Contact Protection Criteria & RBSLs**	**Residential Soil Volatilization to Indoor Air Inhalation Criteria and RBSLs**	**Residential Direct Contact Criteria and RBSLs**	Sample Location	SB-02	SB-02
**(Refer to detailed laboratory report for method reference data)*								Collection Date	6/21/2013	6/21/2013
								Depth (feet bgs)	1-2'	8-9'
Nonspecific Grouping ug/Kg										
Cyanide, Total (P,R)	CNTOTAL	390 (total)	**4,000**	**100**	2.5E+5	NLV	**12,000**		NS	NS
Metals ug/Kg										
Mercury, Total	7439-97-6	130	1,700	50 (M); 1.2*	47,000	48,000	1.6E+5		< 50	< 50
Arsenic	7440-38-2	5,800	4,600	4,600	2.0E+6	NLV	7,600		**480**	**920**
Barium (B)	7440-39-3	75,000	1.3E+6	(G)	1.0E+9 (D)	NLV	3.7E+7		**3,600**	**14,000**
Cadmium (B)	7440-43-9	1,200	6,000	(G,X)	2.3E+8	NLV	5.5E+5		< 200	< 200
Chromium, Total	7440-47-3	18,000 (total)	30,000	**3,300**	1.4E+8	NLV	2.5E+6		< 2000	**4,000**
Copper (B)	7440-50-8	32,000	5.8E+6	(G)	1.0E+9 (D)	NLV	2.0E+7		< 1000	**1,300**
Lead (B)	7439-92-1	21,000	7.0E+5	(G,X)	ID	NLV	4.0E+5		< 1000	**3,000**
Selenium (B)	7782-49-2	410	4,000	400	7.8E+7	NLV	2.6E+6		< 200	< 200
Zinc (B)	7440-66-6	47,000	2.4E+6	(G)	1.0E+9 (D)	NLV	1.7E+8		**1,100**	**5,300**
Semivolatiles, ug/Kg										
Fluoranthene	206-44-0	NA	7.3E+5	5,500	7.3E+5	1.0E+9 (D)	4.6E+7		< 330	< 330
Naphthalene	91-20-3	NA	35,000	730	2.1E+6	2.5E+5	1.6E+7		< 330	< 330
Phenanthrene	85-01-8	NA	56,000	2,100	1.1E+6	2.8E+6	1.6E+6		< 330	< 330
Pyrene	129-00-0	NA	4.8E+5	ID	4.8E+5	1.0E+9 (D)	2.9E+7		< 330	< 330

AKTPEERLESS environmental & energy services

Table 1, Summary of Soil Analytical Results
GTCBRA Traverse City Place
Traverse City, Michigan
8229B-4-20

Guidesheet Number →		#10	#11	#12	#13	#14	#19			
Parameters*	**Chemical Abstract Service Number**	**Statewide Default Background Levels**	**Residential Drinking Water Protection Criteria and RBSLs**	**Groundwater Surface Water Interface Protection Criteria & RBSLs**	**Groundwater Contact Protection Criteria & RBSLs**	**Residential Soil Volatilization to Indoor Air Inhalation Criteria and RBSLs**	**Residential Direct Contact Criteria and RBSLs**	Sample Location	SB-03	SB-03
**(Refer to detailed laboratory report for method reference data)*								Collection Date	6/21/2013	6/21/2013
								Depth (feet bgs)	1-2'	7-8'
Nonspecific Grouping ug/Kg										
Cyanide, Total (P,R)	CNTOTAL	390 (total)	**4,000**	**100**	2.5E+5	NLV	**12,000**		NS	NS
Metals ug/Kg										
Mercury, Total	7439-97-6	130	1,700	50 (M); 1.2*	47,000	48,000	1.6E+5		< 50	< 50
Arsenic	7440-38-2	5,800	4,600	4,600	2.0E+6	NLV	7,600		**420**	**800**
Barium (B)	7440-39-3	75,000	1.3E+6	(G)	1.0E+9 (D)	NLV	3.7E+7		**6,100**	**2,400**
Cadmium (B)	7440-43-9	1,200	6,000	(G,X)	2.3E+8	NLV	5.5E+5		< 200	< 200
Chromium, Total	7440-47-3	18,000 (total)	30,000	**3,300**	1.4E+8	NLV	2.5E+6		< 2000	< 2000
Copper (B)	7440-50-8	32,000	5.8E+6	(G)	1.0E+9 (D)	NLV	2.0E+7		< 1000	< 1000
Lead (B)	7439-92-1	21,000	7.0E+5	(G,X)	ID	NLV	4.0E+5		< 1000	< 1000
Selenium (B)	7782-49-2	410	4,000	400	7.8E+7	NLV	2.6E+6		< 200	< 200
Zinc (B)	7440-66-6	47,000	2.4E+6	(G)	1.0E+9 (D)	NLV	1.7E+8		< 1000	**1,800**
Semivolatiles, ug/Kg										
Fluoranthene	206-44-0	NA	7.3E+5	5,500	7.3E+5	1.0E+9 (D)	4.6E+7		< 330	< 330
Naphthalene	91-20-3	NA	35,000	730	2.1E+6	2.5E+5	1.6E+7		< 330	< 330
Phenanthrene	85-01-8	NA	56,000	2,100	1.1E+6	2.8E+6	1.6E+6		< 330	< 330
Pyrene	129-00-0	NA	4.8E+5	ID	4.8E+5	1.0E+9 (D)	2.9E+7		< 330	< 330

AKTPEERLESS environmental & energy services

Table 1, Summary of Soil Analytical Results
GTCBRA Traverse City Place
Traverse City, Michigan
8229B-4-20

Guidesheet Number →		#10	#11	#12	#13	#14	#19			
Parameters*	**Chemical Abstract Service Number**	**Statewide Default Background Levels**	**Residential Drinking Water Protection Criteria and RBSLs**	**Groundwater Surface Water Interface Protection Criteria & RBSLs**	**Groundwater Contact Protection Criteria & RBSLs**	**Residential Soil Volatilization to Indoor Air Inhalation Criteria and RBSLs**	**Residential Direct Contact Criteria and RBSLs**	Sample Location	SB-04	SB-04
								Collection Date	6/21/2013	6/21/2013
**(Refer to detailed laboratory report for method reference data)*								Depth (feet bgs)	1-2'	8-9'
Nonspecific Grouping ug/Kg										
Cyanide, Total (P,R)	CNTOTAL	390 (total)	**4,000**	**100**	2.5E+5	NLV	**12,000**		NS	NS
Metals ug/Kg										
Mercury, Total	7439-97-6	130	1,700	50 (M); 1.2*	47,000	48,000	1.6E+5		< 50	< 50
Arsenic	7440-38-2	5,800	4,600	4,600	2.0E+6	NLV	7,600		**490**	**460**
Barium (B)	7440-39-3	75,000	1.3E+6	(G)	1.0E+9 (D)	NLV	3.7E+7		**1,700**	**2,600**
Cadmium (B)	7440-43-9	1,200	6,000	(G,X)	2.3E+8	NLV	5.5E+5		< 200	< 200
Chromium, Total	7440-47-3	18,000 (total)	30,000	**3,300**	1.4E+8	NLV	2.5E+6		< 2000	**3,300**
Copper (B)	7440-50-8	32,000	5.8E+6	(G)	1.0E+9 (D)	NLV	2.0E+7		< 1000	< 1000
Lead (B)	7439-92-1	21,000	7.0E+5	(G,X)	ID	NLV	4.0E+5		< 1000	< 1000
Selenium (B)	7782-49-2	410	4,000	400	7.8E+7	NLV	2.6E+6		< 200	< 200
Zinc (B)	7440-66-6	47,000	2.4E+6	(G)	1.0E+9 (D)	NLV	1.7E+8		**1,200**	**2,000**
Semivolatiles, ug/Kg										
Fluoranthene	206-44-0	NA	7.3E+5	5,500	7.3E+5	1.0E+9 (D)	4.6E+7		< 330	< 330
Naphthalene	91-20-3	NA	35,000	730	2.1E+6	2.5E+5	1.6E+7		< 330	< 330
Phenanthrene	85-01-8	NA	56,000	2,100	1.1E+6	2.8E+6	1.6E+6		< 330	< 330
Pyrene	129-00-0	NA	4.8E+5	ID	4.8E+5	1.0E+9 (D)	2.9E+7		< 330	< 330

AKTPEERLESS environmental & energy services

Table 1, Summary of Soil Analytical Results
GTCBRA Traverse City Place
Traverse City, Michigan
8229B-4-20

Guidesheet Number →		#10	#11	#12	#13	#14	#19			
Parameters*	**Chemical Abstract Service Number**	**Statewide Default Background Levels**	**Residential Drinking Water Protection Criteria and RBSLs**	**Groundwater Surface Water Interface Protection Criteria & RBSLs**	**Groundwater Contact Protection Criteria & RBSLs**	**Residential Soil Volatilization to Indoor Air Inhalation Criteria and RBSLs**	**Residential Direct Contact Criteria and RBSLs**	Sample Location	SB-05	SB-05
								Collection Date	6/20/2013	6/20/2013
**(Refer to detailed laboratory report for method reference data)*								Depth (feet bgs)	1-2'	7-8'
Nonspecific Grouping ug/Kg										
Cyanide, Total (P,R)	CNTOTAL	390 (total)	**4,000**	**100**	2.5E+5	NLV	**12,000**		NS	NS
Metals ug/Kg										
Mercury, Total	7439-97-6	130	1,700	50 (M); 1.2*	47,000	48,000	1.6E+5		**120**	< 50
Arsenic	7440-38-2	5,800	4,600	4,600	2.0E+6	NLV	7,600		**4,100**	**610**
Barium (B)	7440-39-3	75,000	1.3E+6	(G)	1.0E+9 (D)	NLV	3.7E+7		**33,000**	**2,100**
Cadmium (B)	7440-43-9	1,200	6,000	(G,X)	2.3E+8	NLV	5.5E+5		**360**	< 200
Chromium, Total	7440-47-3	18,000 (total)	30,000	**3,300**	1.4E+8	NLV	2.5E+6		**3,100**	< 2000
Copper (B)	7440-50-8	32,000	5.8E+6	(G)	1.0E+9 (D)	NLV	2.0E+7		**16,000**	< 1000
Lead (B)	7439-92-1	21,000	7.0E+5	(G,X)	ID	NLV	4.0E+5		**88,000**	< 1000
Selenium (B)	7782-49-2	410	4,000	400	7.8E+7	NLV	2.6E+6		**550**	< 200
Zinc (B)	7440-66-6	47,000	2.4E+6	(G)	1.0E+9 (D)	NLV	1.7E+8		**73,000**	**1,700**
Semivolatiles, ug/Kg										
Fluoranthene	206-44-0	NA	7.3E+5	5,500	7.3E+5	1.0E+9 (D)	4.6E+7		**350**	< 330
Naphthalene	91-20-3	NA	35,000	730	2.1E+6	2.5E+5	1.6E+7		**330**	< 330
Phenanthrene	85-01-8	NA	56,000	2,100	1.1E+6	2.8E+6	1.6E+6		**360**	< 330
Pyrene	129-00-0	NA	4.8E+5	ID	4.8E+5	1.0E+9 (D)	2.9E+7		**340**	< 330

07-Jul-2013

Doug Kilmer
AKT Peerless Environmental Services
1000 S Washington
Suite 104
Lansing, MI 48933

Re: **Garland Street - 8100B** Work Order: **1306978**

Dear Doug,

ALS Environmental received 19 samples on 25-Jun-2013 10:15 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 111.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Joseph Ribar

Electronically approved by: Joseph Ribar

Joseph Ribar
Project Manager

Certificate No: MN 532786

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185
ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

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ALS Group USA, Corp

Date: 07-Jul-13

Client: AKT Peerless Environmental Services
Project: Garland Street - 8100B
Work Order: **1306978**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1306978-01	SB-05 1'-2'	Soil		6/20/2013 11:24	6/25/2013 10:15	☐
1306978-02	SB-05 7-8'	Soil		6/20/2013 12:05	6/25/2013 10:15	☐
1306978-03	SB-08 1-2'	Soil		6/20/2013 14:10	6/25/2013 10:15	☐
1306978-04	SB-08 6.8-7.5'	Soil		6/20/2013 14:20	6/25/2013 10:15	☐
1306978-05	SB-07 1-2'	Soil		6/20/2013 15:55	6/25/2013 10:15	☐
1306978-06	SB-07 9-10'	Soil		6/20/2013 16:20	6/25/2013 10:15	☐
1306978-07	SB-06 1-2'	Soil		6/21/2013 09:27	6/25/2013 10:15	☐
1306978-08	SB-06 8-9'	Soil		6/21/2013 10:00	6/25/2013 10:15	☐
1306978-09	SB-04 1-2'	Soil		6/21/2013 12:20	6/25/2013 10:15	☐
1306978-10	SB-04 8-9'	Soil		6/21/2013 12:32	6/25/2013 10:15	☐
1306978-11	SB-03 1-2'	Soil		6/21/2013 14:40	6/25/2013 10:15	☐
1306978-12	SB-03 7-8'	Soil		6/21/2013 14:47	6/25/2013 10:15	☐
1306978-13	SB-02 1-2'	Soil		6/21/2013 15:30	6/25/2013 10:15	☐
1306978-14	SB-02 8-9'	Soil		6/21/2013 15:42	6/25/2013 10:15	☐
1306978-15	SB-02 Dup-01	Soil		6/21/2013	6/25/2013 10:15	☐
1306978-16	SB-01 1-2'	Soil		6/21/2013 16:22	6/25/2013 10:15	☐
1306978-17	SB-01 9-10'	Soil		6/21/2013 16:34	6/25/2013 10:15	☐
1306978-18	SB-01 1-8'	Tclp Extract		6/21/2013 16:42	6/25/2013 10:15	☐
1306978-19	Trip Blank	Soil		6/21/2013	6/25/2013 10:15	☐

ALS Group USA, Corp

Date: 07-Jul-13

Client: AKT Peerless Environmental Services
Project: Garland Street - 8100B
Work Order: 1306978

Case Narrative

Sample Summary

Semi-Volatile Organic Compounds

Batch 49301, Method 8270, Sample 1306978-05B: One or more surrogate recoveries are unavailable due to sample matrix interference. Target analytes were not affected by the interference. No qualification is necessary.

QC Summary

Volatile Organic Compounds

Batch 49326, Method 8260, Sample 1306978-02A MS: The MS and/or MSD recovery was below the control limit. The corresponding result in the parent sample may be biased low: trans1,4-Dichloro-2-Butene

Batch 49337, Method 8260, Sample 1306978-17A MS: The MS and/or MSD recovery was below the control limit. The corresponding result in the parent sample may be biased low: trans1,4-Dichloro-2-Butene

Batch 49337, Method 8260, Sample MBLK-49337: The concentration in the Method Blank was greater than the quantitation limit. All samples in the batch were non-detect; therefore, no qualification is needed for this analyte: Chloromethane

ALS Group USA, Corp

Date: 07-Jul-13

Client: AKT Peerless Environmental Services
Project: Garland Street - 8100B
WorkOrder: **1306978**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
TDL	Target Detection Limit
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
µg/L	Micrograms per Liter
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-05 1'-2'
Work Order:	1306978	**Collection Date:**	6/20/2013 11:24:00 AM
Project:	Garland Street - 8100B		
Lab ID:	1306978-01	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471**		Prep Date:	**6/27/2013**	Analyst: **LR**
Mercury	**120**	**50**	**50**		**µg/Kg-dry**	1	6/27/2013
METALS BY ICP-MS			**SW6020A**		Prep Date:	**6/27/2013**	Analyst: **ML**
Arsenic	**4,100**	**160**	**100**		**µg/Kg-dry**	1	6/28/2013
Barium	**33,000**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Cadmium	**360**	**200**	**200**		**µg/Kg-dry**	1	6/28/2013
Chromium	**3,100**	**2,000**	**2,000**		**µg/Kg-dry**	1	6/28/2013
Copper	**16,000**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Lead	**88,000**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Selenium	**550**	**200**	**200**		**µg/Kg-dry**	1	6/28/2013
Silver	ND	100	100		µg/Kg-dry	1	6/28/2013
Zinc	**73,000**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date:	**6/25/2013**	Analyst: **RM**
2-Chloronaphthalene	ND	330	330		µg/Kg-dry	1	6/27/2013
2-Methylnaphthalene	**350**	**330**	**330**		**µg/Kg-dry**	1	6/27/2013
Acenaphthene	ND	330	330		µg/Kg-dry	1	6/27/2013
Acenaphthylene	ND	330	330		µg/Kg-dry	1	6/27/2013
Anthracene	ND	330	330		µg/Kg-dry	1	6/27/2013
Benzo(a)anthracene	ND	330	330		µg/Kg-dry	1	6/27/2013
Benzo(a)pyrene	ND	330	330		µg/Kg-dry	1	6/27/2013
Benzo(b)fluoranthene	ND	330	330		µg/Kg-dry	1	6/27/2013
Benzo(g,h,i)perylene	ND	330	330		µg/Kg-dry	1	6/27/2013
Benzo(k)fluoranthene	ND	330	330		µg/Kg-dry	1	6/27/2013
Chrysene	ND	330	330		µg/Kg-dry	1	6/27/2013
Dibenzo(a,h)anthracene	ND	330	330		µg/Kg-dry	1	6/27/2013
Fluoranthene	**350**	**330**	**330**		**µg/Kg-dry**	1	6/27/2013
Fluorene	ND	330	330		µg/Kg-dry	1	6/27/2013
Indeno(1,2,3-cd)pyrene	ND	330	330		µg/Kg-dry	1	6/27/2013
Naphthalene	**330**	**330**	**330**		**µg/Kg-dry**	1	6/27/2013
Phenanthrene	**360**	**330**	**330**		**µg/Kg-dry**	1	6/27/2013
Pyrene	**340**	**330**	**330**		**µg/Kg-dry**	1	6/27/2013
Surr: 2-Fluorobiphenyl	*64.3*	*12-100*			*%REC*	1	6/27/2013
Surr: 4-Terphenyl-d14	*96.4*	*25-137*			*%REC*	1	6/27/2013
Surr: Nitrobenzene-d5	*69.4*	*37-107*			*%REC*	1	6/27/2013
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date:	**6/26/2013**	Analyst: **BG**
1,1,1,2-Tetrachloroethane	ND	100	100		µg/Kg-dry	1	7/5/2013
1,1,1-Trichloroethane	ND	50	50		µg/Kg-dry	1	7/5/2013
1,1,2,2-Tetrachloroethane	ND	50	50		µg/Kg-dry	1	7/5/2013
1,1,2-Trichloroethane	ND	50	50		µg/Kg-dry	1	7/5/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-05 1'-2'
Work Order:	1306978	**Collection Date:**	6/20/2013 11:24:00 AM
Project:	Garland Street - 8100B		
Lab ID:	1306978-01	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	ND	100	100		µg/Kg-dry	1	7/5/2013
1,1-Dichloroethane	ND	50	50		µg/Kg-dry	1	7/5/2013
1,1-Dichloroethene	ND	50	50		µg/Kg-dry	1	7/5/2013
1,2,3-Trichloropropane	ND	100	100		µg/Kg-dry	1	7/5/2013
1,2,4-Trichlorobenzene	ND	250	250		µg/Kg-dry	1	7/5/2013
1,2,4-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	7/5/2013
1,2-Dibromo-3-chloropropane	ND	31	10		µg/Kg-dry	1	7/5/2013
1,2-Dibromoethane	ND	31	20		µg/Kg-dry	1	7/5/2013
1,2-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	7/5/2013
1,2-Dichloroethane	ND	50	50		µg/Kg-dry	1	7/5/2013
1,2-Dichloropropane	ND	50	50		µg/Kg-dry	1	7/5/2013
1,3,5-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	7/5/2013
1,3-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	7/5/2013
1,4-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	7/5/2013
2-Butanone	ND	750	750		µg/Kg-dry	1	7/5/2013
2-Hexanone	ND	2,500	2,500		µg/Kg-dry	1	7/5/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	7/5/2013
4-Methyl-2-pentanone	ND	2,500	2,500		µg/Kg-dry	1	7/5/2013
Acetone	ND	1,000	1,000		µg/Kg-dry	1	7/5/2013
Acrylonitrile	ND	100	100		µg/Kg-dry	1	7/5/2013
Benzene	ND	50	50		µg/Kg-dry	1	7/5/2013
Bromochloromethane	ND	100	100		µg/Kg-dry	1	7/5/2013
Bromodichloromethane	ND	100	100		µg/Kg-dry	1	7/5/2013
Bromoform	ND	100	100		µg/Kg-dry	1	7/5/2013
Bromomethane	ND	200	200		µg/Kg-dry	1	7/5/2013
Carbon disulfide	ND	250	250		µg/Kg-dry	1	7/5/2013
Carbon tetrachloride	ND	50	50		µg/Kg-dry	1	7/5/2013
Chlorobenzene	ND	50	50		µg/Kg-dry	1	7/5/2013
Chloroethane	ND	250	250		µg/Kg-dry	1	7/5/2013
Chloroform	ND	50	50		µg/Kg-dry	1	7/5/2013
Chloromethane	ND	250	250		µg/Kg-dry	1	7/5/2013
cis-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	7/5/2013
cis-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	7/5/2013
Dibromochloromethane	ND	100	100		µg/Kg-dry	1	7/5/2013
Dibromomethane	ND	250	250		µg/Kg-dry	1	7/5/2013
Dichlorodifluoromethane	ND	250	250		µg/Kg-dry	1	7/5/2013
Diethyl ether	ND	200	200		µg/Kg-dry	1	7/5/2013
Ethylbenzene	ND	50	50		µg/Kg-dry	1	7/5/2013
Hexachloroethane	ND	300	300		µg/Kg-dry	1	7/5/2013
Isopropylbenzene	ND	250	250		µg/Kg-dry	1	7/5/2013
m,p-Xylene	ND	100	100		µg/Kg-dry	1	7/5/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-05 1'-2'
Work Order:	1306978	**Collection Date:**	6/20/2013 11:24:00 AM
Project:	Garland Street - 8100B		
Lab ID:	1306978-01	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
Methyl iodide	ND	100	100		µg/Kg-dry	1	7/5/2013
Methyl tert-butyl ether	ND	250	250		µg/Kg-dry	1	7/5/2013
Methylene chloride	ND	100	100		µg/Kg-dry	1	7/5/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	7/5/2013
n-Propylbenzene	ND	100	100		µg/Kg-dry	1	7/5/2013
o-Xylene	ND	50	50		µg/Kg-dry	1	7/5/2013
Styrene	ND	50	50		µg/Kg-dry	1	7/5/2013
Tetrachloroethene	ND	50	50		µg/Kg-dry	1	7/5/2013
Toluene	ND	100	100		µg/Kg-dry	1	7/5/2013
trans-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	7/5/2013
trans-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	7/5/2013
trans-1,4-Dichloro-2-butene	ND	50	50		µg/Kg-dry	1	7/5/2013
Trichloroethene	ND	50	50		µg/Kg-dry	1	7/5/2013
Trichlorofluoromethane	ND	100	100		µg/Kg-dry	1	7/5/2013
Vinyl acetate	ND	5,000	5,000		µg/Kg-dry	1	7/5/2013
Vinyl chloride	ND	40	40		µg/Kg-dry	1	7/5/2013
Xylenes, Total	ND	150	150		µg/Kg-dry	1	7/5/2013
Surr: 1,2-Dichloroethane-d4	*99.3*	*70-130*			*%REC*	1	7/5/2013
Surr: 4-Bromofluorobenzene	*101*	*70-130*			*%REC*	1	7/5/2013
Surr: Dibromofluoromethane	*98.0*	*70-130*			*%REC*	1	7/5/2013
Surr: Toluene-d8	*99.8*	*70-130*			*%REC*	1	7/5/2013
MOISTURE			**A2540 G**				Analyst: **BD**
Moisture	**4.0**	**0.050**	**0**		**% of sample**	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-05 7-8'
Work Order:	1306978	**Collection Date:**	6/20/2013 12:05:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-02	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471**		Prep Date:	**6/27/2013**	Analyst: **LR**
Mercury	ND	50	50		µg/Kg-dry	1	6/27/2013
METALS BY ICP-MS			**SW6020A**		Prep Date:	**6/27/2013**	Analyst: **ML**
Arsenic	**610**	**140**	**100**		**µg/Kg-dry**	1	6/28/2013
Barium	**2,100**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Cadmium	ND	200	200		µg/Kg-dry	1	6/28/2013
Chromium	ND	2,000	2,000		µg/Kg-dry	1	6/28/2013
Copper	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Lead	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Selenium	ND	200	200		µg/Kg-dry	1	6/28/2013
Silver	ND	100	100		µg/Kg-dry	1	6/28/2013
Zinc	**1,700**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date:	**6/28/2013**	Analyst: **RM**
2-Chloronaphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
Acenaphthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Acenaphthylene	ND	330	330		µg/Kg-dry	1	7/1/2013
Anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(a)anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(a)pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(b)fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(g,h,i)perylene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(k)fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Chrysene	ND	330	330		µg/Kg-dry	1	7/1/2013
Dibenzo(a,h)anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Fluorene	ND	330	330		µg/Kg-dry	1	7/1/2013
Indeno(1,2,3-cd)pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
Phenanthrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Surr: 2-Fluorobiphenyl	*64.6*	*12-100*			*%REC*	1	7/1/2013
Surr: 4-Terphenyl-d14	*97.3*	*25-137*			*%REC*	1	7/1/2013
Surr: Nitrobenzene-d5	*61.5*	*37-107*			*%REC*	1	7/1/2013
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date:	**6/26/2013**	Analyst: **BG**
1,1,1,2-Tetrachloroethane	ND	100	100		µg/Kg-dry	1	6/27/2013
1,1,1-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/27/2013
1,1,2,2-Tetrachloroethane	ND	50	50		µg/Kg-dry	1	6/27/2013
1,1,2-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/27/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-05 7-8'
Work Order:	1306978	**Collection Date:**	6/20/2013 12:05:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-02	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	ND	100	100		µg/Kg-dry	1	6/27/2013
1,1-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/27/2013
1,1-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/27/2013
1,2,3-Trichloropropane	ND	100	100		µg/Kg-dry	1	6/27/2013
1,2,4-Trichlorobenzene	ND	250	250		µg/Kg-dry	1	6/27/2013
1,2,4-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
1,2-Dibromo-3-chloropropane	ND	31	10		µg/Kg-dry	1	6/27/2013
1,2-Dibromoethane	ND	31	20		µg/Kg-dry	1	6/27/2013
1,2-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
1,2-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/27/2013
1,2-Dichloropropane	ND	50	50		µg/Kg-dry	1	6/27/2013
1,3,5-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
1,3-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
1,4-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
2-Butanone	ND	750	750		µg/Kg-dry	1	6/27/2013
2-Hexanone	ND	2,500	2,500		µg/Kg-dry	1	6/27/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/27/2013
4-Methyl-2-pentanone	ND	2,500	2,500		µg/Kg-dry	1	6/27/2013
Acetone	ND	1,000	1,000		µg/Kg-dry	1	6/27/2013
Acrylonitrile	ND	100	100		µg/Kg-dry	1	6/27/2013
Benzene	ND	50	50		µg/Kg-dry	1	6/27/2013
Bromochloromethane	ND	100	100		µg/Kg-dry	1	6/27/2013
Bromodichloromethane	ND	100	100		µg/Kg-dry	1	6/27/2013
Bromoform	ND	100	100		µg/Kg-dry	1	6/27/2013
Bromomethane	ND	200	200		µg/Kg-dry	1	6/27/2013
Carbon disulfide	ND	250	250		µg/Kg-dry	1	6/27/2013
Carbon tetrachloride	ND	50	50		µg/Kg-dry	1	6/27/2013
Chlorobenzene	ND	50	50		µg/Kg-dry	1	6/27/2013
Chloroethane	ND	250	250		µg/Kg-dry	1	6/27/2013
Chloroform	ND	50	50		µg/Kg-dry	1	6/27/2013
Chloromethane	ND	250	250		µg/Kg-dry	1	6/27/2013
cis-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/27/2013
cis-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/27/2013
Dibromochloromethane	ND	100	100		µg/Kg-dry	1	6/27/2013
Dibromomethane	ND	250	250		µg/Kg-dry	1	6/27/2013
Dichlorodifluoromethane	ND	250	250		µg/Kg-dry	1	6/27/2013
Diethyl ether	ND	200	200		µg/Kg-dry	1	6/27/2013
Ethylbenzene	ND	50	50		µg/Kg-dry	1	6/27/2013
Hexachloroethane	ND	300	300		µg/Kg-dry	1	6/27/2013
Isopropylbenzene	ND	250	250		µg/Kg-dry	1	6/27/2013
m,p-Xylene	ND	100	100		µg/Kg-dry	1	6/27/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-05 7-8'
Work Order:	1306978	**Collection Date:**	6/20/2013 12:05:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-02	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
Methyl iodide	ND	100	100		µg/Kg-dry	1	6/27/2013
Methyl tert-butyl ether	ND	250	250		µg/Kg-dry	1	6/27/2013
Methylene chloride	ND	100	100	B	µg/Kg-dry	1	6/27/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/27/2013
n-Propylbenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
o-Xylene	ND	50	50		µg/Kg-dry	1	6/27/2013
Styrene	ND	50	50		µg/Kg-dry	1	6/27/2013
Tetrachloroethene	ND	50	50		µg/Kg-dry	1	6/27/2013
Toluene	ND	100	100		µg/Kg-dry	1	6/27/2013
trans-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/27/2013
trans-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/27/2013
trans-1,4-Dichloro-2-butene	ND	50	50		µg/Kg-dry	1	6/27/2013
Trichloroethene	ND	50	50		µg/Kg-dry	1	6/27/2013
Trichlorofluoromethane	ND	100	100		µg/Kg-dry	1	6/27/2013
Vinyl acetate	ND	5,000	5,000		µg/Kg-dry	1	6/27/2013
Vinyl chloride	ND	40	40		µg/Kg-dry	1	6/27/2013
Xylenes, Total	ND	150	150		µg/Kg-dry	1	6/27/2013
Surr: 1,2-Dichloroethane-d4	*98.8*	*70-130*			*%REC*	1	6/27/2013
Surr: 4-Bromofluorobenzene	*96.1*	*70-130*			*%REC*	1	6/27/2013
Surr: Dibromofluoromethane	*95.7*	*70-130*			*%REC*	1	6/27/2013
Surr: Toluene-d8	*101*	*70-130*			*%REC*	1	6/27/2013
MOISTURE			**A2540 G**				Analyst: **BD**
Moisture	**3.4**	**0.050**	**0**		**% of sample**	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-08 1-2'
Work Order:	1306978	**Collection Date:**	6/20/2013 2:10:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-03	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471**		Prep Date:	**6/27/2013**	Analyst: **LR**
Mercury	ND	50	50		µg/Kg-dry	1	6/27/2013
METALS BY ICP-MS			**SW6020A**		Prep Date:	**6/27/2013**	Analyst: **ML**
Arsenic	**570**	**160**	**100**		**µg/Kg-dry**	1	6/28/2013
Barium	**5,800**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Cadmium	ND	200	200		µg/Kg-dry	1	6/28/2013
Chromium	ND	2,000	2,000		µg/Kg-dry	1	6/28/2013
Copper	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Lead	**3,100**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Selenium	ND	200	200		µg/Kg-dry	1	6/28/2013
Silver	ND	100	100		µg/Kg-dry	1	6/28/2013
Zinc	**1,800**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date:	**6/25/2013**	Analyst: **RM**
2-Chloronaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
Acenaphthene	ND	330	330		µg/Kg-dry	1	6/26/2013
Acenaphthylene	ND	330	330		µg/Kg-dry	1	6/26/2013
Anthracene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(a)anthracene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(a)pyrene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(b)fluoranthene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(g,h,i)perylene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(k)fluoranthene	ND	330	330		µg/Kg-dry	1	6/26/2013
Chrysene	ND	330	330		µg/Kg-dry	1	6/26/2013
Dibenzo(a,h)anthracene	ND	330	330		µg/Kg-dry	1	6/26/2013
Fluoranthene	ND	330	330		µg/Kg-dry	1	6/26/2013
Fluorene	ND	330	330		µg/Kg-dry	1	6/26/2013
Indeno(1,2,3-cd)pyrene	ND	330	330		µg/Kg-dry	1	6/26/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
Phenanthrene	ND	330	330		µg/Kg-dry	1	6/26/2013
Pyrene	ND	330	330		µg/Kg-dry	1	6/26/2013
Surr: 2-Fluorobiphenyl	*71.4*	*12-100*			*%REC*	1	6/26/2013
Surr: 4-Terphenyl-d14	*128*	*25-137*			*%REC*	1	6/26/2013
Surr: Nitrobenzene-d5	*58.8*	*37-107*			*%REC*	1	6/26/2013
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date:	**6/26/2013**	Analyst: **AK**
1,1,1,2-Tetrachloroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1,1-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2,2-Tetrachloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-08 1-2'
Work Order:	1306978	**Collection Date:**	6/20/2013 2:10:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-03	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2,3-Trichloropropane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2,4-Trichlorobenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
1,2,4-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dibromo-3-chloropropane	ND	34	10		µg/Kg-dry	1	6/26/2013
1,2-Dibromoethane	ND	34	20		µg/Kg-dry	1	6/26/2013
1,2-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2-Dichloropropane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,3,5-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,3-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,4-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
2-Butanone	ND	750	750		µg/Kg-dry	1	6/26/2013
2-Hexanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
4-Methyl-2-pentanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
Acetone	ND	1,000	1,000		µg/Kg-dry	1	6/26/2013
Acrylonitrile	ND	110	100		µg/Kg-dry	1	6/26/2013
Benzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Bromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromodichloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromoform	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromomethane	ND	200	200		µg/Kg-dry	1	6/26/2013
Carbon disulfide	ND	250	250		µg/Kg-dry	1	6/26/2013
Carbon tetrachloride	ND	50	50		µg/Kg-dry	1	6/26/2013
Chlorobenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloroethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Chloroform	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
cis-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
cis-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
Dibromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Dibromomethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Dichlorodifluoromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Diethyl ether	ND	200	200		µg/Kg-dry	1	6/26/2013
Ethylbenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Hexachloroethane	ND	300	300		µg/Kg-dry	1	6/26/2013
Isopropylbenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
m,p-Xylene	ND	100	100		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-08 1-2'
Work Order:	1306978	**Collection Date:**	6/20/2013 2:10:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-03	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
Methyl iodide	ND	100	100		µg/Kg-dry	1	6/26/2013
Methyl tert-butyl ether	ND	250	250		µg/Kg-dry	1	6/26/2013
Methylene chloride	ND	100	100		µg/Kg-dry	1	6/26/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
n-Propylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
o-Xylene	ND	50	50		µg/Kg-dry	1	6/26/2013
Styrene	ND	50	50		µg/Kg-dry	1	6/26/2013
Tetrachloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Toluene	ND	100	100		µg/Kg-dry	1	6/26/2013
trans-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,4-Dichloro-2-butene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichlorofluoromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Vinyl acetate	ND	5,000	5,000		µg/Kg-dry	1	6/26/2013
Vinyl chloride	ND	40	40		µg/Kg-dry	1	6/26/2013
Xylenes, Total	ND	150	150		µg/Kg-dry	1	6/26/2013
Surr: 1,2-Dichloroethane-d4	*99.6*	*70-130*			*%REC*	1	6/26/2013
Surr: 4-Bromofluorobenzene	*95.5*	*70-130*			*%REC*	1	6/26/2013
Surr: Dibromofluoromethane	*102*	*70-130*			*%REC*	1	6/26/2013
Surr: Toluene-d8	*96.0*	*70-130*			*%REC*	1	6/26/2013
MOISTURE			**A2540 G**				Analyst: **BD**
Moisture	**3.5**	**0.050**	**0**		**% of sample**	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-08 6.8-7.5'
Work Order:	1306978	**Collection Date:**	6/20/2013 2:20:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-04	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471**		Prep Date:	**6/27/2013**	Analyst: **LR**
Mercury	ND	50	50		µg/Kg-dry	1	6/27/2013
METALS BY ICP-MS			**SW6020A**		Prep Date:	**6/27/2013**	Analyst: **ML**
Arsenic	**560**	**160**	**100**		**µg/Kg-dry**	1	6/28/2013
Barium	**2,500**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Cadmium	ND	200	200		µg/Kg-dry	1	6/28/2013
Chromium	ND	2,000	2,000		µg/Kg-dry	1	6/28/2013
Copper	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Lead	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Selenium	ND	200	200		µg/Kg-dry	1	6/28/2013
Silver	ND	100	100		µg/Kg-dry	1	6/28/2013
Zinc	**2,200**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date:	**6/25/2013**	Analyst: **RM**
2-Chloronaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
Acenaphthene	ND	330	330		µg/Kg-dry	1	6/26/2013
Acenaphthylene	ND	330	330		µg/Kg-dry	1	6/26/2013
Anthracene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(a)anthracene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(a)pyrene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(b)fluoranthene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(g,h,i)perylene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(k)fluoranthene	ND	330	330		µg/Kg-dry	1	6/26/2013
Chrysene	ND	330	330		µg/Kg-dry	1	6/26/2013
Dibenzo(a,h)anthracene	ND	330	330		µg/Kg-dry	1	6/26/2013
Fluoranthene	ND	330	330		µg/Kg-dry	1	6/26/2013
Fluorene	ND	330	330		µg/Kg-dry	1	6/26/2013
Indeno(1,2,3-cd)pyrene	ND	330	330		µg/Kg-dry	1	6/26/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
Phenanthrene	ND	330	330		µg/Kg-dry	1	6/26/2013
Pyrene	ND	330	330		µg/Kg-dry	1	6/26/2013
Surr: 2-Fluorobiphenyl	*77.7*	*12-100*			*%REC*	1	6/26/2013
Surr: 4-Terphenyl-d14	*116*	*25-137*			*%REC*	1	6/26/2013
Surr: Nitrobenzene-d5	*66.3*	*37-107*			*%REC*	1	6/26/2013
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date:	**6/26/2013**	Analyst: **AK**
1,1,1,2-Tetrachloroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1,1-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2,2-Tetrachloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-08 6.8-7.5'
Work Order:	1306978	**Collection Date:**	6/20/2013 2:20:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-04	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2,3-Trichloropropane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2,4-Trichlorobenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
1,2,4-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dibromo-3-chloropropane	ND	34	10		µg/Kg-dry	1	6/26/2013
1,2-Dibromoethane	ND	34	20		µg/Kg-dry	1	6/26/2013
1,2-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2-Dichloropropane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,3,5-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,3-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,4-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
2-Butanone	ND	750	750		µg/Kg-dry	1	6/26/2013
2-Hexanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
4-Methyl-2-pentanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
Acetone	ND	1,000	1,000		µg/Kg-dry	1	6/26/2013
Acrylonitrile	ND	110	100		µg/Kg-dry	1	6/26/2013
Benzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Bromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromodichloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromoform	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromomethane	ND	200	200		µg/Kg-dry	1	6/26/2013
Carbon disulfide	ND	250	250		µg/Kg-dry	1	6/26/2013
Carbon tetrachloride	ND	50	50		µg/Kg-dry	1	6/26/2013
Chlorobenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloroethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Chloroform	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
cis-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
cis-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
Dibromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Dibromomethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Dichlorodifluoromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Diethyl ether	ND	200	200		µg/Kg-dry	1	6/26/2013
Ethylbenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Hexachloroethane	ND	300	300		µg/Kg-dry	1	6/26/2013
Isopropylbenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
m,p-Xylene	ND	100	100		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-08 6.8-7.5'
Work Order:	1306978	**Collection Date:**	6/20/2013 2:20:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-04	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
Methyl iodide	ND	100	100		µg/Kg-dry	1	6/26/2013
Methyl tert-butyl ether	ND	250	250		µg/Kg-dry	1	6/26/2013
Methylene chloride	ND	100	100		µg/Kg-dry	1	6/26/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
n-Propylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
o-Xylene	ND	50	50		µg/Kg-dry	1	6/26/2013
Styrene	ND	50	50		µg/Kg-dry	1	6/26/2013
Tetrachloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Toluene	ND	100	100		µg/Kg-dry	1	6/26/2013
trans-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,4-Dichloro-2-butene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichlorofluoromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Vinyl acetate	ND	5,000	5,000		µg/Kg-dry	1	6/26/2013
Vinyl chloride	ND	40	40		µg/Kg-dry	1	6/26/2013
Xylenes, Total	ND	150	150		µg/Kg-dry	1	6/26/2013
Surr: 1,2-Dichloroethane-d4	*99.0*	*70-130*			*%REC*	1	6/26/2013
Surr: 4-Bromofluorobenzene	*95.8*	*70-130*			*%REC*	1	6/26/2013
Surr: Dibromofluoromethane	*101*	*70-130*			*%REC*	1	6/26/2013
Surr: Toluene-d8	*100*	*70-130*			*%REC*	1	6/26/2013
MOISTURE			**A2540 G**				Analyst: **BD**
Moisture	**3.6**	**0.050**	**0**		**% of sample**	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-07 1-2'
Work Order:	1306978	**Collection Date:**	6/20/2013 3:55:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-05	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471**		Prep Date:	**6/27/2013**	Analyst: **LR**
Mercury	ND	50	50		µg/Kg-dry	1	6/27/2013
METALS BY ICP-MS			**SW6020A**		Prep Date:	**6/27/2013**	Analyst: **ML**
Arsenic	**830**	**140**	**100**		**µg/Kg-dry**	1	6/28/2013
Barium	**6,000**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Cadmium	ND	200	200		µg/Kg-dry	1	6/28/2013
Chromium	ND	2,000	2,000		µg/Kg-dry	1	6/28/2013
Copper	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Lead	**1,300**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Selenium	ND	200	200		µg/Kg-dry	1	6/28/2013
Silver	ND	100	100		µg/Kg-dry	1	6/28/2013
Zinc	**3,300**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date:	**6/25/2013**	Analyst: **RM**
1,2,4-Trichlorobenzene	ND	330	330		µg/Kg-dry	1	6/26/2013
1,2-Dichlorobenzene	ND	330	330		µg/Kg-dry	1	6/26/2013
1,3-Dichlorobenzene	ND	330	330		µg/Kg-dry	1	6/26/2013
1,4-Dichlorobenzene	ND	330	330		µg/Kg-dry	1	6/26/2013
2,4,5-Trichlorophenol	ND	300	300		µg/Kg-dry	1	6/26/2013
2,4,6-Trichlorophenol	ND	330	330		µg/Kg-dry	1	6/26/2013
2,4-Dichlorophenol	ND	330	330		µg/Kg-dry	1	6/26/2013
2,4-Dimethylphenol	ND	330	330		µg/Kg-dry	1	6/26/2013
2,4-Dinitrophenol	ND	830	830		µg/Kg-dry	1	6/26/2013
2,4-Dinitrotoluene	ND	330	330		µg/Kg-dry	1	6/26/2013
2,6-Dinitrotoluene	ND	330	330		µg/Kg-dry	1	6/26/2013
2-Chloronaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
2-Chlorophenol	ND	330	330		µg/Kg-dry	1	6/26/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
2-Methylphenol	ND	330	330		µg/Kg-dry	1	6/26/2013
2-Nitroaniline	ND	830	830		µg/Kg-dry	1	6/26/2013
2-Nitrophenol	ND	330	330		µg/Kg-dry	1	6/26/2013
3,3´-Dichlorobenzidine	ND	2,000	2,000		µg/Kg-dry	1	6/26/2013
3-Nitroaniline	ND	830	830		µg/Kg-dry	1	6/26/2013
4,6-Dinitro-2-methylphenol	ND	830	830		µg/Kg-dry	1	6/26/2013
4-Bromophenyl phenyl ether	ND	330	330		µg/Kg-dry	1	6/26/2013
4-Chloro-3-methylphenol	ND	280	280		µg/Kg-dry	1	6/26/2013
4-Chloroaniline	ND	660	330		µg/Kg-dry	1	6/26/2013
4-Chlorophenyl phenyl ether	ND	330	330		µg/Kg-dry	1	6/26/2013
4-Methylphenol	ND	330	330		µg/Kg-dry	1	6/26/2013
4-Nitroaniline	ND	830	830		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-07 1-2'
Work Order:	1306978	**Collection Date:**	6/20/2013 3:55:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-05	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
4-Nitrophenol	ND	830	830		µg/Kg-dry	1	6/26/2013
Acenaphthene	ND	330	330		µg/Kg-dry	1	6/26/2013
Acenaphthylene	ND	330	330		µg/Kg-dry	1	6/26/2013
Anthracene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(a)anthracene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(a)pyrene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(b)fluoranthene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(g,h,i)perylene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(k)fluoranthene	ND	330	330		µg/Kg-dry	1	6/26/2013
Bis(2-chloroethoxy)methane	ND	330	330		µg/Kg-dry	1	6/26/2013
Bis(2-chloroethyl)ether	ND	160	100		µg/Kg-dry	1	6/26/2013
Bis(2-chloroisopropyl)ether	ND	330	330		µg/Kg-dry	1	6/26/2013
Bis(2-ethylhexyl)phthalate	ND	330	330		µg/Kg-dry	1	6/26/2013
Butyl benzyl phthalate	ND	330	330		µg/Kg-dry	1	6/26/2013
Carbazole	ND	330	330		µg/Kg-dry	1	6/26/2013
Chrysene	ND	330	330		µg/Kg-dry	1	6/26/2013
Dibenzo(a,h)anthracene	ND	330	330		µg/Kg-dry	1	6/26/2013
Dibenzofuran	ND	330	330		µg/Kg-dry	1	6/26/2013
Diethyl phthalate	ND	330	330		µg/Kg-dry	1	6/26/2013
Dimethyl phthalate	ND	330	330		µg/Kg-dry	1	6/26/2013
Di-n-butyl phthalate	ND	330	330		µg/Kg-dry	1	6/26/2013
Di-n-octyl phthalate	ND	330	330		µg/Kg-dry	1	6/26/2013
Fluoranthene	ND	330	330		µg/Kg-dry	1	6/26/2013
Fluorene	ND	330	330		µg/Kg-dry	1	6/26/2013
Hexachlorobenzene	ND	330	330		µg/Kg-dry	1	6/26/2013
Hexachlorobutadiene	ND	160	50		µg/Kg-dry	1	6/26/2013
Hexachlorocyclopentadiene	ND	330	330		µg/Kg-dry	1	6/26/2013
Hexachloroethane	ND	300	300		µg/Kg-dry	1	6/26/2013
Indeno(1,2,3-cd)pyrene	ND	330	330		µg/Kg-dry	1	6/26/2013
Isophorone	ND	330	330		µg/Kg-dry	1	6/26/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
Nitrobenzene	ND	330	330		µg/Kg-dry	1	6/26/2013
N-Nitrosodi-n-propylamine	ND	330	330		µg/Kg-dry	1	6/26/2013
N-Nitrosodiphenylamine	ND	330	330		µg/Kg-dry	1	6/26/2013
Pentachlorophenol	ND	330	20		µg/Kg-dry	1	6/26/2013
Phenanthrene	ND	330	330		µg/Kg-dry	1	6/26/2013
Phenol	ND	330	330		µg/Kg-dry	1	6/26/2013
Pyrene	ND	330	330		µg/Kg-dry	1	6/26/2013
Surr: 2,4,6-Tribromophenol	*21.8*	*34-140*		S	*%REC*	1	6/26/2013
Surr: 2-Fluorobiphenyl	*63.7*	*12-100*			*%REC*	1	6/26/2013
Surr: 2-Fluorophenol	*48.5*	*33-117*			*%REC*	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-07 1-2'
Work Order:	1306978	**Collection Date:**	6/20/2013 3:55:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-05	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
Surr: 4-Terphenyl-d14	*117*	*25-137*			*%REC*	1	6/26/2013
Surr: Nitrobenzene-d5	*55.3*	*37-107*			*%REC*	1	6/26/2013
Surr: Phenol-d6	*58.6*	*40-106*			*%REC*	1	6/26/2013
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date: **6/26/2013**		Analyst: **AK**
1,1,1,2-Tetrachloroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1,1-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2,2-Tetrachloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2-Trichlorotrifluoroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2,3-Trichloropropane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2,4-Trichlorobenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
1,2,4-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dibromo-3-chloropropane	ND	34	10		µg/Kg-dry	1	6/26/2013
1,2-Dibromoethane	ND	34	20		µg/Kg-dry	1	6/26/2013
1,2-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2-Dichloropropane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,3,5-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,3-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,4-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
2-Butanone	ND	750	750		µg/Kg-dry	1	6/26/2013
2-Hexanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
4-Methyl-2-pentanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
Acetone	ND	1,000	1,000		µg/Kg-dry	1	6/26/2013
Acrylonitrile	ND	110	100		µg/Kg-dry	1	6/26/2013
Benzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Bromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromodichloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromoform	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromomethane	ND	200	200		µg/Kg-dry	1	6/26/2013
Carbon disulfide	ND	250	250		µg/Kg-dry	1	6/26/2013
Carbon tetrachloride	ND	50	50		µg/Kg-dry	1	6/26/2013
Chlorobenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloroethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Chloroform	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
cis-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-07 1-2'
Work Order:	1306978	**Collection Date:**	6/20/2013 3:55:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-05	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
cis-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
Dibromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Dibromomethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Dichlorodifluoromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Diethyl ether	ND	200	200		µg/Kg-dry	1	6/26/2013
Ethylbenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Hexachloroethane	ND	300	300		µg/Kg-dry	1	6/26/2013
Isopropylbenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
m,p-Xylene	ND	100	100		µg/Kg-dry	1	6/26/2013
Methyl iodide	ND	100	100		µg/Kg-dry	1	6/26/2013
Methyl tert-butyl ether	ND	250	250		µg/Kg-dry	1	6/26/2013
Methylene chloride	ND	100	100		µg/Kg-dry	1	6/26/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
n-Propylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
o-Xylene	ND	50	50		µg/Kg-dry	1	6/26/2013
Styrene	ND	50	50		µg/Kg-dry	1	6/26/2013
Tetrachloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Toluene	ND	100	100		µg/Kg-dry	1	6/26/2013
trans-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,4-Dichloro-2-butene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichlorofluoromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Vinyl acetate	ND	5,000	5,000		µg/Kg-dry	1	6/26/2013
Vinyl chloride	ND	40	40		µg/Kg-dry	1	6/26/2013
Xylenes, Total	ND	150	150		µg/Kg-dry	1	6/26/2013
Surr: 1,2-Dichloroethane-d4	*99.8*	*70-130*			*%REC*	1	6/26/2013
Surr: 4-Bromofluorobenzene	*94.2*	*70-130*			*%REC*	1	6/26/2013
Surr: Dibromofluoromethane	*102*	*70-130*			*%REC*	1	6/26/2013
Surr: Toluene-d8	*99.7*	*70-130*			*%REC*	1	6/26/2013
CYANIDE, TOTAL			**SW9012A**		Prep Date: **6/27/2013**		Analyst: **JJG**
Cyanide, Total	ND	0.52	0.10		mg/Kg-dry	1	6/27/2013
MOISTURE			**A2540 G**				Analyst: **BD**
Moisture	**3.4**	**0.050**	**0**		**% of sample**	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-07 9-10'
Work Order:	1306978	**Collection Date:**	6/20/2013 4:20:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-06	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471**		Prep Date:	**6/27/2013**	Analyst: **LR**
Mercury	ND	50	50		µg/Kg-dry	1	6/27/2013
METALS BY ICP-MS			**SW6020A**		Prep Date:	**6/27/2013**	Analyst: **ML**
Arsenic	**870**	**140**	**100**		**µg/Kg-dry**	1	6/28/2013
Barium	**3,900**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Cadmium	ND	200	200		µg/Kg-dry	1	6/28/2013
Chromium	ND	2,000	2,000		µg/Kg-dry	1	6/28/2013
Copper	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Lead	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Selenium	ND	200	200		µg/Kg-dry	1	6/28/2013
Silver	ND	100	100		µg/Kg-dry	1	6/28/2013
Zinc	**2,200**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date:	**6/25/2013**	Analyst: **RM**
2-Chloronaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
Acenaphthene	ND	330	330		µg/Kg-dry	1	6/26/2013
Acenaphthylene	ND	330	330		µg/Kg-dry	1	6/26/2013
Anthracene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(a)anthracene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(a)pyrene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(b)fluoranthene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(g,h,i)perylene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(k)fluoranthene	ND	330	330		µg/Kg-dry	1	6/26/2013
Chrysene	ND	330	330		µg/Kg-dry	1	6/26/2013
Dibenzo(a,h)anthracene	ND	330	330		µg/Kg-dry	1	6/26/2013
Fluoranthene	ND	330	330		µg/Kg-dry	1	6/26/2013
Fluorene	ND	330	330		µg/Kg-dry	1	6/26/2013
Indeno(1,2,3-cd)pyrene	ND	330	330		µg/Kg-dry	1	6/26/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
Phenanthrene	ND	330	330		µg/Kg-dry	1	6/26/2013
Pyrene	ND	330	330		µg/Kg-dry	1	6/26/2013
Surr: 2-Fluorobiphenyl	*70.5*	*12-100*			*%REC*	1	6/26/2013
Surr: 4-Terphenyl-d14	*121*	*25-137*			*%REC*	1	6/26/2013
Surr: Nitrobenzene-d5	*63.2*	*37-107*			*%REC*	1	6/26/2013
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date:	**6/26/2013**	Analyst: **AK**
1,1,1,2-Tetrachloroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1,1-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2,2-Tetrachloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-07 9-10'
Work Order:	1306978	**Collection Date:**	6/20/2013 4:20:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-06	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2,3-Trichloropropane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2,4-Trichlorobenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
1,2,4-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dibromo-3-chloropropane	ND	31	10		µg/Kg-dry	1	6/26/2013
1,2-Dibromoethane	ND	31	20		µg/Kg-dry	1	6/26/2013
1,2-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2-Dichloropropane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,3,5-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,3-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,4-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
2-Butanone	ND	750	750		µg/Kg-dry	1	6/26/2013
2-Hexanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
4-Methyl-2-pentanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
Acetone	ND	1,000	1,000		µg/Kg-dry	1	6/26/2013
Acrylonitrile	ND	100	100		µg/Kg-dry	1	6/26/2013
Benzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Bromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromodichloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromoform	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromomethane	ND	200	200		µg/Kg-dry	1	6/26/2013
Carbon disulfide	ND	250	250		µg/Kg-dry	1	6/26/2013
Carbon tetrachloride	ND	50	50		µg/Kg-dry	1	6/26/2013
Chlorobenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloroethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Chloroform	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
cis-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
cis-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
Dibromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Dibromomethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Dichlorodifluoromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Diethyl ether	ND	200	200		µg/Kg-dry	1	6/26/2013
Ethylbenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Hexachloroethane	ND	300	300		µg/Kg-dry	1	6/26/2013
Isopropylbenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
m,p-Xylene	ND	100	100		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-07 9-10'
Work Order:	1306978	**Collection Date:**	6/20/2013 4:20:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-06	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
Methyl iodide	ND	100	100		µg/Kg-dry	1	6/26/2013
Methyl tert-butyl ether	ND	250	250		µg/Kg-dry	1	6/26/2013
Methylene chloride	ND	100	100		µg/Kg-dry	1	6/26/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
n-Propylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
o-Xylene	ND	50	50		µg/Kg-dry	1	6/26/2013
Styrene	ND	50	50		µg/Kg-dry	1	6/26/2013
Tetrachloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Toluene	ND	100	100		µg/Kg-dry	1	6/26/2013
trans-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,4-Dichloro-2-butene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichlorofluoromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Vinyl acetate	ND	5,000	5,000		µg/Kg-dry	1	6/26/2013
Vinyl chloride	ND	40	40		µg/Kg-dry	1	6/26/2013
Xylenes, Total	ND	150	150		µg/Kg-dry	1	6/26/2013
Surr: 1,2-Dichloroethane-d4	*101*	*70-130*			*%REC*	1	6/26/2013
Surr: 4-Bromofluorobenzene	*92.6*	*70-130*			*%REC*	1	6/26/2013
Surr: Dibromofluoromethane	*101*	*70-130*			*%REC*	1	6/26/2013
Surr: Toluene-d8	*98.0*	*70-130*			*%REC*	1	6/26/2013
MOISTURE			**A2540 G**				Analyst: **BD**
Moisture	**3.8**	**0.050**	**0**		**% of sample**	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-06 1-2'
Work Order:	1306978	**Collection Date:**	6/21/2013 9:27:00 AM
Project:	Garland Street - 8100B		
Lab ID:	1306978-07	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471**		Prep Date:	**6/27/2013**	Analyst: **LR**
Mercury	**320**	**50**	**50**		**µg/Kg-dry**	2	7/1/2013
METALS BY ICP-MS			**SW6020A**		Prep Date:	**6/27/2013**	Analyst: **ML**
Arsenic	**330**	**140**	**100**		**µg/Kg-dry**	1	6/28/2013
Barium	**29,000**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Cadmium	ND	200	200		µg/Kg-dry	1	6/28/2013
Chromium	ND	2,000	2,000		µg/Kg-dry	1	6/28/2013
Copper	**3,300**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Lead	**21,000**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Selenium	ND	200	200		µg/Kg-dry	1	6/28/2013
Silver	ND	100	100		µg/Kg-dry	1	6/28/2013
Zinc	**17,000**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date:	**6/25/2013**	Analyst: **RM**
2-Chloronaphthalene	ND	330	330		µg/Kg-dry	1	6/27/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/27/2013
Acenaphthene	ND	330	330		µg/Kg-dry	1	6/27/2013
Acenaphthylene	ND	330	330		µg/Kg-dry	1	6/27/2013
Anthracene	ND	330	330		µg/Kg-dry	1	6/27/2013
Benzo(a)anthracene	ND	330	330		µg/Kg-dry	1	6/27/2013
Benzo(a)pyrene	ND	330	330		µg/Kg-dry	1	6/27/2013
Benzo(b)fluoranthene	ND	330	330		µg/Kg-dry	1	6/27/2013
Benzo(g,h,i)perylene	ND	330	330		µg/Kg-dry	1	6/27/2013
Benzo(k)fluoranthene	ND	330	330		µg/Kg-dry	1	6/27/2013
Chrysene	ND	330	330		µg/Kg-dry	1	6/27/2013
Dibenzo(a,h)anthracene	ND	330	330		µg/Kg-dry	1	6/27/2013
Fluoranthene	ND	330	330		µg/Kg-dry	1	6/27/2013
Fluorene	ND	330	330		µg/Kg-dry	1	6/27/2013
Indeno(1,2,3-cd)pyrene	ND	330	330		µg/Kg-dry	1	6/27/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/27/2013
Phenanthrene	ND	330	330		µg/Kg-dry	1	6/27/2013
Pyrene	ND	330	330		µg/Kg-dry	1	6/27/2013
Surr: 2-Fluorobiphenyl	*71.2*	*12-100*			*%REC*	1	6/27/2013
Surr: 4-Terphenyl-d14	*116*	*25-137*			*%REC*	1	6/27/2013
Surr: Nitrobenzene-d5	*60.2*	*37-107*			*%REC*	1	6/27/2013
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date:	**6/26/2013**	Analyst: **AK**
1,1,1,2-Tetrachloroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1,1-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2,2-Tetrachloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-06 1-2'
Work Order:	1306978	**Collection Date:**	6/21/2013 9:27:00 AM
Project:	Garland Street - 8100B		
Lab ID:	1306978-07	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2,3-Trichloropropane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2,4-Trichlorobenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
1,2,4-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dibromo-3-chloropropane	ND	32	10		µg/Kg-dry	1	6/26/2013
1,2-Dibromoethane	ND	32	20		µg/Kg-dry	1	6/26/2013
1,2-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2-Dichloropropane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,3,5-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,3-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,4-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
2-Butanone	ND	750	750		µg/Kg-dry	1	6/26/2013
2-Hexanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
4-Methyl-2-pentanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
Acetone	ND	1,000	1,000		µg/Kg-dry	1	6/26/2013
Acrylonitrile	ND	110	100		µg/Kg-dry	1	6/26/2013
Benzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Bromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromodichloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromoform	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromomethane	ND	200	200		µg/Kg-dry	1	6/26/2013
Carbon disulfide	ND	250	250		µg/Kg-dry	1	6/26/2013
Carbon tetrachloride	ND	50	50		µg/Kg-dry	1	6/26/2013
Chlorobenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloroethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Chloroform	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
cis-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
cis-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
Dibromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Dibromomethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Dichlorodifluoromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Diethyl ether	ND	200	200		µg/Kg-dry	1	6/26/2013
Ethylbenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Hexachloroethane	ND	300	300		µg/Kg-dry	1	6/26/2013
Isopropylbenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
m,p-Xylene	ND	100	100		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-06 1-2'
Work Order:	1306978	**Collection Date:**	6/21/2013 9:27:00 AM
Project:	Garland Street - 8100B		
Lab ID:	1306978-07	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
Methyl iodide	ND	100	100		µg/Kg-dry	1	6/26/2013
Methyl tert-butyl ether	ND	250	250		µg/Kg-dry	1	6/26/2013
Methylene chloride	ND	100	100		µg/Kg-dry	1	6/26/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
n-Propylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
o-Xylene	ND	50	50		µg/Kg-dry	1	6/26/2013
Styrene	ND	50	50		µg/Kg-dry	1	6/26/2013
Tetrachloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Toluene	ND	100	100		µg/Kg-dry	1	6/26/2013
trans-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,4-Dichloro-2-butene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichlorofluoromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Vinyl acetate	ND	5,000	5,000		µg/Kg-dry	1	6/26/2013
Vinyl chloride	ND	40	40		µg/Kg-dry	1	6/26/2013
Xylenes, Total	ND	150	150		µg/Kg-dry	1	6/26/2013
Surr: 1,2-Dichloroethane-d4	*98.2*	*70-130*			*%REC*	1	6/26/2013
Surr: 4-Bromofluorobenzene	*92.2*	*70-130*			*%REC*	1	6/26/2013
Surr: Dibromofluoromethane	*100*	*70-130*			*%REC*	1	6/26/2013
Surr: Toluene-d8	*98.3*	*70-130*			*%REC*	1	6/26/2013
MOISTURE			**A2540 G**				Analyst: **BD**
Moisture	**5.7**	**0.050**	**0**		**% of sample**	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-06 8-9'
Work Order:	1306978	**Collection Date:**	6/21/2013 10:00:00 AM
Project:	Garland Street - 8100B		
Lab ID:	1306978-08	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471**		Prep Date:	**6/27/2013**	Analyst: **LR**
Mercury	ND	50	50		µg/Kg-dry	1	6/27/2013
METALS BY ICP-MS			**SW6020A**		Prep Date:	**6/27/2013**	Analyst: **ML**
Arsenic	**340**	**150**	**100**		**µg/Kg-dry**	1	6/28/2013
Barium	**7,300**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Cadmium	ND	200	200		µg/Kg-dry	1	6/28/2013
Chromium	**3,800**	**2,000**	**2,000**		**µg/Kg-dry**	1	6/28/2013
Copper	**1,500**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Lead	**3,500**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Selenium	ND	200	200		µg/Kg-dry	1	6/28/2013
Silver	ND	100	100		µg/Kg-dry	1	6/28/2013
Zinc	**3,800**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date:	**6/25/2013**	Analyst: **RM**
2-Chloronaphthalene	ND	330	330		µg/Kg-dry	1	6/27/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/27/2013
Acenaphthene	ND	330	330		µg/Kg-dry	1	6/27/2013
Acenaphthylene	ND	330	330		µg/Kg-dry	1	6/27/2013
Anthracene	ND	330	330		µg/Kg-dry	1	6/27/2013
Benzo(a)anthracene	ND	330	330		µg/Kg-dry	1	6/27/2013
Benzo(a)pyrene	ND	330	330		µg/Kg-dry	1	6/27/2013
Benzo(b)fluoranthene	ND	330	330		µg/Kg-dry	1	6/27/2013
Benzo(g,h,i)perylene	ND	330	330		µg/Kg-dry	1	6/27/2013
Benzo(k)fluoranthene	ND	330	330		µg/Kg-dry	1	6/27/2013
Chrysene	ND	330	330		µg/Kg-dry	1	6/27/2013
Dibenzo(a,h)anthracene	ND	330	330		µg/Kg-dry	1	6/27/2013
Fluoranthene	ND	330	330		µg/Kg-dry	1	6/27/2013
Fluorene	ND	330	330		µg/Kg-dry	1	6/27/2013
Indeno(1,2,3-cd)pyrene	ND	330	330		µg/Kg-dry	1	6/27/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/27/2013
Phenanthrene	ND	330	330		µg/Kg-dry	1	6/27/2013
Pyrene	ND	330	330		µg/Kg-dry	1	6/27/2013
Surr: 2-Fluorobiphenyl	*65.6*	*12-100*			*%REC*	1	6/27/2013
Surr: 4-Terphenyl-d14	*108*	*25-137*			*%REC*	1	6/27/2013
Surr: Nitrobenzene-d5	*60.2*	*37-107*			*%REC*	1	6/27/2013
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date:	**6/26/2013**	Analyst: **AK**
1,1,1,2-Tetrachloroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1,1-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2,2-Tetrachloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-06 8-9'
Work Order:	1306978	**Collection Date:**	6/21/2013 10:00:00 AM
Project:	Garland Street - 8100B		
Lab ID:	1306978-08	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2,3-Trichloropropane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2,4-Trichlorobenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
1,2,4-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dibromo-3-chloropropane	ND	31	10		µg/Kg-dry	1	6/26/2013
1,2-Dibromoethane	ND	31	20		µg/Kg-dry	1	6/26/2013
1,2-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2-Dichloropropane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,3,5-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,3-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,4-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
2-Butanone	ND	750	750		µg/Kg-dry	1	6/26/2013
2-Hexanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
4-Methyl-2-pentanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
Acetone	ND	1,000	1,000		µg/Kg-dry	1	6/26/2013
Acrylonitrile	ND	100	100		µg/Kg-dry	1	6/26/2013
Benzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Bromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromodichloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromoform	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromomethane	ND	200	200		µg/Kg-dry	1	6/26/2013
Carbon disulfide	ND	250	250		µg/Kg-dry	1	6/26/2013
Carbon tetrachloride	ND	50	50		µg/Kg-dry	1	6/26/2013
Chlorobenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloroethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Chloroform	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
cis-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
cis-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
Dibromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Dibromomethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Dichlorodifluoromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Diethyl ether	ND	200	200		µg/Kg-dry	1	6/26/2013
Ethylbenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Hexachloroethane	ND	300	300		µg/Kg-dry	1	6/26/2013
Isopropylbenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
m,p-Xylene	ND	100	100		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-06 8-9'
Work Order:	1306978	**Collection Date:**	6/21/2013 10:00:00 AM
Project:	Garland Street - 8100B		
Lab ID:	1306978-08	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
Methyl iodide	ND	100	100		µg/Kg-dry	1	6/26/2013
Methyl tert-butyl ether	ND	250	250		µg/Kg-dry	1	6/26/2013
Methylene chloride	ND	100	100		µg/Kg-dry	1	6/26/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
n-Propylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
o-Xylene	ND	50	50		µg/Kg-dry	1	6/26/2013
Styrene	ND	50	50		µg/Kg-dry	1	6/26/2013
Tetrachloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Toluene	ND	100	100		µg/Kg-dry	1	6/26/2013
trans-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,4-Dichloro-2-butene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichlorofluoromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Vinyl acetate	ND	5,000	5,000		µg/Kg-dry	1	6/26/2013
Vinyl chloride	ND	40	40		µg/Kg-dry	1	6/26/2013
Xylenes, Total	ND	150	150		µg/Kg-dry	1	6/26/2013
Surr: 1,2-Dichloroethane-d4	*100*	*70-130*			*%REC*	1	6/26/2013
Surr: 4-Bromofluorobenzene	*92.2*	*70-130*			*%REC*	1	6/26/2013
Surr: Dibromofluoromethane	*101*	*70-130*			*%REC*	1	6/26/2013
Surr: Toluene-d8	*98.0*	*70-130*			*%REC*	1	6/26/2013
MOISTURE			**A2540 G**				Analyst: **BD**
Moisture	**3.5**	**0.050**	**0**		**% of sample**	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-04 1-2'
Work Order:	1306978	**Collection Date:**	6/21/2013 12:20:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-09	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471**		Prep Date:	**6/27/2013**	Analyst: **LR**
Mercury	ND	50	50		µg/Kg-dry	1	6/27/2013
METALS BY ICP-MS			**SW6020A**		Prep Date:	**6/27/2013**	Analyst: **ML**
Arsenic	**490**	**150**	**100**		**µg/Kg-dry**	1	6/28/2013
Barium	**1,700**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Cadmium	ND	200	200		µg/Kg-dry	1	6/28/2013
Chromium	ND	2,000	2,000		µg/Kg-dry	1	6/28/2013
Copper	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Lead	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Selenium	ND	200	200		µg/Kg-dry	1	6/28/2013
Silver	ND	100	100		µg/Kg-dry	1	6/28/2013
Zinc	**1,200**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date:	**6/25/2013**	Analyst: **HL**
2-Chloronaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
Acenaphthene	ND	330	330		µg/Kg-dry	1	6/26/2013
Acenaphthylene	ND	330	330		µg/Kg-dry	1	6/26/2013
Anthracene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(a)anthracene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(a)pyrene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(b)fluoranthene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(g,h,i)perylene	ND	330	330		µg/Kg-dry	1	6/26/2013
Benzo(k)fluoranthene	ND	330	330		µg/Kg-dry	1	6/26/2013
Chrysene	ND	330	330		µg/Kg-dry	1	6/26/2013
Dibenzo(a,h)anthracene	ND	330	330		µg/Kg-dry	1	6/26/2013
Fluoranthene	ND	330	330		µg/Kg-dry	1	6/26/2013
Fluorene	ND	330	330		µg/Kg-dry	1	6/26/2013
Indeno(1,2,3-cd)pyrene	ND	330	330		µg/Kg-dry	1	6/26/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
Phenanthrene	ND	330	330		µg/Kg-dry	1	6/26/2013
Pyrene	ND	330	330		µg/Kg-dry	1	6/26/2013
Surr: 2-Fluorobiphenyl	*67.3*	*12-100*			*%REC*	1	6/26/2013
Surr: 4-Terphenyl-d14	*111*	*25-137*			*%REC*	1	6/26/2013
Surr: Nitrobenzene-d5	*64.5*	*37-107*			*%REC*	1	6/26/2013
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date:	**6/26/2013**	Analyst: **AK**
1,1,1,2-Tetrachloroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1,1-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2,2-Tetrachloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-04 1-2'
Work Order:	1306978	**Collection Date:**	6/21/2013 12:20:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-09	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2,3-Trichloropropane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2,4-Trichlorobenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
1,2,4-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dibromo-3-chloropropane	ND	31	10		µg/Kg-dry	1	6/26/2013
1,2-Dibromoethane	ND	31	20		µg/Kg-dry	1	6/26/2013
1,2-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2-Dichloropropane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,3,5-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,3-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,4-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
2-Butanone	ND	750	750		µg/Kg-dry	1	6/26/2013
2-Hexanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
4-Methyl-2-pentanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
Acetone	ND	1,000	1,000		µg/Kg-dry	1	6/26/2013
Acrylonitrile	ND	100	100		µg/Kg-dry	1	6/26/2013
Benzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Bromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromodichloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromoform	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromomethane	ND	200	200		µg/Kg-dry	1	6/26/2013
Carbon disulfide	ND	250	250		µg/Kg-dry	1	6/26/2013
Carbon tetrachloride	ND	50	50		µg/Kg-dry	1	6/26/2013
Chlorobenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloroethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Chloroform	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
cis-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
cis-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
Dibromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Dibromomethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Dichlorodifluoromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Diethyl ether	ND	200	200		µg/Kg-dry	1	6/26/2013
Ethylbenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Hexachloroethane	ND	300	300		µg/Kg-dry	1	6/26/2013
Isopropylbenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
m,p-Xylene	ND	100	100		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-04 1-2'
Work Order:	1306978	**Collection Date:**	6/21/2013 12:20:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-09	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
Methyl iodide	ND	100	100		µg/Kg-dry	1	6/26/2013
Methyl tert-butyl ether	ND	250	250		µg/Kg-dry	1	6/26/2013
Methylene chloride	ND	100	100		µg/Kg-dry	1	6/26/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
n-Propylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
o-Xylene	ND	50	50		µg/Kg-dry	1	6/26/2013
Styrene	ND	50	50		µg/Kg-dry	1	6/26/2013
Tetrachloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Toluene	ND	100	100		µg/Kg-dry	1	6/26/2013
trans-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,4-Dichloro-2-butene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichlorofluoromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Vinyl acetate	ND	5,000	5,000		µg/Kg-dry	1	6/26/2013
Vinyl chloride	ND	40	40		µg/Kg-dry	1	6/26/2013
Xylenes, Total	ND	150	150		µg/Kg-dry	1	6/26/2013
Surr: 1,2-Dichloroethane-d4	*100*	*70-130*			*%REC*	1	6/26/2013
Surr: 4-Bromofluorobenzene	*95.0*	*70-130*			*%REC*	1	6/26/2013
Surr: Dibromofluoromethane	*103*	*70-130*			*%REC*	1	6/26/2013
Surr: Toluene-d8	*98.8*	*70-130*			*%REC*	1	6/26/2013
MOISTURE			**A2540 G**				Analyst: **BD**
Moisture	**2.7**	**0.050**	**0**		**% of sample**	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-04 8-9'
Work Order:	1306978	**Collection Date:**	6/21/2013 12:32:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-10	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471**		Prep Date:	**6/27/2013**	Analyst: **LR**
Mercury	ND	50	50		µg/Kg-dry	1	6/27/2013
METALS BY ICP-MS			**SW6020A**		Prep Date:	**6/27/2013**	Analyst: **ML**
Arsenic	**460**	**130**	**100**		**µg/Kg-dry**	1	6/28/2013
Barium	**2,600**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Cadmium	ND	200	200		µg/Kg-dry	1	6/28/2013
Chromium	**3,300**	**2,000**	**2,000**		**µg/Kg-dry**	1	6/28/2013
Copper	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Lead	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Selenium	ND	200	200		µg/Kg-dry	1	6/28/2013
Silver	ND	100	100		µg/Kg-dry	1	6/28/2013
Zinc	**2,000**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date:	**6/28/2013**	Analyst: **RM**
2-Chloronaphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
Acenaphthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Acenaphthylene	ND	330	330		µg/Kg-dry	1	7/1/2013
Anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(a)anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(a)pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(b)fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(g,h,i)perylene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(k)fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Chrysene	ND	330	330		µg/Kg-dry	1	7/1/2013
Dibenzo(a,h)anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Fluorene	ND	330	330		µg/Kg-dry	1	7/1/2013
Indeno(1,2,3-cd)pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
Phenanthrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Surr: 2-Fluorobiphenyl	*76.1*	*12-100*			*%REC*	1	7/1/2013
Surr: 4-Terphenyl-d14	*107*	*25-137*			*%REC*	1	7/1/2013
Surr: Nitrobenzene-d5	*73.6*	*37-107*			*%REC*	1	7/1/2013
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date:	**6/26/2013**	Analyst: **AK**
1,1,1,2-Tetrachloroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1,1-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2,2-Tetrachloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-04 8-9'
Work Order:	1306978	**Collection Date:**	6/21/2013 12:32:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-10	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2,3-Trichloropropane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2,4-Trichlorobenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
1,2,4-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dibromo-3-chloropropane	ND	31	10		µg/Kg-dry	1	6/26/2013
1,2-Dibromoethane	ND	31	20		µg/Kg-dry	1	6/26/2013
1,2-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2-Dichloropropane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,3,5-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,3-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,4-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
2-Butanone	ND	750	750		µg/Kg-dry	1	6/26/2013
2-Hexanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
4-Methyl-2-pentanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
Acetone	ND	1,000	1,000		µg/Kg-dry	1	6/26/2013
Acrylonitrile	ND	100	100		µg/Kg-dry	1	6/26/2013
Benzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Bromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromodichloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromoform	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromomethane	ND	200	200		µg/Kg-dry	1	6/26/2013
Carbon disulfide	ND	250	250		µg/Kg-dry	1	6/26/2013
Carbon tetrachloride	ND	50	50		µg/Kg-dry	1	6/26/2013
Chlorobenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloroethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Chloroform	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
cis-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
cis-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
Dibromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Dibromomethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Dichlorodifluoromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Diethyl ether	ND	200	200		µg/Kg-dry	1	6/26/2013
Ethylbenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Hexachloroethane	ND	300	300		µg/Kg-dry	1	6/26/2013
Isopropylbenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
m,p-Xylene	ND	100	100		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-04 8-9'
Work Order:	1306978	**Collection Date:**	6/21/2013 12:32:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-10	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
Methyl iodide	ND	100	100		µg/Kg-dry	1	6/26/2013
Methyl tert-butyl ether	ND	250	250		µg/Kg-dry	1	6/26/2013
Methylene chloride	ND	100	100		µg/Kg-dry	1	6/26/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
n-Propylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
o-Xylene	ND	50	50		µg/Kg-dry	1	6/26/2013
Styrene	ND	50	50		µg/Kg-dry	1	6/26/2013
Tetrachloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Toluene	ND	100	100		µg/Kg-dry	1	6/26/2013
trans-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,4-Dichloro-2-butene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichlorofluoromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Vinyl acetate	ND	5,000	5,000		µg/Kg-dry	1	6/26/2013
Vinyl chloride	ND	40	40		µg/Kg-dry	1	6/26/2013
Xylenes, Total	ND	150	150		µg/Kg-dry	1	6/26/2013
Surr: 1,2-Dichloroethane-d4	*98.8*	*70-130*			*%REC*	1	6/26/2013
Surr: 4-Bromofluorobenzene	*91.2*	*70-130*			*%REC*	1	6/26/2013
Surr: Dibromofluoromethane	*101*	*70-130*			*%REC*	1	6/26/2013
Surr: Toluene-d8	*98.5*	*70-130*			*%REC*	1	6/26/2013
MOISTURE			**A2540 G**				Analyst: **BD**
Moisture	**4.0**	**0.050**	**0**		**% of sample**	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-03 1-2'
Work Order:	1306978	**Collection Date:**	6/21/2013 2:40:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-11	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471**		Prep Date:	**6/27/2013**	Analyst: **LR**
Mercury	ND	50	50		µg/Kg-dry	1	6/27/2013
METALS BY ICP-MS			**SW6020A**		Prep Date:	**6/27/2013**	Analyst: **ML**
Arsenic	**420**	**160**	**100**		**µg/Kg-dry**	1	6/28/2013
Barium	**6,100**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Cadmium	ND	200	200		µg/Kg-dry	1	6/28/2013
Chromium	ND	2,000	2,000		µg/Kg-dry	1	6/28/2013
Copper	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Lead	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Selenium	ND	200	200		µg/Kg-dry	1	6/28/2013
Silver	ND	100	100		µg/Kg-dry	1	6/28/2013
Zinc	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date:	**6/28/2013**	Analyst: **RM**
2-Chloronaphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
Acenaphthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Acenaphthylene	ND	330	330		µg/Kg-dry	1	7/1/2013
Anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(a)anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(a)pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(b)fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(g,h,i)perylene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(k)fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Chrysene	ND	330	330		µg/Kg-dry	1	7/1/2013
Dibenzo(a,h)anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Fluorene	ND	330	330		µg/Kg-dry	1	7/1/2013
Indeno(1,2,3-cd)pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
Phenanthrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Surr: 2-Fluorobiphenyl	*69.7*	*12-100*			*%REC*	1	7/1/2013
Surr: 4-Terphenyl-d14	*107*	*25-137*			*%REC*	1	7/1/2013
Surr: Nitrobenzene-d5	*65.6*	*37-107*			*%REC*	1	7/1/2013
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date:	**6/26/2013**	Analyst: **AK**
1,1,1,2-Tetrachloroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1,1-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2,2-Tetrachloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-03 1-2'
Work Order:	1306978	**Collection Date:**	6/21/2013 2:40:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-11	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2,3-Trichloropropane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2,4-Trichlorobenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
1,2,4-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dibromo-3-chloropropane	ND	31	10		µg/Kg-dry	1	6/26/2013
1,2-Dibromoethane	ND	31	20		µg/Kg-dry	1	6/26/2013
1,2-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2-Dichloropropane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,3,5-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,3-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,4-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
2-Butanone	ND	750	750		µg/Kg-dry	1	6/26/2013
2-Hexanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
4-Methyl-2-pentanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
Acetone	ND	1,000	1,000		µg/Kg-dry	1	6/26/2013
Acrylonitrile	ND	100	100		µg/Kg-dry	1	6/26/2013
Benzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Bromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromodichloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromoform	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromomethane	ND	200	200		µg/Kg-dry	1	6/26/2013
Carbon disulfide	ND	250	250		µg/Kg-dry	1	6/26/2013
Carbon tetrachloride	ND	50	50		µg/Kg-dry	1	6/26/2013
Chlorobenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloroethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Chloroform	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
cis-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
cis-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
Dibromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Dibromomethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Dichlorodifluoromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Diethyl ether	ND	200	200		µg/Kg-dry	1	6/26/2013
Ethylbenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Hexachloroethane	ND	300	300		µg/Kg-dry	1	6/26/2013
Isopropylbenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
m,p-Xylene	ND	100	100		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-03 1-2'
Work Order:	1306978	**Collection Date:**	6/21/2013 2:40:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-11	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
Methyl iodide	ND	100	100		µg/Kg-dry	1	6/26/2013
Methyl tert-butyl ether	ND	250	250		µg/Kg-dry	1	6/26/2013
Methylene chloride	ND	100	100		µg/Kg-dry	1	6/26/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
n-Propylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
o-Xylene	ND	50	50		µg/Kg-dry	1	6/26/2013
Styrene	ND	50	50		µg/Kg-dry	1	6/26/2013
Tetrachloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Toluene	ND	100	100		µg/Kg-dry	1	6/26/2013
trans-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,4-Dichloro-2-butene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichlorofluoromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Vinyl acetate	ND	5,000	5,000		µg/Kg-dry	1	6/26/2013
Vinyl chloride	ND	40	40		µg/Kg-dry	1	6/26/2013
Xylenes, Total	ND	150	150		µg/Kg-dry	1	6/26/2013
Surr: 1,2-Dichloroethane-d4	*98.9*	*70-130*			*%REC*	1	6/26/2013
Surr: 4-Bromofluorobenzene	*91.4*	*70-130*			*%REC*	1	6/26/2013
Surr: Dibromofluoromethane	*100*	*70-130*			*%REC*	1	6/26/2013
Surr: Toluene-d8	*99.8*	*70-130*			*%REC*	1	6/26/2013
MOISTURE			**A2540 G**				Analyst: **BD**
Moisture	**3.3**	**0.050**	**0**		**% of sample**	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-03 7-8'
Work Order:	1306978	**Collection Date:**	6/21/2013 2:47:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-12	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471**		Prep Date:	**6/27/2013**	Analyst: **LR**
Mercury	ND	50	50		µg/Kg-dry	1	6/27/2013
METALS BY ICP-MS			**SW6020A**		Prep Date:	**6/27/2013**	Analyst: **ML**
Arsenic	**800**	**150**	**100**		**µg/Kg-dry**	1	6/28/2013
Barium	**2,400**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Cadmium	ND	200	200		µg/Kg-dry	1	6/28/2013
Chromium	ND	2,000	2,000		µg/Kg-dry	1	6/28/2013
Copper	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Lead	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Selenium	ND	200	200		µg/Kg-dry	1	6/28/2013
Silver	ND	100	100		µg/Kg-dry	1	6/28/2013
Zinc	**1,800**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date:	**6/28/2013**	Analyst: **RM**
2-Chloronaphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
Acenaphthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Acenaphthylene	ND	330	330		µg/Kg-dry	1	7/1/2013
Anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(a)anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(a)pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(b)fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(g,h,i)perylene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(k)fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Chrysene	ND	330	330		µg/Kg-dry	1	7/1/2013
Dibenzo(a,h)anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Fluorene	ND	330	330		µg/Kg-dry	1	7/1/2013
Indeno(1,2,3-cd)pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
Phenanthrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Surr: 2-Fluorobiphenyl	*59.5*	*12-100*			*%REC*	1	7/1/2013
Surr: 4-Terphenyl-d14	*115*	*25-137*			*%REC*	1	7/1/2013
Surr: Nitrobenzene-d5	*56.0*	*37-107*			*%REC*	1	7/1/2013
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date:	**6/26/2013**	Analyst: **AK**
1,1,1,2-Tetrachloroethane	ND	100	100		µg/Kg-dry	1	6/28/2013
1,1,1-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/28/2013
1,1,2,2-Tetrachloroethane	ND	50	50		µg/Kg-dry	1	6/28/2013
1,1,2-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/28/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-03 7-8'
Work Order:	1306978	**Collection Date:**	6/21/2013 2:47:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-12	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	ND	100	100		µg/Kg-dry	1	6/28/2013
1,1-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/28/2013
1,1-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/28/2013
1,2,3-Trichloropropane	ND	100	100		µg/Kg-dry	1	6/28/2013
1,2,4-Trichlorobenzene	ND	250	250		µg/Kg-dry	1	6/28/2013
1,2,4-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/28/2013
1,2-Dibromo-3-chloropropane	ND	32	10		µg/Kg-dry	1	6/28/2013
1,2-Dibromoethane	ND	32	20		µg/Kg-dry	1	6/28/2013
1,2-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/28/2013
1,2-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/28/2013
1,2-Dichloropropane	ND	50	50		µg/Kg-dry	1	6/28/2013
1,3,5-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/28/2013
1,3-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/28/2013
1,4-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/28/2013
2-Butanone	ND	750	750		µg/Kg-dry	1	6/28/2013
2-Hexanone	ND	2,500	2,500		µg/Kg-dry	1	6/28/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/28/2013
4-Methyl-2-pentanone	ND	2,500	2,500		µg/Kg-dry	1	6/28/2013
Acetone	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Acrylonitrile	ND	110	100		µg/Kg-dry	1	6/28/2013
Benzene	ND	50	50		µg/Kg-dry	1	6/28/2013
Bromochloromethane	ND	100	100		µg/Kg-dry	1	6/28/2013
Bromodichloromethane	ND	100	100		µg/Kg-dry	1	6/28/2013
Bromoform	ND	100	100		µg/Kg-dry	1	6/28/2013
Bromomethane	ND	200	200		µg/Kg-dry	1	6/28/2013
Carbon disulfide	ND	250	250		µg/Kg-dry	1	6/28/2013
Carbon tetrachloride	ND	50	50		µg/Kg-dry	1	6/28/2013
Chlorobenzene	ND	50	50		µg/Kg-dry	1	6/28/2013
Chloroethane	ND	250	250		µg/Kg-dry	1	6/28/2013
Chloroform	ND	50	50		µg/Kg-dry	1	6/28/2013
Chloromethane	ND	250	250		µg/Kg-dry	1	6/28/2013
cis-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/28/2013
cis-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/28/2013
Dibromochloromethane	ND	100	100		µg/Kg-dry	1	6/28/2013
Dibromomethane	ND	250	250		µg/Kg-dry	1	6/28/2013
Dichlorodifluoromethane	ND	250	250		µg/Kg-dry	1	6/28/2013
Diethyl ether	ND	200	200		µg/Kg-dry	1	6/28/2013
Ethylbenzene	ND	50	50		µg/Kg-dry	1	6/28/2013
Hexachloroethane	ND	300	300		µg/Kg-dry	1	6/28/2013
Isopropylbenzene	ND	250	250		µg/Kg-dry	1	6/28/2013
m,p-Xylene	ND	100	100		µg/Kg-dry	1	6/28/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-03 7-8'
Work Order:	1306978	**Collection Date:**	6/21/2013 2:47:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-12	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
Methyl iodide	ND	100	100		µg/Kg-dry	1	6/28/2013
Methyl tert-butyl ether	ND	250	250		µg/Kg-dry	1	6/28/2013
Methylene chloride	ND	100	100		µg/Kg-dry	1	6/28/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/28/2013
n-Propylbenzene	ND	100	100		µg/Kg-dry	1	6/28/2013
o-Xylene	ND	50	50		µg/Kg-dry	1	6/28/2013
Styrene	ND	50	50		µg/Kg-dry	1	6/28/2013
Tetrachloroethene	ND	50	50		µg/Kg-dry	1	6/28/2013
Toluene	ND	100	100		µg/Kg-dry	1	6/28/2013
trans-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/28/2013
trans-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/28/2013
trans-1,4-Dichloro-2-butene	ND	50	50		µg/Kg-dry	1	6/28/2013
Trichloroethene	ND	50	50		µg/Kg-dry	1	6/28/2013
Trichlorofluoromethane	ND	100	100		µg/Kg-dry	1	6/28/2013
Vinyl acetate	ND	5,000	5,000		µg/Kg-dry	1	6/28/2013
Vinyl chloride	ND	40	40		µg/Kg-dry	1	6/28/2013
Xylenes, Total	ND	150	150		µg/Kg-dry	1	6/28/2013
Surr: 1,2-Dichloroethane-d4	*96.2*	*70-130*			*%REC*	1	6/28/2013
Surr: 4-Bromofluorobenzene	*96.6*	*70-130*			*%REC*	1	6/28/2013
Surr: Dibromofluoromethane	*98.4*	*70-130*			*%REC*	1	6/28/2013
Surr: Toluene-d8	*100*	*70-130*			*%REC*	1	6/28/2013
MOISTURE			**A2540 G**				Analyst: **BD**
Moisture	**3.7**	**0.050**	**0**		**% of sample**	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-02 1-2'
Work Order:	1306978	**Collection Date:**	6/21/2013 3:30:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-13	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471**		Prep Date:	**6/27/2013**	Analyst: **LR**
Mercury	ND	50	50		µg/Kg-dry	1	6/27/2013
METALS BY ICP-MS			**SW6020A**		Prep Date:	**6/27/2013**	Analyst: **ML**
Arsenic	**480**	**160**	**100**		**µg/Kg-dry**	1	6/28/2013
Barium	**3,600**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Cadmium	ND	200	200		µg/Kg-dry	1	6/28/2013
Chromium	ND	2,000	2,000		µg/Kg-dry	1	6/28/2013
Copper	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Lead	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Selenium	ND	200	200		µg/Kg-dry	1	6/28/2013
Silver	ND	100	100		µg/Kg-dry	1	6/28/2013
Zinc	**1,100**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date:	**6/28/2013**	Analyst: **RM**
2-Chloronaphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
Acenaphthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Acenaphthylene	ND	330	330		µg/Kg-dry	1	7/1/2013
Anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(a)anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(a)pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(b)fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(g,h,i)perylene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(k)fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Chrysene	ND	330	330		µg/Kg-dry	1	7/1/2013
Dibenzo(a,h)anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Fluorene	ND	330	330		µg/Kg-dry	1	7/1/2013
Indeno(1,2,3-cd)pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
Phenanthrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Surr: 2-Fluorobiphenyl	*72.0*	*12-100*			*%REC*	1	7/1/2013
Surr: 4-Terphenyl-d14	*99.0*	*25-137*			*%REC*	1	7/1/2013
Surr: Nitrobenzene-d5	*69.7*	*37-107*			*%REC*	1	7/1/2013
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date:	**6/26/2013**	Analyst: **BG**
1,1,1,2-Tetrachloroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1,1-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2,2-Tetrachloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-02 1-2'
Work Order:	1306978	**Collection Date:**	6/21/2013 3:30:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-13	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2,3-Trichloropropane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2,4-Trichlorobenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
1,2,4-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dibromo-3-chloropropane	ND	33	10		µg/Kg-dry	1	6/26/2013
1,2-Dibromoethane	ND	33	20		µg/Kg-dry	1	6/26/2013
1,2-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2-Dichloropropane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,3,5-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,3-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,4-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
2-Butanone	ND	750	750		µg/Kg-dry	1	6/26/2013
2-Hexanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
4-Methyl-2-pentanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
Acetone	ND	1,000	1,000		µg/Kg-dry	1	6/26/2013
Acrylonitrile	ND	110	100		µg/Kg-dry	1	6/26/2013
Benzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Bromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromodichloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromoform	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromomethane	ND	200	200		µg/Kg-dry	1	6/26/2013
Carbon disulfide	ND	250	250		µg/Kg-dry	1	6/26/2013
Carbon tetrachloride	ND	50	50		µg/Kg-dry	1	6/26/2013
Chlorobenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloroethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Chloroform	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
cis-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
cis-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
Dibromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Dibromomethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Dichlorodifluoromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Diethyl ether	ND	200	200		µg/Kg-dry	1	6/26/2013
Ethylbenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Hexachloroethane	ND	300	300		µg/Kg-dry	1	6/26/2013
Isopropylbenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
m,p-Xylene	ND	100	100		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-02 1-2'
Work Order:	1306978	**Collection Date:**	6/21/2013 3:30:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-13	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
Methyl iodide	ND	100	100		µg/Kg-dry	1	6/26/2013
Methyl tert-butyl ether	ND	250	250		µg/Kg-dry	1	6/26/2013
Methylene chloride	ND	100	100		µg/Kg-dry	1	6/26/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
n-Propylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
o-Xylene	ND	50	50		µg/Kg-dry	1	6/26/2013
Styrene	ND	50	50		µg/Kg-dry	1	6/26/2013
Tetrachloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Toluene	ND	100	100		µg/Kg-dry	1	6/26/2013
trans-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,4-Dichloro-2-butene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichlorofluoromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Vinyl acetate	ND	5,000	5,000		µg/Kg-dry	1	6/26/2013
Vinyl chloride	ND	40	40		µg/Kg-dry	1	6/26/2013
Xylenes, Total	ND	150	150		µg/Kg-dry	1	6/26/2013
Surr: 1,2-Dichloroethane-d4	*93.1*	*70-130*			*%REC*	1	6/26/2013
Surr: 4-Bromofluorobenzene	*106*	*70-130*			*%REC*	1	6/26/2013
Surr: Dibromofluoromethane	*92.6*	*70-130*			*%REC*	1	6/26/2013
Surr: Toluene-d8	*101*	*70-130*			*%REC*	1	6/26/2013
MOISTURE			**A2540 G**				Analyst: **BD**
Moisture	**8.6**	**0.050**	**0**		**% of sample**	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-02 8-9'
Work Order:	1306978	**Collection Date:**	6/21/2013 3:42:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-14	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471**		Prep Date:	**6/27/2013**	Analyst: **LR**
Mercury	ND	50	50		µg/Kg-dry	1	6/27/2013
METALS BY ICP-MS			**SW6020A**		Prep Date:	**6/27/2013**	Analyst: **ML**
Arsenic	**920**	**150**	**100**		**µg/Kg-dry**	1	6/28/2013
Barium	**14,000**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Cadmium	ND	200	200		µg/Kg-dry	1	6/28/2013
Chromium	**4,000**	**2,000**	**2,000**		**µg/Kg-dry**	1	6/28/2013
Copper	**1,300**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Lead	**3,000**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Selenium	ND	200	200		µg/Kg-dry	1	6/28/2013
Silver	ND	100	100		µg/Kg-dry	1	6/28/2013
Zinc	**5,300**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date:	**6/28/2013**	Analyst: **RM**
2-Chloronaphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
Acenaphthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Acenaphthylene	ND	330	330		µg/Kg-dry	1	7/1/2013
Anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(a)anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(a)pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(b)fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(g,h,i)perylene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(k)fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Chrysene	ND	330	330		µg/Kg-dry	1	7/1/2013
Dibenzo(a,h)anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Fluorene	ND	330	330		µg/Kg-dry	1	7/1/2013
Indeno(1,2,3-cd)pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
Phenanthrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Surr: 2-Fluorobiphenyl	*68.9*	*12-100*			*%REC*	1	7/1/2013
Surr: 4-Terphenyl-d14	*117*	*25-137*			*%REC*	1	7/1/2013
Surr: Nitrobenzene-d5	*62.6*	*37-107*			*%REC*	1	7/1/2013
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date:	**6/26/2013**	Analyst: **BG**
1,1,1,2-Tetrachloroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1,1-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2,2-Tetrachloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-02 8-9'
Work Order:	1306978	**Collection Date:**	6/21/2013 3:42:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-14	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2,3-Trichloropropane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2,4-Trichlorobenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
1,2,4-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dibromo-3-chloropropane	ND	31	10		µg/Kg-dry	1	6/26/2013
1,2-Dibromoethane	ND	31	20		µg/Kg-dry	1	6/26/2013
1,2-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2-Dichloropropane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,3,5-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,3-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,4-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
2-Butanone	ND	750	750		µg/Kg-dry	1	6/26/2013
2-Hexanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
4-Methyl-2-pentanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
Acetone	ND	1,000	1,000		µg/Kg-dry	1	6/26/2013
Acrylonitrile	ND	100	100		µg/Kg-dry	1	6/26/2013
Benzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Bromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromodichloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromoform	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromomethane	ND	200	200		µg/Kg-dry	1	6/26/2013
Carbon disulfide	ND	250	250		µg/Kg-dry	1	6/26/2013
Carbon tetrachloride	ND	50	50		µg/Kg-dry	1	6/26/2013
Chlorobenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloroethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Chloroform	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
cis-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
cis-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
Dibromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Dibromomethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Dichlorodifluoromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Diethyl ether	ND	200	200		µg/Kg-dry	1	6/26/2013
Ethylbenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Hexachloroethane	ND	300	300		µg/Kg-dry	1	6/26/2013
Isopropylbenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
m,p-Xylene	ND	100	100		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-02 8-9'
Work Order:	1306978	**Collection Date:**	6/21/2013 3:42:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-14	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
Methyl iodide	ND	100	100		µg/Kg-dry	1	6/26/2013
Methyl tert-butyl ether	ND	250	250		µg/Kg-dry	1	6/26/2013
Methylene chloride	ND	100	100		µg/Kg-dry	1	6/26/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
n-Propylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
o-Xylene	ND	50	50		µg/Kg-dry	1	6/26/2013
Styrene	ND	50	50		µg/Kg-dry	1	6/26/2013
Tetrachloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Toluene	ND	100	100		µg/Kg-dry	1	6/26/2013
trans-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,4-Dichloro-2-butene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichlorofluoromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Vinyl acetate	ND	5,000	5,000		µg/Kg-dry	1	6/26/2013
Vinyl chloride	ND	40	40		µg/Kg-dry	1	6/26/2013
Xylenes, Total	ND	150	150		µg/Kg-dry	1	6/26/2013
Surr: 1,2-Dichloroethane-d4	*92.2*	*70-130*			*%REC*	1	6/26/2013
Surr: 4-Bromofluorobenzene	*106*	*70-130*			*%REC*	1	6/26/2013
Surr: Dibromofluoromethane	*92.4*	*70-130*			*%REC*	1	6/26/2013
Surr: Toluene-d8	*101*	*70-130*			*%REC*	1	6/26/2013
MOISTURE			**A2540 G**				Analyst: **BD**
Moisture	**3.4**	**0.050**	**0**		**% of sample**	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-02 Dup-01
Work Order:	1306978	**Collection Date:**	6/21/2013
Project:	Garland Street - 8100B		
Lab ID:	1306978-15	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471**		Prep Date:	**6/27/2013**	Analyst: **LR**
Mercury	ND	50	50		µg/Kg-dry	1	6/27/2013
METALS BY ICP-MS			**SW6020A**		Prep Date:	**6/27/2013**	Analyst: **ML**
Arsenic	**520**	**140**	**100**		**µg/Kg-dry**	1	6/28/2013
Barium	**3,800**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Cadmium	ND	200	200		µg/Kg-dry	1	6/28/2013
Chromium	ND	2,000	2,000		µg/Kg-dry	1	6/28/2013
Copper	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Lead	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Selenium	ND	200	200		µg/Kg-dry	1	6/28/2013
Silver	ND	100	100		µg/Kg-dry	1	6/28/2013
Zinc	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date:	**6/28/2013**	Analyst: **RM**
2-Chloronaphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
Acenaphthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Acenaphthylene	ND	330	330		µg/Kg-dry	1	7/1/2013
Anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(a)anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(a)pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(b)fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(g,h,i)perylene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(k)fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Chrysene	ND	330	330		µg/Kg-dry	1	7/1/2013
Dibenzo(a,h)anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Fluorene	ND	330	330		µg/Kg-dry	1	7/1/2013
Indeno(1,2,3-cd)pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
Phenanthrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Surr: 2-Fluorobiphenyl	*72.7*	*12-100*			*%REC*	1	7/1/2013
Surr: 4-Terphenyl-d14	*102*	*25-137*			*%REC*	1	7/1/2013
Surr: Nitrobenzene-d5	*68.9*	*37-107*			*%REC*	1	7/1/2013
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date:	**6/26/2013**	Analyst: **BG**
1,1,1,2-Tetrachloroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1,1-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2,2-Tetrachloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1,2-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-02 Dup-01
Work Order:	1306978	**Collection Date:**	6/21/2013
Project:	Garland Street - 8100B		
Lab ID:	1306978-15	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,1-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2,3-Trichloropropane	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2,4-Trichlorobenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
1,2,4-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dibromo-3-chloropropane	ND	31	10		µg/Kg-dry	1	6/26/2013
1,2-Dibromoethane	ND	31	20		µg/Kg-dry	1	6/26/2013
1,2-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,2-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,2-Dichloropropane	ND	50	50		µg/Kg-dry	1	6/26/2013
1,3,5-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,3-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
1,4-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
2-Butanone	ND	750	750		µg/Kg-dry	1	6/26/2013
2-Hexanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
4-Methyl-2-pentanone	ND	2,500	2,500		µg/Kg-dry	1	6/26/2013
Acetone	ND	1,000	1,000		µg/Kg-dry	1	6/26/2013
Acrylonitrile	ND	100	100		µg/Kg-dry	1	6/26/2013
Benzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Bromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromodichloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromoform	ND	100	100		µg/Kg-dry	1	6/26/2013
Bromomethane	ND	200	200		µg/Kg-dry	1	6/26/2013
Carbon disulfide	ND	250	250		µg/Kg-dry	1	6/26/2013
Carbon tetrachloride	ND	50	50		µg/Kg-dry	1	6/26/2013
Chlorobenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloroethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Chloroform	ND	50	50		µg/Kg-dry	1	6/26/2013
Chloromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
cis-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
cis-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
Dibromochloromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Dibromomethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Dichlorodifluoromethane	ND	250	250		µg/Kg-dry	1	6/26/2013
Diethyl ether	ND	200	200		µg/Kg-dry	1	6/26/2013
Ethylbenzene	ND	50	50		µg/Kg-dry	1	6/26/2013
Hexachloroethane	ND	300	300		µg/Kg-dry	1	6/26/2013
Isopropylbenzene	ND	250	250		µg/Kg-dry	1	6/26/2013
m,p-Xylene	ND	100	100		µg/Kg-dry	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-02 Dup-01
Work Order:	1306978	**Collection Date:**	6/21/2013
Project:	Garland Street - 8100B		
Lab ID:	1306978-15	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
Methyl iodide	ND	100	100		µg/Kg-dry	1	6/26/2013
Methyl tert-butyl ether	ND	250	250		µg/Kg-dry	1	6/26/2013
Methylene chloride	ND	100	100		µg/Kg-dry	1	6/26/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/26/2013
n-Propylbenzene	ND	100	100		µg/Kg-dry	1	6/26/2013
o-Xylene	ND	50	50		µg/Kg-dry	1	6/26/2013
Styrene	ND	50	50		µg/Kg-dry	1	6/26/2013
Tetrachloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Toluene	ND	100	100		µg/Kg-dry	1	6/26/2013
trans-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/26/2013
trans-1,4-Dichloro-2-butene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichloroethene	ND	50	50		µg/Kg-dry	1	6/26/2013
Trichlorofluoromethane	ND	100	100		µg/Kg-dry	1	6/26/2013
Vinyl acetate	ND	5,000	5,000		µg/Kg-dry	1	6/26/2013
Vinyl chloride	ND	40	40		µg/Kg-dry	1	6/26/2013
Xylenes, Total	ND	150	150		µg/Kg-dry	1	6/26/2013
Surr: 1,2-Dichloroethane-d4	*91.4*	*70-130*			*%REC*	1	6/26/2013
Surr: 4-Bromofluorobenzene	*105*	*70-130*			*%REC*	1	6/26/2013
Surr: Dibromofluoromethane	*90.4*	*70-130*			*%REC*	1	6/26/2013
Surr: Toluene-d8	*100*	*70-130*			*%REC*	1	6/26/2013
MOISTURE			**A2540 G**				Analyst: **BD**
Moisture	**3.0**	**0.050**	**0**		**% of sample**	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-01 1-2'
Work Order:	1306978	**Collection Date:**	6/21/2013 4:22:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-16	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471**		Prep Date:	**6/27/2013**	Analyst: **LR**
Mercury	ND	50	50		µg/Kg-dry	1	6/27/2013
METALS BY ICP-MS			**SW6020A**		Prep Date:	**6/27/2013**	Analyst: **ML**
Arsenic	**570**	**140**	**100**		**µg/Kg-dry**	1	6/28/2013
Barium	**2,100**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Cadmium	ND	200	200		µg/Kg-dry	1	6/28/2013
Chromium	ND	2,000	2,000		µg/Kg-dry	1	6/28/2013
Copper	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Lead	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Selenium	ND	200	200		µg/Kg-dry	1	6/28/2013
Silver	ND	100	100		µg/Kg-dry	1	6/28/2013
Zinc	**2,300**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date:	**6/28/2013**	Analyst: **RM**
2-Chloronaphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
Acenaphthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Acenaphthylene	ND	330	330		µg/Kg-dry	1	7/1/2013
Anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(a)anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(a)pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(b)fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(g,h,i)perylene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(k)fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Chrysene	ND	330	330		µg/Kg-dry	1	7/1/2013
Dibenzo(a,h)anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Fluorene	ND	330	330		µg/Kg-dry	1	7/1/2013
Indeno(1,2,3-cd)pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
Phenanthrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Surr: 2-Fluorobiphenyl	*70.6*	*12-100*			*%REC*	1	7/1/2013
Surr: 4-Terphenyl-d14	*103*	*25-137*			*%REC*	1	7/1/2013
Surr: Nitrobenzene-d5	*67.9*	*37-107*			*%REC*	1	7/1/2013
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date:	**6/26/2013**	Analyst: **BG**
1,1,1,2-Tetrachloroethane	ND	100	100		µg/Kg-dry	1	6/27/2013
1,1,1-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/27/2013
1,1,2,2-Tetrachloroethane	ND	50	50		µg/Kg-dry	1	6/27/2013
1,1,2-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/27/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-01 1-2'
Work Order:	1306978	**Collection Date:**	6/21/2013 4:22:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-16	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	ND	100	100		µg/Kg-dry	1	6/27/2013
1,1-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/27/2013
1,1-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/27/2013
1,2,3-Trichloropropane	ND	100	100		µg/Kg-dry	1	6/27/2013
1,2,4-Trichlorobenzene	ND	250	250		µg/Kg-dry	1	6/27/2013
1,2,4-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
1,2-Dibromo-3-chloropropane	ND	30	10		µg/Kg-dry	1	6/27/2013
1,2-Dibromoethane	ND	30	20		µg/Kg-dry	1	6/27/2013
1,2-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
1,2-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/27/2013
1,2-Dichloropropane	ND	50	50		µg/Kg-dry	1	6/27/2013
1,3,5-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
1,3-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
1,4-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
2-Butanone	ND	750	750		µg/Kg-dry	1	6/27/2013
2-Hexanone	ND	2,500	2,500		µg/Kg-dry	1	6/27/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/27/2013
4-Methyl-2-pentanone	ND	2,500	2,500		µg/Kg-dry	1	6/27/2013
Acetone	ND	1,000	1,000		µg/Kg-dry	1	6/27/2013
Acrylonitrile	ND	100	100		µg/Kg-dry	1	6/27/2013
Benzene	ND	50	50		µg/Kg-dry	1	6/27/2013
Bromochloromethane	ND	100	100		µg/Kg-dry	1	6/27/2013
Bromodichloromethane	ND	100	100		µg/Kg-dry	1	6/27/2013
Bromoform	ND	100	100		µg/Kg-dry	1	6/27/2013
Bromomethane	ND	200	200		µg/Kg-dry	1	6/27/2013
Carbon disulfide	ND	250	250		µg/Kg-dry	1	6/27/2013
Carbon tetrachloride	ND	50	50		µg/Kg-dry	1	6/27/2013
Chlorobenzene	ND	50	50		µg/Kg-dry	1	6/27/2013
Chloroethane	ND	250	250		µg/Kg-dry	1	6/27/2013
Chloroform	ND	50	50		µg/Kg-dry	1	6/27/2013
Chloromethane	ND	250	250		µg/Kg-dry	1	6/27/2013
cis-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/27/2013
cis-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/27/2013
Dibromochloromethane	ND	100	100		µg/Kg-dry	1	6/27/2013
Dibromomethane	ND	250	250		µg/Kg-dry	1	6/27/2013
Dichlorodifluoromethane	ND	250	250		µg/Kg-dry	1	6/27/2013
Diethyl ether	ND	200	200		µg/Kg-dry	1	6/27/2013
Ethylbenzene	ND	50	50		µg/Kg-dry	1	6/27/2013
Hexachloroethane	ND	300	300		µg/Kg-dry	1	6/27/2013
Isopropylbenzene	ND	250	250		µg/Kg-dry	1	6/27/2013
m,p-Xylene	ND	100	100		µg/Kg-dry	1	6/27/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-01 1-2'
Work Order:	1306978	**Collection Date:**	6/21/2013 4:22:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-16	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
Methyl iodide	ND	100	100		µg/Kg-dry	1	6/27/2013
Methyl tert-butyl ether	ND	250	250		µg/Kg-dry	1	6/27/2013
Methylene chloride	ND	100	100		µg/Kg-dry	1	6/27/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/27/2013
n-Propylbenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
o-Xylene	ND	50	50		µg/Kg-dry	1	6/27/2013
Styrene	ND	50	50		µg/Kg-dry	1	6/27/2013
Tetrachloroethene	ND	50	50		µg/Kg-dry	1	6/27/2013
Toluene	ND	100	100		µg/Kg-dry	1	6/27/2013
trans-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/27/2013
trans-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/27/2013
trans-1,4-Dichloro-2-butene	ND	50	50		µg/Kg-dry	1	6/27/2013
Trichloroethene	ND	50	50		µg/Kg-dry	1	6/27/2013
Trichlorofluoromethane	ND	100	100		µg/Kg-dry	1	6/27/2013
Vinyl acetate	ND	5,000	5,000		µg/Kg-dry	1	6/27/2013
Vinyl chloride	ND	40	40		µg/Kg-dry	1	6/27/2013
Xylenes, Total	ND	150	150		µg/Kg-dry	1	6/27/2013
Surr: 1,2-Dichloroethane-d4	*96.8*	*70-130*			*%REC*	1	6/27/2013
Surr: 4-Bromofluorobenzene	*96.5*	*70-130*			*%REC*	1	6/27/2013
Surr: Dibromofluoromethane	*92.3*	*70-130*			*%REC*	1	6/27/2013
Surr: Toluene-d8	*100*	*70-130*			*%REC*	1	6/27/2013
MOISTURE			**A2540 G**				Analyst: **BD**
Moisture	**1.6**	**0.050**	**0**		**% of sample**	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-01 9-10'
Work Order:	1306978	**Collection Date:**	6/21/2013 4:34:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-17	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471**		Prep Date:	**6/27/2013**	Analyst: **LR**
Mercury	ND	50	50		µg/Kg-dry	1	6/27/2013
METALS BY ICP-MS			**SW6020A**		Prep Date:	**6/27/2013**	Analyst: **ML**
Arsenic	**420**	**130**	**100**		**µg/Kg-dry**	1	6/28/2013
Barium	**2,600**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
Cadmium	ND	200	200		µg/Kg-dry	1	6/28/2013
Chromium	ND	2,000	2,000		µg/Kg-dry	1	6/28/2013
Copper	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Lead	ND	1,000	1,000		µg/Kg-dry	1	6/28/2013
Selenium	ND	200	200		µg/Kg-dry	1	6/28/2013
Silver	ND	100	100		µg/Kg-dry	1	6/28/2013
Zinc	**1,500**	**1,000**	**1,000**		**µg/Kg-dry**	1	6/28/2013
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270**		Prep Date:	**6/28/2013**	Analyst: **RM**
2-Chloronaphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
Acenaphthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Acenaphthylene	ND	330	330		µg/Kg-dry	1	7/1/2013
Anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(a)anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(a)pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(b)fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(g,h,i)perylene	ND	330	330		µg/Kg-dry	1	7/1/2013
Benzo(k)fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Chrysene	ND	330	330		µg/Kg-dry	1	7/1/2013
Dibenzo(a,h)anthracene	ND	330	330		µg/Kg-dry	1	7/1/2013
Fluoranthene	ND	330	330		µg/Kg-dry	1	7/1/2013
Fluorene	ND	330	330		µg/Kg-dry	1	7/1/2013
Indeno(1,2,3-cd)pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	7/1/2013
Phenanthrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Pyrene	ND	330	330		µg/Kg-dry	1	7/1/2013
Surr: 2-Fluorobiphenyl	*74.2*	*12-100*			*%REC*	1	7/1/2013
Surr: 4-Terphenyl-d14	*112*	*25-137*			*%REC*	1	7/1/2013
Surr: Nitrobenzene-d5	*72.3*	*37-107*			*%REC*	1	7/1/2013
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date:	**6/26/2013**	Analyst: **BG**
1,1,1,2-Tetrachloroethane	ND	100	100		µg/Kg-dry	1	6/27/2013
1,1,1-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/27/2013
1,1,2,2-Tetrachloroethane	ND	50	50		µg/Kg-dry	1	6/27/2013
1,1,2-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/27/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-01 9-10'
Work Order:	1306978	**Collection Date:**	6/21/2013 4:34:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-17	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	ND	100	100		µg/Kg-dry	1	6/27/2013
1,1-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/27/2013
1,1-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/27/2013
1,2,3-Trichloropropane	ND	100	100		µg/Kg-dry	1	6/27/2013
1,2,4-Trichlorobenzene	ND	250	250		µg/Kg-dry	1	6/27/2013
1,2,4-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
1,2-Dibromo-3-chloropropane	ND	34	10		µg/Kg-dry	1	6/27/2013
1,2-Dibromoethane	ND	34	20		µg/Kg-dry	1	6/27/2013
1,2-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
1,2-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/27/2013
1,2-Dichloropropane	ND	50	50		µg/Kg-dry	1	6/27/2013
1,3,5-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
1,3-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
1,4-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
2-Butanone	ND	750	750		µg/Kg-dry	1	6/27/2013
2-Hexanone	ND	2,500	2,500		µg/Kg-dry	1	6/27/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/27/2013
4-Methyl-2-pentanone	ND	2,500	2,500		µg/Kg-dry	1	6/27/2013
Acetone	ND	1,000	1,000		µg/Kg-dry	1	6/27/2013
Acrylonitrile	ND	110	100		µg/Kg-dry	1	6/27/2013
Benzene	ND	50	50		µg/Kg-dry	1	6/27/2013
Bromochloromethane	ND	100	100		µg/Kg-dry	1	6/27/2013
Bromodichloromethane	ND	100	100		µg/Kg-dry	1	6/27/2013
Bromoform	ND	100	100		µg/Kg-dry	1	6/27/2013
Bromomethane	ND	200	200		µg/Kg-dry	1	6/27/2013
Carbon disulfide	ND	250	250		µg/Kg-dry	1	6/27/2013
Carbon tetrachloride	ND	50	50		µg/Kg-dry	1	6/27/2013
Chlorobenzene	ND	50	50		µg/Kg-dry	1	6/27/2013
Chloroethane	ND	250	250		µg/Kg-dry	1	6/27/2013
Chloroform	ND	50	50		µg/Kg-dry	1	6/27/2013
Chloromethane	ND	250	250		µg/Kg-dry	1	6/27/2013
cis-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/27/2013
cis-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/27/2013
Dibromochloromethane	ND	100	100		µg/Kg-dry	1	6/27/2013
Dibromomethane	ND	250	250		µg/Kg-dry	1	6/27/2013
Dichlorodifluoromethane	ND	250	250		µg/Kg-dry	1	6/27/2013
Diethyl ether	ND	200	200		µg/Kg-dry	1	6/27/2013
Ethylbenzene	ND	50	50		µg/Kg-dry	1	6/27/2013
Hexachloroethane	ND	300	300		µg/Kg-dry	1	6/27/2013
Isopropylbenzene	ND	250	250		µg/Kg-dry	1	6/27/2013
m,p-Xylene	ND	100	100		µg/Kg-dry	1	6/27/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	SB-01 9-10'
Work Order:	1306978	**Collection Date:**	6/21/2013 4:34:00 PM
Project:	Garland Street - 8100B		
Lab ID:	1306978-17	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
Methyl iodide	ND	100	100		µg/Kg-dry	1	6/27/2013
Methyl tert-butyl ether	ND	250	250		µg/Kg-dry	1	6/27/2013
Methylene chloride	ND	100	100		µg/Kg-dry	1	6/27/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/27/2013
n-Propylbenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
o-Xylene	ND	50	50		µg/Kg-dry	1	6/27/2013
Styrene	ND	50	50		µg/Kg-dry	1	6/27/2013
Tetrachloroethene	ND	50	50		µg/Kg-dry	1	6/27/2013
Toluene	ND	100	100		µg/Kg-dry	1	6/27/2013
trans-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/27/2013
trans-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/27/2013
trans-1,4-Dichloro-2-butene	ND	50	50		µg/Kg-dry	1	6/27/2013
Trichloroethene	ND	50	50		µg/Kg-dry	1	6/27/2013
Trichlorofluoromethane	ND	100	100		µg/Kg-dry	1	6/27/2013
Vinyl acetate	ND	5,000	5,000		µg/Kg-dry	1	6/27/2013
Vinyl chloride	ND	40	40		µg/Kg-dry	1	6/27/2013
Xylenes, Total	ND	150	150		µg/Kg-dry	1	6/27/2013
Surr: 1,2-Dichloroethane-d4	*99.0*	*70-130*			*%REC*	1	6/27/2013
Surr: 4-Bromofluorobenzene	*95.2*	*70-130*			*%REC*	1	6/27/2013
Surr: Dibromofluoromethane	*94.6*	*70-130*			*%REC*	1	6/27/2013
Surr: Toluene-d8	*100*	*70-130*			*%REC*	1	6/27/2013
MOISTURE			**A2540 G**				Analyst: **BD**
Moisture	**4.4**	**0.050**	**0**		**% of sample**	1	6/26/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *08-Jul-13*

Client: AKT Peerless Environmental Services
Project: Garland Street - 8100B

Work Order: 1306978

Lab ID: 1306978-18A
Client Sample ID: SB-01 1-8'

Collection Date: 6/21/2013 4:42:00 PM
Matrix: TCLP EXTRACT

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TCLP HERBICIDES			**SW8151**		Prep Date: **6/27/2013**	Analyst: **JD**
2,4,5-TP (Silvex)	ND		5.0	µg/L	1	6/28/2013 11:50 PM
2,4-D	**14**		**5.0**	**µg/L**	1	6/28/2013 11:50 PM
Surr: DCAA	*89.4*		*30-150*	*%REC*	1	6/28/2013 11:50 PM
TCLP PESTICIDES			**SW8081**		Prep Date: **6/26/2013**	Analyst: **JD**
Chlordane, Technical	ND		5.0	µg/L	1	7/1/2013 03:23 PM
Endrin	ND		0.25	µg/L	1	7/1/2013 03:23 PM
gamma-BHC (Lindane)	ND		0.25	µg/L	1	7/1/2013 03:23 PM
Heptachlor	ND		0.25	µg/L	1	7/1/2013 03:23 PM
Heptachlor epoxide	ND		0.25	µg/L	1	7/1/2013 03:23 PM
Methoxychlor	ND		0.25	µg/L	1	7/1/2013 03:23 PM
Toxaphene	ND		20	µg/L	1	7/1/2013 03:23 PM
Surr: Decachlorobiphenyl	*80.0*		*30-135*	*%REC*	1	7/1/2013 03:23 PM
Surr: Tetrachloro-m-xylene	*65.0*		*25-140*	*%REC*	1	7/1/2013 03:23 PM
TCLP MERCURY BY CVAA			**SW7470A**		Prep Date: **6/26/2013**	Analyst: **LR**
Mercury	ND		0.0020	mg/L	1	6/26/2013 04:07 PM
TCLP METALS ANALYSIS BY ICP-MS			**SW6020A**		Prep Date: **6/27/2013**	Analyst: **ML**
Arsenic	ND		0.010	mg/L	1	7/1/2013 01:12 PM
Barium	ND		0.050	mg/L	1	7/1/2013 01:12 PM
Cadmium	ND		0.0020	mg/L	1	7/1/2013 01:12 PM
Chromium	ND		0.020	mg/L	1	6/28/2013 04:29 PM
Lead	ND		0.010	mg/L	1	7/1/2013 01:12 PM
Selenium	ND		0.020	mg/L	1	6/28/2013 04:29 PM
Silver	ND		0.0050	mg/L	1	6/28/2013 04:29 PM
TCLP SEMI-VOLATILE ORGANICS			**SW8270**		Prep Date: **6/26/2013**	Analyst: **HL**
1,4-Dichlorobenzene	ND		100	µg/L	1	6/27/2013 06:28 PM
2,4,5-Trichlorophenol	ND		100	µg/L	1	6/27/2013 06:28 PM
2,4,6-Trichlorophenol	ND		100	µg/L	1	6/27/2013 06:28 PM
2,4-Dinitrotoluene	ND		100	µg/L	1	6/27/2013 06:28 PM
Hexachloro-1,3-butadiene	ND		100	µg/L	1	6/27/2013 06:28 PM
Hexachlorobenzene	ND		100	µg/L	1	6/27/2013 06:28 PM
Hexachloroethane	ND		100	µg/L	1	6/27/2013 06:28 PM
m-Cresol	ND		100	µg/L	1	6/27/2013 06:28 PM
Nitrobenzene	ND		100	µg/L	1	6/27/2013 06:28 PM
o-Cresol	ND		100	µg/L	1	6/27/2013 06:28 PM
p-Cresol	ND		100	µg/L	1	6/27/2013 06:28 PM
Pentachlorophenol	ND		400	µg/L	1	6/27/2013 06:28 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Pyridine	ND	400	µg/L	1	6/27/2013 06:28 PM
Surr: 2,4,6-Tribromophenol	*51.6*	*21-125*	*%REC*	1	6/27/2013 06:28 PM
Surr: 2-Fluorobiphenyl	*46.2*	*39-94*	*%REC*	1	6/27/2013 06:28 PM
Surr: 2-Fluorophenol	*33.8*	*10-75*	*%REC*	1	6/27/2013 06:28 PM
Surr: 4-Terphenyl-d14	*103*	*26-119*	*%REC*	1	6/27/2013 06:28 PM
Surr: Nitrobenzene-d5	*44.2*	*41-104*	*%REC*	1	6/27/2013 06:28 PM
Surr: Phenol-d6	*19.2*	*11-50*	*%REC*	1	6/27/2013 06:28 PM

TCLP VOLATILE ORGANICS **SW8260** Prep Date: **6/26/2013** Analyst: **BG**

1,1-Dichloroethene	ND	20	µg/L	20	6/27/2013 03:18 PM
1,2-Dichloroethane	ND	20	µg/L	20	6/27/2013 03:18 PM
2-Butanone	ND	200	µg/L	20	6/27/2013 03:18 PM
Benzene	ND	20	µg/L	20	6/27/2013 03:18 PM
Carbon tetrachloride	ND	20	µg/L	20	6/27/2013 03:18 PM
Chlorobenzene	ND	20	µg/L	20	6/27/2013 03:18 PM
Chloroform	ND	20	µg/L	20	6/27/2013 03:18 PM
Tetrachloroethene	ND	20	µg/L	20	6/27/2013 03:18 PM
Trichloroethene	ND	20	µg/L	20	6/27/2013 03:18 PM
Vinyl chloride	ND	20	µg/L	20	6/27/2013 03:18 PM
Surr: 1,2-Dichloroethane-d4	*97.4*	*70-130*	*%REC*	20	6/27/2013 03:18 PM
Surr: 4-Bromofluorobenzene	*105*	*70-130*	*%REC*	20	6/27/2013 03:18 PM
Surr: Dibromofluoromethane	*99.4*	*70-130*	*%REC*	20	6/27/2013 03:18 PM
Surr: Toluene-d8	*99.0*	*70-130*	*%REC*	20	6/27/2013 03:18 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	Trip Blank
Work Order:	1306978	**Collection Date:**	6/21/2013
Project:	Garland Street - 8100B		
Lab ID:	1306978-19	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			**SW8260**		Prep Date: **6/26/2013**		Analyst: **BG**
1,1,1,2-Tetrachloroethane	ND	100	100		µg/Kg-dry	1	6/27/2013
1,1,1-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/27/2013
1,1,2,2-Tetrachloroethane	ND	50	50		µg/Kg-dry	1	6/27/2013
1,1,2-Trichloroethane	ND	50	50		µg/Kg-dry	1	6/27/2013
1,1,2-Trichlorotrifluoroethane	ND	100	100		µg/Kg-dry	1	6/27/2013
1,1-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/27/2013
1,1-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/27/2013
1,2,3-Trichloropropane	ND	100	100		µg/Kg-dry	1	6/27/2013
1,2,4-Trichlorobenzene	ND	250	250		µg/Kg-dry	1	6/27/2013
1,2,4-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
1,2-Dibromo-3-chloropropane	ND	30	10		µg/Kg-dry	1	6/27/2013
1,2-Dibromoethane	ND	30	20		µg/Kg-dry	1	6/27/2013
1,2-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
1,2-Dichloroethane	ND	50	50		µg/Kg-dry	1	6/27/2013
1,2-Dichloropropane	ND	50	50		µg/Kg-dry	1	6/27/2013
1,3,5-Trimethylbenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
1,3-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
1,4-Dichlorobenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
2-Butanone	ND	750	750		µg/Kg-dry	1	6/27/2013
2-Hexanone	ND	2,500	2,500		µg/Kg-dry	1	6/27/2013
2-Methylnaphthalene	ND	330	330		µg/Kg-dry	1	6/27/2013
4-Methyl-2-pentanone	ND	2,500	2,500		µg/Kg-dry	1	6/27/2013
Acetone	ND	1,000	1,000		µg/Kg-dry	1	6/27/2013
Acrylonitrile	ND	100	100		µg/Kg-dry	1	6/27/2013
Benzene	ND	50	50		µg/Kg-dry	1	6/27/2013
Bromochloromethane	ND	100	100		µg/Kg-dry	1	6/27/2013
Bromodichloromethane	ND	100	100		µg/Kg-dry	1	6/27/2013
Bromoform	ND	100	100		µg/Kg-dry	1	6/27/2013
Bromomethane	ND	200	200		µg/Kg-dry	1	6/27/2013
Carbon disulfide	ND	250	250		µg/Kg-dry	1	6/27/2013
Carbon tetrachloride	ND	50	50		µg/Kg-dry	1	6/27/2013
Chlorobenzene	ND	50	50		µg/Kg-dry	1	6/27/2013
Chloroethane	ND	250	250		µg/Kg-dry	1	6/27/2013
Chloroform	ND	50	50		µg/Kg-dry	1	6/27/2013
Chloromethane	ND	250	250		µg/Kg-dry	1	6/27/2013
cis-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/27/2013
cis-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/27/2013
Dibromochloromethane	ND	100	100		µg/Kg-dry	1	6/27/2013
Dibromomethane	ND	250	250		µg/Kg-dry	1	6/27/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: *07-Jul-13*

Client:	AKT Peerless Environmental Services	**Client Sample ID:**	Trip Blank
Work Order:	1306978	**Collection Date:**	6/21/2013
Project:	Garland Street - 8100B		
Lab ID:	1306978-19	**Matrix:**	SOIL

Analyses	Result	Report Limit	MDEQ OP Memo 2 TDL	Qual	Units	Dilution Factor	Date Analyzed
Dichlorodifluoromethane	ND	250	250		µg/Kg-dry	1	6/27/2013
Diethyl ether	ND	200	200		µg/Kg-dry	1	6/27/2013
Ethylbenzene	ND	50	50		µg/Kg-dry	1	6/27/2013
Hexachloroethane	ND	300	300		µg/Kg-dry	1	6/27/2013
Isopropylbenzene	ND	250	250		µg/Kg-dry	1	6/27/2013
m,p-Xylene	ND	100	100		µg/Kg-dry	1	6/27/2013
Methyl iodide	ND	100	100		µg/Kg-dry	1	6/27/2013
Methyl tert-butyl ether	ND	250	250		µg/Kg-dry	1	6/27/2013
Methylene chloride	ND	100	100		µg/Kg-dry	1	6/27/2013
Naphthalene	ND	330	330		µg/Kg-dry	1	6/27/2013
n-Propylbenzene	ND	100	100		µg/Kg-dry	1	6/27/2013
o-Xylene	ND	50	50		µg/Kg-dry	1	6/27/2013
Styrene	ND	50	50		µg/Kg-dry	1	6/27/2013
Tetrachloroethene	ND	50	50		µg/Kg-dry	1	6/27/2013
Toluene	ND	100	100		µg/Kg-dry	1	6/27/2013
trans-1,2-Dichloroethene	ND	50	50		µg/Kg-dry	1	6/27/2013
trans-1,3-Dichloropropene	ND	50	50		µg/Kg-dry	1	6/27/2013
trans-1,4-Dichloro-2-butene	ND	50	50		µg/Kg-dry	1	6/27/2013
Trichloroethene	ND	50	50		µg/Kg-dry	1	6/27/2013
Trichlorofluoromethane	ND	100	100		µg/Kg-dry	1	6/27/2013
Vinyl acetate	ND	5,000	5,000		µg/Kg-dry	1	6/27/2013
Vinyl chloride	ND	40	40		µg/Kg-dry	1	6/27/2013
Xylenes, Total	ND	150	150		µg/Kg-dry	1	6/27/2013
Surr: 1,2-Dichloroethane-d4	*102*	*70-130*			*%REC*	1	6/27/2013
Surr: 4-Bromofluorobenzene	*93.4*	*70-130*			*%REC*	1	6/27/2013
Surr: Dibromofluoromethane	*98.2*	*70-130*			*%REC*	1	6/27/2013
Surr: Toluene-d8	*99.9*	*70-130*			*%REC*	1	6/27/2013

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 07-Jul-13

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49321** Instrument ID **GC12** Method: **SW8081**

MBLK Sample ID: **PBLKW1-49321-49321** Units: **µg/L** Analysis Date: **7/1/2013 02:05 PM**

Client ID: Run ID: **GC12_130701A** SeqNo: **2366489** Prep Date: **6/26/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chlordane, Technical	ND	1.0								
Endrin	ND	0.050								
gamma-BHC (Lindane)	ND	0.050								
Heptachlor	ND	0.050								
Heptachlor epoxide	ND	0.050								
Methoxychlor	ND	0.050								
Toxaphene	ND	4.0								
Surr: Decachlorobiphenyl	*0.075*	0	*0.1*	0	*75*	*30-135*		0		
Surr: Tetrachloro-m-xylene	*0.068*	0	*0.1*	0	*68*	*25-140*		0		

LCS Sample ID: **PLCSW1-49321-49321** Units: **µg/L** Analysis Date: **7/1/2013 02:21 PM**

Client ID: Run ID: **GC12_130701A** SeqNo: **2366490** Prep Date: **6/26/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Endrin	0.078	0.050	0.1	0	78	55-135		0		
gamma-BHC (Lindane)	0.065	0.050	0.1	0	65	25-135		0		
Heptachlor	0.066	0.050	0.1	0	66	40-130		0		
Heptachlor epoxide	0.068	0.050	0.1	0	68	40-130		0		
Methoxychlor	0.092	0.050	0.1	0	92	55-150		0		
Surr: Decachlorobiphenyl	*0.063*	0	*0.1*	0	*63*	*30-135*		0		
Surr: Tetrachloro-m-xylene	*0.054*	0	*0.1*	0	*54*	*25-140*		0		

MS Sample ID: **1306981-02A MS** Units: **µg/L** Analysis Date: **7/1/2013 02:52 PM**

Client ID: Run ID: **GC12_130701A** SeqNo: **2366487** Prep Date: **6/26/2013** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Endrin	1.84	2.0	2	0	92	55-135		0		J
gamma-BHC (Lindane)	3.72	2.0	2	1.96	88	25-135		0		
Heptachlor	1.28	2.0	2	0	64	40-130		0		J
Heptachlor epoxide	1.4	2.0	2	0	70	40-130		0		J
Methoxychlor	2.2	2.0	2	0	110	55-150		0		
Surr: Decachlorobiphenyl	*1.56*	0	*2*	0	*78*	*30-135*		0		
Surr: Tetrachloro-m-xylene	*0.8*	0	*2*	0	*40*	*25-140*		0		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49321** Instrument ID **GC12** Method: **SW8081**

MSD Sample ID: **1306981-02A MSD** Units: **µg/L** Analysis Date: **7/1/2013 03:07 PM**

Client ID: Run ID: **GC12_130701A** SeqNo: **2366488** Prep Date: **6/26/2013** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Endrin	1.88	2.0	2	0	94	55-135	1.84	0	35	J
gamma-BHC (Lindane)	3.52	2.0	2	1.96	78	25-135	3.72	5.52	35	
Heptachlor	1.24	2.0	2	0	62	40-130	1.28	0	35	J
Heptachlor epoxide	1.36	2.0	2	0	68	40-130	1.4	0	35	J
Methoxychlor	2.24	2.0	2	0	112	55-150	2.2	1.8	35	
Surr: Decachlorobiphenyl	*1.4*	0	*2*	0	*70*	*30-135*	1.56	*10.8*	*35*	
Surr: Tetrachloro-m-xylene	*0.76*	0	*2*	0	*38*	*25-140*	0.8	*5.13*	*35*	

The following samples were analyzed in this batch: 1306978-18A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49348** Instrument ID **GC7** Method: **SW8151**

MBLK Sample ID: **HBLKW1-49348-49348** Units: **µg/L** Analysis Date: **6/28/2013 11:18 PM**

Client ID: Run ID: **GC7_130628A** SeqNo: **2366521** Prep Date: **6/27/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-TP (Silvex)	ND	5.0								
2,4-D	ND	5.0								
Surr: DCAA	*42*	0	*50*	0	*84*	*30-150*	0			

LCS Sample ID: **HLCSW1-49348-49348** Units: **µg/L** Analysis Date: **6/28/2013 11:34 PM**

Client ID: Run ID: **GC7_130628A** SeqNo: **2366522** Prep Date: **6/27/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-TP (Silvex)	42.3	5.0	50	0	84.6	50-150	0			
2,4-D	47.9	5.0	50	0	95.8	50-150	0			
Surr: DCAA	*43.4*	0	*50*	0	*86.8*	*30-150*	0			

The following samples were analyzed in this batch: 1306978-18A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49327** Instrument ID **HG1** Method: **SW7470**

MBLK Sample ID: **MBLK-49327-49327** Units: **mg/L** Analysis Date: **6/26/2013 03:57 PM**
Client ID: Run ID: **HG1_130626A** SeqNo: **2362138** Prep Date: **6/26/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.00020								

LCS Sample ID: **LCS-49327-49327** Units: **mg/L** Analysis Date: **6/26/2013 03:59 PM**
Client ID: Run ID: **HG1_130626A** SeqNo: **2362139** Prep Date: **6/26/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.001938	0.00020	0.002	0	96.9	80-120		0		

MS Sample ID: **1306978-18AMS** Units: **mg/L** Analysis Date: **6/26/2013 04:09 PM**
Client ID: **SB-01 1-8'** Run ID: **HG1_130626A** SeqNo: **2362144** Prep Date: **6/26/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.001809	0.00020	0.002	-0.00008	94.4	75-125		0		

MSD Sample ID: **1306978-18AMSD** Units: **mg/L** Analysis Date: **6/26/2013 04:11 PM**
Client ID: **SB-01 1-8'** Run ID: **HG1_130626A** SeqNo: **2362145** Prep Date: **6/26/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.001774	0.00020	0.002	-0.00008	92.7	75-125	0.001809	1.95	20	

The following samples were analyzed in this batch: 1306978-18A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49353** Instrument ID **HG1** Method: **SW7471**

MBLK Sample ID: **MBLK-49353-49353** Units: **mg/Kg** Analysis Date: **6/27/2013 01:02 PM**
Client ID: Run ID: **HG1_130627A** SeqNo: **2363167** Prep Date: **6/27/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.020								

LCS Sample ID: **LCS-49353-49353** Units: **mg/Kg** Analysis Date: **6/27/2013 01:04 PM**
Client ID: Run ID: **HG1_130627A** SeqNo: **2363168** Prep Date: **6/27/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1863	0.020	0.1665	0	112	80-120		0		

MS Sample ID: **1306978-09BMS** Units: **mg/Kg** Analysis Date: **6/27/2013 01:37 PM**
Client ID: **SB-04 1-2'** Run ID: **HG1_130627A** SeqNo: **2363184** Prep Date: **6/27/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1336	0.015	0.1229	0.001771	107	75-125		0		

MSD Sample ID: **1306978-09BMSD** Units: **mg/Kg** Analysis Date: **6/27/2013 01:39 PM**
Client ID: **SB-04 1-2'** Run ID: **HG1_130627A** SeqNo: **2363185** Prep Date: **6/27/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1237	0.014	0.1199	0.001771	102	75-125	0.1336	7.67	35	

The following samples were analyzed in this batch:

1306978-01B	1306978-02B	1306978-03B
1306978-04B	1306978-05B	1306978-06B
1306978-07B	1306978-08B	1306978-09B
1306978-10B	1306978-11B	1306978-12B
1306978-13B	1306978-14B	1306978-15B
1306978-16B	1306978-17B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49354** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK Sample ID: **MBLK-49354-49354** Units: **mg/L** Analysis Date: **6/28/2013 06:18 AM**
Client ID: Run ID: **ICPMS1_130627A** SeqNo: **2364153** Prep Date: **6/27/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.0050								
Barium	ND	0.0050								
Cadmium	ND	0.0020								
Chromium	ND	0.0050								
Lead	0.00007414	0.0050								J
Selenium	ND	0.0050								
Silver	ND	0.0050								

LCS Sample ID: **LCS-49354-49354** Units: **mg/L** Analysis Date: **6/28/2013 06:25 AM**
Client ID: Run ID: **ICPMS1_130627A** SeqNo: **2364154** Prep Date: **6/27/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.1017	0.0050	0.1	0	102	80-120	0			
Barium	0.09735	0.0050	0.1	0	97.4	80-120	0			
Cadmium	0.1025	0.0020	0.1	0	102	80-120	0			
Chromium	0.09756	0.0050	0.1	0	97.6	80-120	0			
Lead	0.1021	0.0050	0.1	0	102	80-120	0			
Selenium	0.09557	0.0050	0.1	0	95.6	80-120	0			
Silver	0.1124	0.0050	0.1	0	112	80-120	0			

MS Sample ID: **1306905-06CMS** Units: **mg/L** Analysis Date: **6/28/2013 07:44 AM**
Client ID: Run ID: **ICPMS1_130627A** SeqNo: **2364167** Prep Date: **6/27/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.1018	0.0050	0.1	0.0003659	101	75-125	0			
Barium	0.1044	0.0050	0.1	0.008386	96	75-125	0			
Cadmium	0.09999	0.0020	0.1	-0.00001392	100	75-125	0			
Chromium	0.0953	0.0050	0.1	0.0004022	94.9	75-125	0			
Lead	0.1013	0.0050	0.1	0.0001124	101	75-125	0			
Selenium	0.09484	0.0050	0.1	0.0004613	94.4	75-125	0			
Silver	0.1052	0.0050	0.1	-0.00003084	105	75-125	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49354** Instrument ID **ICPMS1** Method: **SW6020A**

MSD Sample ID: **1306905-06CMSD** Units: **mg/L** Analysis Date: **6/28/2013 09:21 AM**

Client ID: Run ID: **ICPMS1_130627A** SeqNo: **2364798** Prep Date: **6/27/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.1039	0.0050	0.1	0.0003659	104	75-125	0.1018	2.04	20	
Barium	0.1074	0.0050	0.1	0.008386	99	75-125	0.1044	2.83	20	
Cadmium	0.1005	0.0020	0.1	-0.00001392	101	75-125	0.09999	0.509	20	
Chromium	0.09963	0.0050	0.1	0.0004022	99.2	75-125	0.0953	4.44	20	
Lead	0.1018	0.0050	0.1	0.0001124	102	75-125	0.1013	0.492	20	
Selenium	0.09798	0.0050	0.1	0.0004613	97.5	75-125	0.09484	3.26	20	
Silver	0.1076	0.0050	0.1	-0.00003084	108	75-125	0.1052	2.26	20	

The following samples were analyzed in this batch: 1306978-18A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49368** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK Sample ID: **MBLK-49368-49368** Units: **mg/Kg** Analysis Date: **6/28/2013 03:17 AM**

Client ID: Run ID: **ICPMS1_130627A** SeqNo: **2364123** Prep Date: **6/27/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	ND	0.10								
Chromium	ND	0.25								
Copper	0.1062	0.25								J
Lead	0.002686	0.25								J
Selenium	0.04273	0.25								J
Silver	ND	0.25								
Zinc	ND	0.50								

LCS Sample ID: **LCS-49368-49368** Units: **mg/Kg** Analysis Date: **6/28/2013 03:24 AM**

Client ID: Run ID: **ICPMS1_130627A** SeqNo: **2364124** Prep Date: **6/27/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.435	0.25	5	0	88.7	80-120	0			
Barium	4.737	0.25	5	0	94.7	80-120	0			
Cadmium	4.678	0.10	5	0	93.6	80-120	0			
Chromium	4.684	0.25	5	0	93.7	80-120	0			
Copper	4.734	0.25	5	0	94.7	80-120	0			
Lead	5	0.25	5	0	100	80-120	0			
Selenium	4.034	0.25	5	0	80.7	80-120	0			
Silver	5.42	0.25	5	0	108	80-120	0			
Zinc	4.375	0.50	5	0	87.5	80-120	0			

MS Sample ID: **1306978-11BMS** Units: **mg/Kg** Analysis Date: **6/28/2013 05:31 AM**

Client ID: **SB-03 1-2'** Run ID: **ICPMS1_130627A** SeqNo: **2364145** Prep Date: **6/27/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	7.451	0.39	7.837	0.4017	90	75-125	0			
Barium	13.69	0.39	7.837	5.856	100	75-125	0			
Cadmium	7.306	0.16	7.837	0.003874	93.2	75-125	0			
Chromium	8.119	0.39	7.837	0.5737	96.3	75-125	0			
Copper	7.986	0.39	7.837	0.3126	97.9	75-125	0			
Lead	8.307	0.39	7.837	0.436	100	75-125	0			
Selenium	6.507	0.39	7.837	0.1113	81.6	75-125	0			
Silver	8.378	0.39	7.837	0.006198	107	75-125	0			
Zinc	7.892	0.78	7.837	0.9571	88.5	75-125	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49368** Instrument ID **ICPMS1** Method: **SW6020A**

MSD Sample ID: **1306978-11BMSD** Units: **mg/Kg** Analysis Date: **6/28/2013 05:36 AM**

Client ID: **SB-03 1-2'** Run ID: **ICPMS1_130627A** SeqNo: **2364146** Prep Date: **6/27/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	6.987	0.37	7.485	0.4017	88	75-125	7.451	6.43	25	
Barium	13.04	0.37	7.485	5.856	96	75-125	13.69	4.88	25	
Cadmium	7.082	0.15	7.485	0.003874	94.6	75-125	7.306	3.13	25	
Chromium	7.672	0.37	7.485	0.5737	94.8	75-125	8.119	5.66	25	
Copper	7.612	0.37	7.485	0.3126	97.5	75-125	7.986	4.79	25	
Lead	7.964	0.37	7.485	0.436	101	75-125	8.307	4.22	25	
Selenium	6.245	0.37	7.485	0.1113	81.9	75-125	6.507	4.11	25	
Silver	8.144	0.37	7.485	0.006198	109	75-125	8.378	2.83	25	
Zinc	7.597	0.75	7.485	0.9571	88.7	75-125	7.892	3.8	25	

The following samples were analyzed in this batch:

1306978-01B	1306978-02B	1306978-03B
1306978-04B	1306978-05B	1306978-06B
1306978-07B	1306978-08B	1306978-09B
1306978-10B	1306978-11B	1306978-12B
1306978-13B	1306978-14B	1306978-15B
1306978-16B	1306978-17B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49301** Instrument ID **SVMS4** Method: **SW8270**

MBLK Sample ID: **SBLKS1-49301-49301** Units: **µg/Kg** Analysis Date: **6/26/2013 03:27 PM**

Client ID: Run ID: **SVMS4_130626A** SeqNo: **2362416** Prep Date: **6/25/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	ND	160								
1,2-Dichlorobenzene	ND	160								
1,3-Dichlorobenzene	ND	160								
1,4-Dichlorobenzene	ND	160								
2,4,5-Trichlorophenol	ND	160								
2,4,6-Trichlorophenol	ND	160								
2,4-Dichlorophenol	ND	160								
2,4-Dimethylphenol	ND	330								
2,4-Dinitrophenol	ND	660								
2,4-Dinitrotoluene	ND	160								
2,6-Dinitrotoluene	ND	160								
2-Chloronaphthalene	ND	80								
2-Chlorophenol	ND	160								
2-Methylnaphthalene	ND	80								
2-Methylphenol	ND	160								
2-Nitroaniline	ND	660								
2-Nitrophenol	ND	160								
3,3´-Dichlorobenzidine	ND	660								
3-Nitroaniline	ND	660								
4,6-Dinitro-2-methylphenol	ND	330								
4-Bromophenyl phenyl ether	ND	160								
4-Chloro-3-methylphenol	ND	160								
4-Chloroaniline	ND	660								
4-Chlorophenyl phenyl ether	ND	160								
4-Methylphenol	ND	160								
4-Nitroaniline	ND	660								
4-Nitrophenol	ND	660								
Acenaphthene	ND	30								
Acenaphthylene	ND	30								
Anthracene	ND	30								
Benzo(a)anthracene	ND	30								
Benzo(a)pyrene	ND	30								
Benzo(b)fluoranthene	ND	30								
Benzo(g,h,i)perylene	ND	30								
Benzo(k)fluoranthene	ND	30								
Bis(2-chloroethoxy)methane	ND	160								
Bis(2-chloroethyl)ether	ND	160								
Bis(2-chloroisopropyl)ether	ND	160								
Bis(2-ethylhexyl)phthalate	ND	330								
Butyl benzyl phthalate	ND	160								
Carbazole	ND	160								
Chrysene	ND	30								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Batch ID: **49301** Instrument ID **SVMS4** Method: **SW8270**

Dibenzo(a,h)anthracene	ND	30					
Dibenzofuran	ND	160					
Diethyl phthalate	ND	330					
Dimethyl phthalate	ND	330					
Di-n-butyl phthalate	ND	330					
Di-n-octyl phthalate	ND	160					
Fluoranthene	ND	30					
Fluorene	ND	30					
Hexachlorobenzene	ND	160					
Hexachlorobutadiene	ND	160					
Hexachlorocyclopentadiene	ND	330					
Hexachloroethane	ND	160					
Indeno(1,2,3-cd)pyrene	ND	30					
Isophorone	ND	160					
Naphthalene	ND	30					
Nitrobenzene	ND	160					
N-Nitrosodi-n-propylamine	ND	160					
N-Nitrosodiphenylamine	ND	160					
Pentachlorophenol	ND	330					
Phenanthrene	ND	30					
Phenol	ND	160					
Pyrene	ND	30					
Surr: 2,4,6-Tribromophenol	*1096*	0	*1667*	0	*65.7*	*34-140*	0
Surr: 2-Fluorobiphenyl	*1170*	0	*1667*	0	*70.2*	*12-100*	0
Surr: 2-Fluorophenol	*1438*	0	*1667*	0	*86.3*	*33-117*	0
Surr: 4-Terphenyl-d14	*2002*	0	*1667*	0	*120*	*25-137*	0
Surr: Nitrobenzene-d5	*1120*	0	*1667*	0	*67.2*	*37-107*	0
Surr: Phenol-d6	*1338*	0	*1667*	0	*80.3*	*40-106*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49301** Instrument ID **SVMS4** Method: **SW8270**

LCS Sample ID: **SLCSS1-49301-49301** Units: **µg/Kg** Analysis Date: **6/26/2013 01:19 PM**

Client ID: Run ID: **SVMS4_130626A** SeqNo: **2362412** Prep Date: **6/25/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	545	160	666.7	0	81.7	45-110	0			
1,2-Dichlorobenzene	564	160	666.7	0	84.6	45-95	0			
1,3-Dichlorobenzene	543.3	160	666.7	0	81.5	40-100	0			
1,4-Dichlorobenzene	577	160	666.7	0	86.5	35-105	0			
2,4,5-Trichlorophenol	482.7	160	666.7	0	72.4	50-110	0			
2,4,6-Trichlorophenol	504.3	160	666.7	0	75.6	45-110	0			
2,4-Dichlorophenol	520.3	160	666.7	0	78	45-110	0			
2,4-Dimethylphenol	463.3	330	666.7	0	69.5	30-105	0			
2,4-Dinitrophenol	366.3	660	666.7	0	54.9	15-130	0			J
2,4-Dinitrotoluene	574	160	666.7	0	86.1	50-115	0			
2,6-Dinitrotoluene	609	160	666.7	0	91.3	50-110	0			
2-Chloronaphthalene	556.7	80	666.7	0	83.5	45-105	0			
2-Chlorophenol	625	160	666.7	0	93.7	45-105	0			
2-Methylnaphthalene	538	80	666.7	0	80.7	45-105	0			
2-Methylphenol	594	160	666.7	0	89.1	40-105	0			
2-Nitroaniline	556.7	660	666.7	0	83.5	45-120	0			J
2-Nitrophenol	568.3	160	666.7	0	85.2	40-110	0			
3-Nitroaniline	548.7	660	666.7	0	82.3	25-150	0			J
4-Bromophenyl phenyl ether	561.3	160	666.7	0	84.2	45-115	0			
4-Chloro-3-methylphenol	583.7	160	666.7	0	87.5	45-115	0			
4-Chloroaniline	409.7	660	666.7	0	61.4	15-110	0			J
4-Chlorophenyl phenyl ether	501	160	666.7	0	75.1	45-110	0			
4-Methylphenol	648.3	160	666.7	0	97.2	40-105	0			
4-Nitroaniline	583.7	660	666.7	0	87.5	35-150	0			J
4-Nitrophenol	382.7	660	666.7	0	57.4	15-140	0			J
Acenaphthene	573.3	30	666.7	0	86	45-110	0			
Acenaphthylene	580.7	30	666.7	0	87.1	45-105	0			
Anthracene	596.7	30	666.7	0	89.5	55-105	0			
Benzo(a)anthracene	630.3	30	666.7	0	94.5	50-110	0			
Benzo(a)pyrene	694.7	30	666.7	0	104	50-110	0			
Benzo(b)fluoranthene	671	30	666.7	0	101	45-115	0			
Benzo(g,h,i)perylene	645.7	30	666.7	0	96.8	40-125	0			
Benzo(k)fluoranthene	737	30	666.7	0	111	45-115	0			
Bis(2-chloroethoxy)methane	571	160	666.7	0	85.6	45-110	0			
Bis(2-chloroethyl)ether	678	160	666.7	0	102	40-105	0			
Bis(2-chloroisopropyl)ether	594	160	666.7	0	89.1	20-115	0			
Bis(2-ethylhexyl)phthalate	616.3	330	666.7	0	92.4	45-125	0			
Butyl benzyl phthalate	671.3	160	666.7	0	101	50-125	0			
Carbazole	661.7	160	666.7	0	99.2	50-150	0			
Chrysene	673.7	30	666.7	0	101	55-110	0			
Dibenzo(a,h)anthracene	657.3	30	666.7	0	98.6	40-125	0			
Dibenzofuran	576.7	160	666.7	0	86.5	50-105	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **49301** Instrument ID **SVMS4** Method: **SW8270**

Diethyl phthalate	604	330	666.7	0	90.6	50-115	0	
Dimethyl phthalate	609.3	330	666.7	0	91.4	50-110	0	
Di-n-butyl phthalate	589	330	666.7	0	88.3	55-110	0	
Di-n-octyl phthalate	638.3	160	666.7	0	95.7	40-130	0	
Fluoranthene	623.3	30	666.7	0	93.5	55-115	0	
Fluorene	572.3	30	666.7	0	85.8	50-110	0	
Hexachlorobenzene	568.3	160	666.7	0	85.2	45-120	0	
Hexachlorobutadiene	527.7	160	666.7	0	79.1	40-115	0	
Hexachlorocyclopentadiene	310.7	330	666.7	0	46.6	40-115	0	J
Hexachloroethane	553.3	160	666.7	0	83	35-110	0	
Indeno(1,2,3-cd)pyrene	639.3	30	666.7	0	95.9	40-120	0	
Isophorone	538.7	160	666.7	0	80.8	45-110	0	
Naphthalene	544	30	666.7	0	81.6	40-105	0	
Nitrobenzene	564.7	160	666.7	0	84.7	40-115	0	
N-Nitrosodi-n-propylamine	585	160	666.7	0	87.7	40-115	0	
N-Nitrosodiphenylamine	650	160	666.7	0	97.5	50-115	0	
Pentachlorophenol	524	330	666.7	0	78.6	25-120	0	
Phenanthrene	583.3	30	666.7	0	87.5	50-110	0	
Phenol	608	160	666.7	0	91.2	40-100	0	
Pyrene	677	30	666.7	0	102	45-125	0	
Surr: 2,4,6-Tribromophenol	*1211*	0	*1667*	0	*72.7*	*34-140*	0	
Surr: 2-Fluorobiphenyl	*1243*	0	*1667*	0	*74.6*	*12-100*	0	
Surr: 2-Fluorophenol	*1483*	0	*1667*	0	*89*	*33-117*	0	
Surr: 4-Terphenyl-d14	*1812*	0	*1667*	0	*109*	*25-137*	0	
Surr: Nitrobenzene-d5	*1189*	0	*1667*	0	*71.4*	*37-107*	0	
Surr: Phenol-d6	*1438*	0	*1667*	0	*86.3*	*40-106*	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49301** Instrument ID **SVMS4** Method: **SW8270**

MS Sample ID: **1306978-09B MS** Units: **µg/Kg** Analysis Date: **6/26/2013 01:51 PM**

Client ID: **SB-04 1-2'** Run ID: **SVMS4_130626A** SeqNo: **2362413** Prep Date: **6/25/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	996.8	310	1295	0	77	45-110	0			
1,2-Dichlorobenzene	1018	310	1295	0	78.6	45-95	0			
1,3-Dichlorobenzene	990.3	310	1295	0	76.5	40-100	0			
1,4-Dichlorobenzene	1028	310	1295	0	79.4	35-105	0			
2,4,5-Trichlorophenol	906.8	310	1295	0	70	50-110	0			
2,4,6-Trichlorophenol	935.9	310	1295	0	72.3	45-110	0			
2,4-Dichlorophenol	944.3	310	1295	0	72.9	45-110	0			
2,4-Dimethylphenol	794.8	640	1295	0	61.4	30-105	0			
2,4-Dinitrophenol	840.1	1,300	1295	0	64.9	15-130	0			J
2,4-Dinitrotoluene	1043	310	1295	0	80.6	50-115	0			
2,6-Dinitrotoluene	1093	310	1295	0	84.4	50-110	0			
2-Chloronaphthalene	1003	160	1295	0	77.4	45-105	0			
2-Chlorophenol	1134	310	1295	0	87.6	45-105	0			
2-Methylnaphthalene	975.4	160	1295	0	75.3	45-105	0			
2-Methylphenol	1117	310	1295	0	86.3	40-105	0			
2-Nitroaniline	1002	1,300	1295	0	77.4	45-120	0			J
2-Nitrophenol	1051	310	1295	0	81.2	40-110	0			
3-Nitroaniline	1032	1,300	1295	0	79.7	25-110	0			J
4-Bromophenyl phenyl ether	1003	310	1295	0	77.4	45-115	0			
4-Chloro-3-methylphenol	1052	310	1295	0	81.3	45-115	0			
4-Chloroaniline	741.1	1,300	1295	0	57.2	15-110	0			J
4-Chlorophenyl phenyl ether	893.2	310	1295	0	69	45-110	0			
4-Methylphenol	1156	310	1295	0	89.3	40-105	0			
4-Nitroaniline	1080	1,300	1295	0	83.4	35-150	0			J
4-Nitrophenol	733.3	1,300	1295	0	56.6	15-140	0			J
Acenaphthene	1021	58	1295	0	78.8	45-110	0			
Acenaphthylene	1030	58	1295	0	79.5	45-105	0			
Anthracene	1072	58	1295	0	82.8	55-105	0			
Benzo(a)anthracene	1123	58	1295	0	86.7	50-110	0			
Benzo(a)pyrene	1199	58	1295	0	92.6	50-110	0			
Benzo(b)fluoranthene	1174	58	1295	0	90.7	45-115	0			
Benzo(g,h,i)perylene	1137	58	1295	0	87.8	40-125	0			
Benzo(k)fluoranthene	1233	58	1295	0	95.2	45-115	0			
Bis(2-chloroethoxy)methane	1039	310	1295	0	80.2	45-110	0			
Bis(2-chloroethyl)ether	1214	310	1295	0	93.8	40-105	0			
Bis(2-chloroisopropyl)ether	1080	310	1295	0	83.4	20-115	0			
Bis(2-ethylhexyl)phthalate	1126	640	1295	0	86.9	45-125	0			
Butyl benzyl phthalate	1195	310	1295	0	92.3	50-125	0			
Carbazole	1094	310	1295	0	84.5	50-150	0			
Chrysene	1230	58	1295	17.67	93.7	55-110	0			
Dibenzo(a,h)anthracene	1117	58	1295	0	86.2	40-125	0			
Dibenzofuran	1056	310	1295	0	81.6	50-105	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **49301** Instrument ID **SVMS4** Method: **SW8270**

Diethyl phthalate	1053	640	1295	0	81.3	50-115	0	
Dimethyl phthalate	1085	640	1295	0	83.8	50-110	0	
Di-n-butyl phthalate	1019	640	1295	0	78.7	55-110	0	
Di-n-octyl phthalate	1124	310	1295	0	86.8	40-130	0	
Fluoranthene	1044	58	1295	0	80.6	55-115	0	
Fluorene	1025	58	1295	0	79.1	50-110	0	
Hexachlorobenzene	1025	310	1295	0	79.2	45-120	0	
Hexachlorobutadiene	947.6	310	1295	0	73.2	40-115	0	
Hexachlorocyclopentadiene	601.3	640	1295	0	46.4	40-115	0	J
Hexachloroethane	992.9	310	1295	0	76.7	35-110	0	
Indeno(1,2,3-cd)pyrene	1129	58	1295	0	87.2	40-120	0	
Isophorone	976.7	310	1295	0	75.4	45-110	0	
Naphthalene	983.2	58	1295	0	75.9	40-105	0	
Nitrobenzene	1039	310	1295	0	80.3	40-115	0	
N-Nitrosodi-n-propylamine	1058	310	1295	0	81.7	40-115	0	
N-Nitrosodiphenylamine	1129	310	1295	0	87.2	50-115	0	
Pentachlorophenol	1051	640	1295	0	81.2	25-120	0	
Phenanthrene	1058	58	1295	0	81.7	50-110	0	
Phenol	1091	310	1295	0	84.2	40-100	0	
Pyrene	1203	58	1295	0	92.9	45-125	0	
Surr: 2,4,6-Tribromophenol	*2276*	0	*3236*	0	*70.3*	*34-140*	0	
Surr: 2-Fluorobiphenyl	*2243*	0	*3236*	0	*69.3*	*12-100*	0	
Surr: 2-Fluorophenol	*2707*	0	*3236*	0	*83.7*	*33-117*	0	
Surr: 4-Terphenyl-d14	*3321*	0	*3236*	0	*103*	*25-137*	0	
Surr: Nitrobenzene-d5	*2170*	0	*3236*	0	*67*	*37-107*	0	
Surr: Phenol-d6	*2639*	0	*3236*	0	*81.5*	*40-106*	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49301** Instrument ID **SVMS4** Method: **SW8270**

MSD Sample ID: **1306978-09B MSD** Units: **µg/Kg** Analysis Date: **6/26/2013 02:22 PM**

Client ID: **SB-04 1-2'** Run ID: **SVMS4_130626A** SeqNo: **2362414** Prep Date: **6/25/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	1031	310	1279	0	80.6	45-110	996.8	3.37	30	
1,2-Dichlorobenzene	1053	310	1279	0	82.3	45-95	1018	3.33	30	
1,3-Dichlorobenzene	1019	310	1279	0	79.7	40-100	990.3	2.89	30	
1,4-Dichlorobenzene	1079	310	1279	0	84.4	35-105	1028	4.9	30	
2,4,5-Trichlorophenol	939.4	310	1279	0	73.4	50-110	906.8	3.54	30	
2,4,6-Trichlorophenol	957.3	310	1279	0	74.8	45-110	935.9	2.26	30	
2,4-Dichlorophenol	972.7	310	1279	0	76	45-110	944.3	2.96	30	
2,4-Dimethylphenol	810.3	630	1279	0	63.3	30-105	794.8	1.92	30	
2,4-Dinitrophenol	879.3	1,300	1279	0	68.7	15-130	840.1	0	30	J
2,4-Dinitrotoluene	1054	310	1279	0	82.4	50-115	1043	1.01	30	
2,6-Dinitrotoluene	1140	310	1279	0	89.1	50-110	1093	4.16	30	
2-Chloronaphthalene	1029	150	1279	0	80.4	45-105	1003	2.6	30	
2-Chlorophenol	1181	310	1279	0	92.3	45-105	1134	4.02	30	
2-Methylnaphthalene	1008	150	1279	0	78.8	45-105	975.4	3.27	30	
2-Methylphenol	1133	310	1279	0	88.6	40-105	1117	1.43	30	
2-Nitroaniline	1032	1,300	1279	0	80.7	45-120	1002	0	30	J
2-Nitrophenol	1091	310	1279	0	85.3	40-110	1051	3.72	30	
3-Nitroaniline	1066	1,300	1279	0	83.3	25-110	1032	0	30	J
4-Bromophenyl phenyl ether	1044	310	1279	0	81.6	45-115	1003	4.02	30	
4-Chloro-3-methylphenol	1088	310	1279	0	85	45-115	1052	3.31	30	
4-Chloroaniline	753.3	1,300	1279	0	58.9	15-110	741.1	0	30	J
4-Chlorophenyl phenyl ether	931.1	310	1279	0	72.8	45-110	893.2	4.16	30	
4-Methylphenol	1188	310	1279	0	92.8	40-105	1156	2.7	30	
4-Nitroaniline	1125	1,300	1279	0	87.9	35-150	1080	0	30	J
4-Nitrophenol	724.6	1,300	1279	0	56.6	15-140	733.3	0	30	J
Acenaphthene	1060	58	1279	0	82.9	45-110	1021	3.81	30	
Acenaphthylene	1067	58	1279	0	83.4	45-105	1030	3.52	30	
Anthracene	1090	58	1279	0	85.2	55-105	1072	1.59	30	
Benzo(a)anthracene	1171	58	1279	0	91.5	50-110	1123	4.18	30	
Benzo(a)pyrene	1257	58	1279	0	98.3	50-110	1199	4.77	30	
Benzo(b)fluoranthene	1204	58	1279	0	94.1	45-115	1174	2.48	30	
Benzo(g,h,i)perylene	1193	58	1279	0	93.3	40-125	1137	4.81	30	
Benzo(k)fluoranthene	1334	58	1279	0	104	45-115	1233	7.87	30	
Bis(2-chloroethoxy)methane	1083	310	1279	0	84.7	45-110	1039	4.19	30	
Bis(2-chloroethyl)ether	1266	310	1279	0	99	40-105	1214	4.19	30	
Bis(2-chloroisopropyl)ether	1118	310	1279	0	87.4	20-115	1080	3.48	30	
Bis(2-ethylhexyl)phthalate	1203	630	1279	0	94	45-125	1126	6.64	30	
Butyl benzyl phthalate	1315	310	1279	0	103	50-125	1195	9.61	30	
Carbazole	1185	310	1279	0	92.6	50-150	1094	7.94	30	
Chrysene	1275	58	1279	17.67	98.3	55-110	1230	3.57	30	
Dibenzo(a,h)anthracene	1154	58	1279	0	90.2	40-125	1117	3.27	30	
Dibenzofuran	1085	310	1279	0	84.8	50-105	1056	2.7	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49301** Instrument ID **SVMS4** Method: **SW8270**

Diethyl phthalate	1104	630	1279	0	86.3	50-115	1053	4.76	30	
Dimethyl phthalate	1122	630	1279	0	87.7	50-110	1085	3.4	30	
Di-n-butyl phthalate	1098	630	1279	0	85.8	55-110	1019	7.43	30	
Di-n-octyl phthalate	1175	310	1279	0	91.9	40-130	1124	4.45	30	
Fluoranthene	1105	58	1279	0	86.4	55-115	1044	5.68	30	
Fluorene	1072	58	1279	0	83.8	50-110	1025	4.5	30	
Hexachlorobenzene	1071	310	1279	0	83.7	45-120	1025	4.32	30	
Hexachlorobutadiene	994.4	310	1279	0	77.7	40-115	947.6	4.83	30	
Hexachlorocyclopentadiene	604.3	630	1279	0	47.2	40-115	601.3	0	30	J
Hexachloroethane	1044	310	1279	0	81.6	35-110	992.9	5.05	30	
Indeno(1,2,3-cd)pyrene	1186	58	1279	0	92.7	40-120	1129	4.91	30	
Isophorone	1011	310	1279	0	79	45-110	976.7	3.46	30	
Naphthalene	1038	58	1279	0	81.1	40-105	983.2	5.42	30	
Nitrobenzene	1070	310	1279	0	83.6	40-115	1039	2.88	30	
N-Nitrosodi-n-propylamine	1107	310	1279	0	86.5	40-115	1058	4.56	30	
N-Nitrosodiphenylamine	1185	310	1279	0	92.6	50-115	1129	4.8	30	
Pentachlorophenol	1140	630	1279	0	89.1	25-120	1051	8.08	30	
Phenanthrene	1092	58	1279	0	85.3	50-110	1058	3.17	30	
Phenol	1129	310	1279	0	88.3	40-100	1091	3.49	30	
Pyrene	1259	58	1279	0	98.4	45-125	1203	4.55	30	
Surr: 2,4,6-Tribromophenol	*2305*	0	*3198*	0	*72.1*	*34-140*	2276	*1.24*	*40*	
Surr: 2-Fluorobiphenyl	*2320*	0	*3198*	0	*72.6*	*12-100*	2243	*3.39*	*40*	
Surr: 2-Fluorophenol	*2710*	0	*3198*	0	*84.8*	*33-117*	2707	*0.103*	*40*	
Surr: 4-Terphenyl-d14	*3509*	0	*3198*	0	*110*	*25-137*	3321	*5.5*	*40*	
Surr: Nitrobenzene-d5	*2272*	0	*3198*	0	*71*	*37-107*	2170	*4.59*	*40*	
Surr: Phenol-d6	*2722*	0	*3198*	0	*85.1*	*40-106*	2639	*3.12*	*40*	

The following samples were analyzed in this batch:

1306978-01B	1306978-03B	1306978-04B
1306978-05B	1306978-06B	1306978-07B
1306978-08B	1306978-09B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49307** Instrument ID **SVMS6** Method: **E625**

MBLK Sample ID: **SBLKW1-49307-49307** Units: **µg/L** Analysis Date: **6/26/2013 04:11 PM**

Client ID: Run ID: **SVMS6_130626A** SeqNo: **2362229** Prep Date: **6/26/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Hexachlorobenzene	ND	5.0								
Hexachloroethane	ND	5.0								
Nitrobenzene	ND	5.0								
Surr: 2,4,6-Tribromophenol	*36.13*	0	*50*	0	*72.3*	*38-115*	0			
Surr: 2-Fluorobiphenyl	*34.71*	0	*50*	0	*69.4*	*32-100*	0			
Surr: 2-Fluorophenol	*21.69*	0	*50*	0	*43.4*	*22-59*	0			
Surr: 4-Terphenyl-d14	*52.29*	0	*50*	0	*105*	*23-112*	0			
Surr: Nitrobenzene-d5	*32.03*	0	*50*	0	*64.1*	*31-93*	0			
Surr: Phenol-d6	*11.73*	0	*50*	0	*23.5*	*13-36*	0			

LCS Sample ID: **SLCSW1-49307-49307** Units: **µg/L** Analysis Date: **6/27/2013 11:59 AM**

Client ID: Run ID: **SVMS4_130627A** SeqNo: **2364672** Prep Date: **6/26/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	15.23	5.0	20	0	76.2	30-110	0			
2,4,5-Trichlorophenol	12.31	5.0	20	0	61.6	50-110	0			
2,4,6-Trichlorophenol	13.3	5.0	20	0	66.5	50-115	0			
2,4-Dinitrotoluene	14.66	5.0	20	0	73.3	50-120	0			
Hexachloro-1,3-butadiene	12.63	5.0	20	0	63.2	25-105	0			
Hexachlorobenzene	15.96	5.0	20	0	79.8	50-110	0			
Hexachloroethane	14.73	5.0	20	0	73.6	30-95	0			
m-Cresol	12.04	5.0	20	0	60.2	30-110	0			
Nitrobenzene	14.29	5.0	20	0	71.4	45-110	0			
o-Cresol	12.52	5.0	20	0	62.6	40-110	0			
p-Cresol	12.04	5.0	20	0	60.2	30-110	0			
Pentachlorophenol	13.1	20	20	0	65.5	40-115	0			J
Pyridine	6.96	20	20	0	34.8	10-71	0			J
Surr: 2,4,6-Tribromophenol	*31.5*	0	*50*	0	*63*	*21-125*	0			
Surr: 2-Fluorobiphenyl	*31.78*	0	*50*	0	*63.6*	*36-94*	0			
Surr: 2-Fluorophenol	*22.01*	0	*50*	0	*44*	*10-75*	0			
Surr: 4-Terphenyl-d14	*52.6*	0	*50*	0	*105*	*26-119*	0			
Surr: Nitrobenzene-d5	*30.04*	0	*50*	0	*60.1*	*41-104*	0			
Surr: Phenol-d6	*13.1*	0	*50*	0	*26.2*	*11-50*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49307** Instrument ID **SVMS6** Method: **E625**

MS Sample ID: **1306920-03C MS** Units: **µg/L** Analysis Date: **6/27/2013 01:03 PM**

Client ID: Run ID: **SVMS4_130627A** SeqNo: **2364673** Prep Date: **6/26/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	293.8	100	400	0	73.4	30-110	0			
2,4,5-Trichlorophenol	235.2	100	400	0	58.8	50-110	0			
2,4,6-Trichlorophenol	251	100	400	0	62.8	50-115	0			
2,4-Dinitrotoluene	287.6	100	400	0	71.9	50-120	0			
Hexachloro-1,3-butadiene	249.6	100	400	0	62.4	25-105	0			
Hexachlorobenzene	313.6	100	400	0	78.4	50-110	0			
Hexachloroethane	284.2	100	400	0	71	30-95	0			
m-Cresol	212	100	400	0	53	30-110	0			
Nitrobenzene	276.2	100	400	0	69	45-110	0			
o-Cresol	237.6	100	400	0	59.4	40-110	0			
p-Cresol	212	100	400	0	53	30-110	0			
Pentachlorophenol	275.6	400	400	0	68.9	40-115	0			J
Pyridine	139.6	400	400	0	34.9	10-80	0			J
Surr: 2,4,6-Tribromophenol	*624.8*	0	*1000*	0	*62.5*	*21-125*	0			
Surr: 2-Fluorobiphenyl	*607.4*	0	*1000*	0	*60.7*	*36-94*	0			
Surr: 2-Fluorophenol	*412*	0	*1000*	0	*41.2*	*10-75*	0			
Surr: 4-Terphenyl-d14	*1005*	0	*1000*	0	*101*	*26-119*	0			
Surr: Nitrobenzene-d5	*580*	0	*1000*	0	*58*	*41-104*	0			
Surr: Phenol-d6	*235*	0	*1000*	0	*23.5*	*11-50*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49307** Instrument ID **SVMS6** Method: **E625**

MSD Sample ID: **1306920-03C MSD** Units: **µg/L** Analysis Date: **6/27/2013 01:36 PM**

Client ID: Run ID: **SVMS4_130627A** SeqNo: **2364674** Prep Date: **6/26/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	330	100	400	0	82.5	30-110	293.8	11.6	30	
2,4,5-Trichlorophenol	259.2	100	400	0	64.8	50-110	235.2	9.71	30	
2,4,6-Trichlorophenol	282.2	100	400	0	70.6	50-115	251	11.7	30	
2,4-Dinitrotoluene	312.2	100	400	0	78	50-120	287.6	8.2	30	
Hexachloro-1,3-butadiene	281.8	100	400	0	70.4	25-105	249.6	12.1	30	
Hexachlorobenzene	333.2	100	400	0	83.3	50-110	313.6	6.06	30	
Hexachloroethane	322.4	100	400	0	80.6	30-95	284.2	12.6	30	
m-Cresol	250.4	100	400	0	62.6	30-110	212	16.6	30	
Nitrobenzene	312.2	100	400	0	78	45-110	276.2	12.2	30	
o-Cresol	273	100	400	0	68.2	40-110	237.6	13.9	30	
p-Cresol	250.4	100	400	0	62.6	30-110	212	16.6	30	
Pentachlorophenol	290.2	400	400	0	72.6	40-115	275.6	0	30	J
Pyridine	158.2	400	400	0	39.6	10-80	139.6	0	30	J
Surr: 2,4,6-Tribromophenol	*677.4*	0	*1000*	0	*67.7*	*21-125*	624.8	*8.08*	*0*	
Surr: 2-Fluorobiphenyl	*684.4*	0	*1000*	0	*68.4*	*36-94*	607.4	*11.9*	*0*	
Surr: 2-Fluorophenol	*496.2*	0	*1000*	0	*49.6*	*10-75*	412	*18.5*	*0*	
Surr: 4-Terphenyl-d14	*1032*	0	*1000*	0	*103*	*26-119*	1005	*2.63*	*0*	
Surr: Nitrobenzene-d5	*664.4*	0	*1000*	0	*66.4*	*41-104*	580	*13.6*	*0*	
Surr: Phenol-d6	*289*	0	*1000*	0	*28.9*	*11-50*	235	*20.6*	*0*	

The following samples were analyzed in this batch: 1306978-18A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49378** Instrument ID **SVMS6** Method: **SW8270**

MBLK Sample ID: **SBLKS1-49378-49378** Units: **µg/Kg** Analysis Date: **7/1/2013 11:06 AM**

Client ID: Run ID: **SVMS6_130701A** SeqNo: **2366221** Prep Date: **6/28/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Chloronaphthalene	ND	80								
2-Methylnaphthalene	ND	80								
Acenaphthene	ND	30								
Acenaphthylene	ND	30								
Anthracene	ND	30								
Benzo(a)anthracene	ND	30								
Benzo(a)pyrene	ND	30								
Benzo(b)fluoranthene	ND	30								
Benzo(g,h,i)perylene	ND	30								
Benzo(k)fluoranthene	ND	30								
Chrysene	ND	30								
Dibenzo(a,h)anthracene	ND	30								
Fluoranthene	ND	30								
Fluorene	ND	30								
Indeno(1,2,3-cd)pyrene	ND	30								
Naphthalene	ND	30								
Phenanthrene	ND	30								
Pyrene	ND	30								
Surr: 2-Fluorobiphenyl	*1215*	0	*1667*	0	*72.9*	*12-100*		0		
Surr: 4-Terphenyl-d14	*1856*	0	*1667*	0	*111*	*25-137*		0		
Surr: Nitrobenzene-d5	*1150*	0	*1667*	0	*69*	*37-107*		0		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49378** Instrument ID **SVMS6** Method: **SW8270**

LCS Sample ID: **SLCSS1-49378-49378** Units: **µg/Kg** Analysis Date: **7/1/2013 11:26 AM**

Client ID: Run ID: **SVMS6_130701A** SeqNo: **2366222** Prep Date: **6/28/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Chloronaphthalene	497.3	80	666.7	0	74.6	45-105	0			
2-Methylnaphthalene	518.3	80	666.7	0	77.7	45-105	0			
Acenaphthene	497.3	30	666.7	0	74.6	45-110	0			
Acenaphthylene	494	30	666.7	0	74.1	45-105	0			
Anthracene	552	30	666.7	0	82.8	55-105	0			
Benzo(a)anthracene	586	30	666.7	0	87.9	50-110	0			
Benzo(a)pyrene	631	30	666.7	0	94.6	50-110	0			
Benzo(b)fluoranthene	640	30	666.7	0	96	45-115	0			
Benzo(g,h,i)perylene	603.3	30	666.7	0	90.5	40-125	0			
Benzo(k)fluoranthene	625.3	30	666.7	0	93.8	45-115	0			
Chrysene	608.7	30	666.7	0	91.3	55-110	0			
Dibenzo(a,h)anthracene	675.3	30	666.7	0	101	40-125	0			
Fluoranthene	566.7	30	666.7	0	85	55-115	0			
Fluorene	509.3	30	666.7	0	76.4	50-110	0			
Indeno(1,2,3-cd)pyrene	657.7	30	666.7	0	98.6	40-120	0			
Naphthalene	485	30	666.7	0	72.7	40-105	0			
Phenanthrene	527.3	30	666.7	0	79.1	50-110	0			
Pyrene	614	30	666.7	0	92.1	45-125	0			
Surr: 2-Fluorobiphenyl	*1226*	0	*1667*	0	*73.6*	*12-100*	0			
Surr: 4-Terphenyl-d14	*1742*	0	*1667*	0	*104*	*25-137*	0			
Surr: Nitrobenzene-d5	*1243*	0	*1667*	0	*74.6*	*37-107*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49378** Instrument ID **SVMS6** Method: **SW8270**

MS Sample ID: **1306978-17B MS** Units: **µg/Kg** Analysis Date: **7/1/2013 12:43 PM**

Client ID: **SB-01 9-10'** Run ID: **SVMS6_130701A** SeqNo: **2366226** Prep Date: **6/28/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Chloronaphthalene	954.7	150	1271	0	75.1	45-105	0			
2-Methylnaphthalene	962.9	150	1271	0	75.7	45-105	0			
Acenaphthene	934.3	57	1271	0	73.5	45-110	0			
Acenaphthylene	937.5	57	1271	0	73.7	45-105	0			
Anthracene	1012	57	1271	0	79.6	55-105	0			
Benzo(a)anthracene	1100	57	1271	0	86.5	50-110	0			
Benzo(a)pyrene	1192	57	1271	0	93.7	50-110	0			
Benzo(b)fluoranthene	1232	57	1271	0	96.9	45-115	0			
Benzo(g,h,i)perylene	934.3	57	1271	0	73.5	40-125	0			
Benzo(k)fluoranthene	1222	57	1271	0	96.1	45-115	0			
Chrysene	1080	57	1271	0	84.9	55-110	0			
Dibenzo(a,h)anthracene	1085	57	1271	0	85.3	40-125	0			
Fluoranthene	982.6	57	1271	0	77.3	55-115	0			
Fluorene	962.3	57	1271	0	75.7	50-110	0			
Indeno(1,2,3-cd)pyrene	1064	57	1271	0	83.7	40-120	0			
Naphthalene	929.9	57	1271	0	73.1	40-105	0			
Phenanthrene	966.1	57	1271	0	76	50-110	0			
Pyrene	1229	57	1271	0	96.7	45-125	0			
Surr: 2-Fluorobiphenyl	*2361*	0	*3178*	0	*74.3*	*12-100*	0			
Surr: 4-Terphenyl-d14	*3536*	0	*3178*	0	*111*	*25-137*	0			
Surr: Nitrobenzene-d5	*2318*	0	*3178*	0	*72.9*	*37-107*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49378** Instrument ID **SVMS6** Method: **SW8270**

MSD Sample ID: **1306978-17B MSD** Units: **µg/Kg** Analysis Date: **7/1/2013 01:02 PM**

Client ID: **SB-01 9-10'** Run ID: **SVMS6_130701A** SeqNo: **2366227** Prep Date: **6/28/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Chloronaphthalene	957.6	160	1300	0	73.6	45-105	954.7	0.307	30	
2-Methylnaphthalene	975.8	160	1300	0	75	45-105	962.9	1.33	30	
Acenaphthene	948.5	59	1300	0	72.9	45-110	934.3	1.51	30	
Acenaphthylene	958.9	59	1300	0	73.7	45-105	937.5	2.26	30	
Anthracene	1032	59	1300	0	79.4	55-105	1012	2	30	
Benzo(a)anthracene	1155	59	1300	0	88.8	50-110	1100	4.82	30	
Benzo(a)pyrene	1235	59	1300	0	94.9	50-110	1192	3.53	30	
Benzo(b)fluoranthene	1268	59	1300	0	97.5	45-115	1232	2.87	30	
Benzo(g,h,i)perylene	1138	59	1300	0	87.5	40-125	934.3	19.7	30	
Benzo(k)fluoranthene	1207	59	1300	0	92.8	45-115	1222	1.24	30	
Chrysene	1157	59	1300	0	88.9	55-110	1080	6.85	30	
Dibenzo(a,h)anthracene	1249	59	1300	0	96	40-125	1085	14	30	
Fluoranthene	1088	59	1300	0	83.7	55-115	982.6	10.2	30	
Fluorene	985.6	59	1300	0	75.8	50-110	962.3	2.39	30	
Indeno(1,2,3-cd)pyrene	1241	59	1300	0	95.4	40-120	1064	15.4	30	
Naphthalene	929	59	1300	0	71.4	40-105	929.9	0.0952	30	
Phenanthrene	998.6	59	1300	0	76.8	50-110	966.1	3.3	30	
Pyrene	1207	59	1300	0	92.8	45-125	1229	1.81	30	
Surr: 2-Fluorobiphenyl	*2303*	0	*3251*	0	*70.9*	*12-100*	2361	*2.46*	*40*	
Surr: 4-Terphenyl-d14	*3492*	0	*3251*	0	*107*	*25-137*	3536	*1.24*	*40*	
Surr: Nitrobenzene-d5	*2350*	0	*3251*	0	*72.3*	*37-107*	2318	*1.37*	*40*	

The following samples were analyzed in this batch:

1306978-02B	1306978-10B	1306978-11B
1306978-12B	1306978-13B	1306978-14B
1306978-15B	1306978-16B	1306978-17B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49326** Instrument ID **VMS8** Method: **SW8260**

MBLK Sample ID: **MBLK-49326-49326** Units: **µg/Kg** Analysis Date: **6/26/2013 03:06 PM**

Client ID: Run ID: **VMS8_130626A** SeqNo: **2362678** Prep Date: **6/26/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	ND	30								
1,1,1-Trichloroethane	ND	30								
1,1,2,2-Tetrachloroethane	ND	30								
1,1,2-Trichloroethane	ND	30								
1,1,2-Trichlorotrifluoroethane	ND	30								
1,1-Dichloroethane	ND	30								
1,1-Dichloroethene	ND	30								
1,2,3-Trichloropropane	ND	30								
1,2,4-Trichlorobenzene	ND	30								
1,2,4-Trimethylbenzene	ND	30								
1,2-Dibromo-3-chloropropane	ND	30								
1,2-Dibromoethane	ND	30								
1,2-Dichlorobenzene	ND	30								
1,2-Dichloroethane	ND	30								
1,2-Dichloropropane	ND	30								
1,3,5-Trimethylbenzene	ND	30								
1,3-Dichlorobenzene	ND	30								
1,4-Dichlorobenzene	ND	30								
2-Butanone	ND	200								
2-Hexanone	ND	30								
2-Methylnaphthalene	ND	100								
4-Methyl-2-pentanone	ND	30								
Acetone	ND	100								
Acrylonitrile	ND	100								
Benzene	ND	30								
Bromochloromethane	ND	30								
Bromodichloromethane	ND	30								
Bromoform	ND	30								
Bromomethane	ND	75								
Carbon disulfide	ND	30								
Carbon tetrachloride	ND	30								
Chlorobenzene	ND	30								
Chloroethane	ND	100								
Chloroform	ND	30								
Chloromethane	71.5	100								J
cis-1,2-Dichloroethene	ND	30								
cis-1,3-Dichloropropene	ND	30								
Dibromochloromethane	ND	30								
Dibromomethane	ND	30								
Dichlorodifluoromethane	ND	30								
Diethyl ether	ND	30								
Ethylbenzene	ND	30								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **49326** Instrument ID **VMS8** Method: **SW8260**

Hexachloroethane	ND	30						
Isopropylbenzene	ND	30						
m,p-Xylene	ND	60						
Methyl iodide	ND	75						
Methyl tert-butyl ether	ND	30						
Methylene chloride	204	30						
Naphthalene	28	100						J
n-Propylbenzene	ND	30						
o-Xylene	ND	30						
Styrene	ND	30						
Tetrachloroethene	ND	30						
Toluene	ND	30						
trans-1,2-Dichloroethene	ND	30						
trans-1,3-Dichloropropene	ND	30						
trans-1,4-Dichloro-2-butene	ND	30						
Trichloroethene	ND	30						
Trichlorofluoromethane	ND	30						
Vinyl acetate	ND	30						
Vinyl chloride	ND	30						
Xylenes, Total	ND	90						
Surr: 1,2-Dichloroethane-d4	*1018*	0	*1000*	0	*102*	*70-130*	0	
Surr: 4-Bromofluorobenzene	*946*	0	*1000*	0	*94.6*	*70-130*	0	
Surr: Dibromofluoromethane	*996*	0	*1000*	0	*99.6*	*70-130*	0	
Surr: Toluene-d8	*958.5*	0	*1000*	0	*95.8*	*70-130*	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49326** Instrument ID **VMS8** Method: **SW8260**

MBLK Sample ID: **MBLK-49326-49326** Units: **µg/Kg** Analysis Date: **7/5/2013 12:41 PM**

Client ID: Run ID: **VMS5_130705A** SeqNo: **2370301** Prep Date: **6/26/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	ND	30								
1,1,1-Trichloroethane	ND	30								
1,1,2,2-Tetrachloroethane	ND	30								
1,1,2-Trichloroethane	ND	30								
1,1,2-Trichlorotrifluoroethane	ND	30								
1,1-Dichloroethane	ND	30								
1,1-Dichloroethene	ND	30								
1,2,3-Trichloropropane	ND	30								
1,2,4-Trichlorobenzene	ND	30								
1,2,4-Trimethylbenzene	ND	30								
1,2-Dibromo-3-chloropropane	ND	30								
1,2-Dibromoethane	ND	30								
1,2-Dichlorobenzene	ND	30								
1,2-Dichloroethane	ND	30								
1,2-Dichloropropane	ND	30								
1,3,5-Trimethylbenzene	ND	30								
1,3-Dichlorobenzene	ND	30								
1,4-Dichlorobenzene	ND	30								
2-Butanone	ND	200								
2-Hexanone	ND	30								
2-Methylnaphthalene	ND	100								
4-Methyl-2-pentanone	ND	30								
Acetone	ND	100								
Acrylonitrile	ND	100								
Benzene	ND	30								
Bromochloromethane	ND	30								
Bromodichloromethane	ND	30								
Bromoform	ND	30								
Bromomethane	ND	75								
Carbon disulfide	ND	30								
Carbon tetrachloride	ND	30								
Chlorobenzene	ND	30								
Chloroethane	ND	100								
Chloroform	ND	30								
Chloromethane	ND	100								
cis-1,2-Dichloroethene	ND	30								
cis-1,3-Dichloropropene	ND	30								
Dibromochloromethane	ND	30								
Dibromomethane	ND	30								
Dichlorodifluoromethane	ND	30								
Diethyl ether	ND	30								
Ethylbenzene	ND	30								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **49326** Instrument ID **VMS8** Method: **SW8260**

Hexachloroethane	ND	30					
Isopropylbenzene	ND	30					
m,p-Xylene	ND	60					
Methyl iodide	ND	75					
Methyl tert-butyl ether	ND	30					
Methylene chloride	ND	30					
Naphthalene	ND	100					
n-Propylbenzene	ND	30					
o-Xylene	ND	30					
Styrene	ND	30					
Tetrachloroethene	ND	30					
Toluene	ND	30					
trans-1,2-Dichloroethene	ND	30					
trans-1,3-Dichloropropene	ND	30					
trans-1,4-Dichloro-2-butene	ND	30					
Trichloroethene	ND	30					
Trichlorofluoromethane	ND	30					
Vinyl acetate	ND	30					
Vinyl chloride	ND	30					
Xylenes, Total	ND	90					
Surr: 1,2-Dichloroethane-d4	*997*	0	*1000*	0	*99.7*	*70-130*	0
Surr: 4-Bromofluorobenzene	*997*	0	*1000*	0	*99.7*	*70-130*	0
Surr: Dibromofluoromethane	*980*	0	*1000*	0	*98*	*70-130*	0
Surr: Toluene-d8	*994*	0	*1000*	0	*99.4*	*70-130*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49326** Instrument ID **VMS8** Method: **SW8260**

LCS Sample ID: **LCS1-49326-49326** Units: **µg/Kg** Analysis Date: **6/26/2013 01:54 PM**

Client ID: Run ID: **VMS8_130626A** SeqNo: **2362677** Prep Date: **6/26/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	934	30	1000	0	93.4	75-125	0			
1,1,1-Trichloroethane	957.5	30	1000	0	95.8	70-135	0			
1,1,2,2-Tetrachloroethane	1010	30	1000	0	101	55-130	0			
1,1,2-Trichloroethane	933.5	30	1000	0	93.4	60-125	0			
1,1-Dichloroethane	901.5	30	1000	0	90.2	75-125	0			
1,1-Dichloroethene	877	30	1000	0	87.7	65-135	0			
1,2,3-Trichloropropane	1022	30	1000	0	102	65-130	0			
1,2,4-Trichlorobenzene	1004	30	1000	0	100	65-130	0			
1,2,4-Trimethylbenzene	966.5	30	1000	0	96.6	65-135	0			
1,2-Dibromo-3-chloropropane	916.5	30	1000	0	91.6	40-135	0			
1,2-Dibromoethane	1087	30	1000	0	109	70-125	0			
1,2-Dichlorobenzene	1002	30	1000	0	100	75-120	0			
1,2-Dichloroethane	959.5	30	1000	0	96	70-135	0			
1,2-Dichloropropane	904	30	1000	0	90.4	70-120	0			
1,3,5-Trimethylbenzene	973.5	30	1000	0	97.4	65-135	0			
1,3-Dichlorobenzene	964	30	1000	0	96.4	70-125	0			
1,4-Dichlorobenzene	990.5	30	1000	0	99	70-125	0			
2-Butanone	1099	200	1000	0	110	30-160	0			
2-Hexanone	1006	30	1000	0	101	45-145	0			
4-Methyl-2-pentanone	1330	30	1000	0	133	45-145	0			
Acetone	1004	100	1000	0	100	20-160	0			
Acrylonitrile	927	100	1000	0	92.7	70-135	0			
Benzene	933	30	1000	0	93.3	75-125	0			
Bromochloromethane	971	30	1000	0	97.1	70-125	0			
Bromodichloromethane	922	30	1000	0	92.2	70-130	0			
Bromoform	918	30	1000	0	91.8	55-135	0			
Bromomethane	1460	75	1000	0	146	30-160	0			
Carbon disulfide	923	30	1000	0	92.3	45-160	0			
Carbon tetrachloride	946	30	1000	0	94.6	65-135	0			
Chlorobenzene	963	30	1000	0	96.3	75-125	0			
Chloroethane	1068	100	1000	0	107	40-155	0			
Chloroform	944	30	1000	0	94.4	70-125	0			
Chloromethane	928	100	1000	0	92.8	50-130	0			
cis-1,2-Dichloroethene	988.5	30	1000	0	98.8	65-125	0			
cis-1,3-Dichloropropene	1026	30	1000	0	103	70-125	0			
Dibromochloromethane	891	30	1000	0	89.1	65-135	0			
Dibromomethane	984.5	30	1000	0	98.4	75-130	0			
Dichlorodifluoromethane	778.5	30	1000	0	77.8	35-135	0			
Ethylbenzene	951	30	1000	0	95.1	75-125	0			
Hexachloroethane	837	30	1000	0	83.7	70-135	0			
Isopropylbenzene	954	30	1000	0	95.4	75-130	0			
m,p-Xylene	1900	60	2000	0	95	80-125	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **49326** Instrument ID **VMS8** Method: **SW8260**

Methyl tert-butyl ether	1066	30	1000	0	107	75-125	0
Methylene chloride	969	30	1000	0	96.9	55-145	0
Naphthalene	1042	100	1000	0	104	40-140	0
n-Propylbenzene	984.5	30	1000	0	98.4	65-135	0
o-Xylene	948	30	1000	0	94.8	75-125	0
Styrene	971.5	30	1000	0	97.2	75-125	0
Tetrachloroethene	913.5	30	1000	0	91.4	64-140	0
Toluene	924.5	30	1000	0	92.4	70-125	0
trans-1,2-Dichloroethene	947.5	30	1000	0	94.8	65-135	0
trans-1,3-Dichloropropene	976	30	1000	0	97.6	65-125	0
trans-1,4-Dichloro-2-butene	843.5	30	1000	0	84.4	70-135	0
Trichloroethene	979	30	1000	0	97.9	75-125	0
Trichlorofluoromethane	950	30	1000	0	95	25-185	0
Vinyl chloride	793	30	1000	0	79.3	60-125	0
Xylenes, Total	2848	90	3000	0	95	75-125	0
Surr: 1,2-Dichloroethane-d4	*991.5*	0	*1000*	0	*99.2*	*70-130*	0
Surr: 4-Bromofluorobenzene	*954*	0	*1000*	0	*95.4*	*70-130*	0
Surr: Dibromofluoromethane	*1032*	0	*1000*	0	*103*	*70-130*	0
Surr: Toluene-d8	*976*	0	*1000*	0	*97.6*	*70-130*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49326** Instrument ID **VMS8** Method: **SW8260**

MS Sample ID: **1306978-02A MS** Units: **µg/Kg** Analysis Date: **6/27/2013 05:54 AM**

Client ID: **SB-05 7-8'** Run ID: **VMS6_130626A** SeqNo: **2363327** Prep Date: **6/26/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	973	30	1000	0	97.3	75-125	0			
1,1,1-Trichloroethane	1076	30	1000	0	108	70-135	0			
1,1,2,2-Tetrachloroethane	890.5	30	1000	0	89	55-130	0			
1,1,2-Trichloroethane	914	30	1000	0	91.4	60-125	0			
1,1-Dichloroethane	1046	30	1000	0	105	75-125	0			
1,1-Dichloroethene	1048	30	1000	0	105	65-135	0			
1,2,3-Trichloropropane	900	30	1000	0	90	65-130	0			
1,2,4-Trichlorobenzene	891.5	30	1000	0	89.2	65-130	0			
1,2,4-Trimethylbenzene	979.5	30	1000	0	98	65-135	0			
1,2-Dibromo-3-chloropropane	718.5	30	1000	0	71.8	40-135	0			
1,2-Dibromoethane	1024	30	1000	0	102	70-125	0			
1,2-Dichlorobenzene	982	30	1000	0	98.2	75-120	0			
1,2-Dichloroethane	998	30	1000	0	99.8	70-135	0			
1,2-Dichloropropane	963	30	1000	0	96.3	70-120	0			
1,3,5-Trimethylbenzene	1008	30	1000	0	101	65-135	0			
1,3-Dichlorobenzene	973	30	1000	0	97.3	70-125	0			
1,4-Dichlorobenzene	952.5	30	1000	0	95.2	70-125	0			
2-Butanone	772	200	1000	0	77.2	30-160	0			
2-Hexanone	773	30	1000	0	77.3	45-145	0			
4-Methyl-2-pentanone	1110	30	1000	0	111	45-145	0			
Acetone	773	100	1000	0	77.3	20-160	0			
Acrylonitrile	833.5	100	1000	0	83.4	70-135	0			
Benzene	1042	30	1000	0	104	75-125	0			
Bromochloromethane	1018	30	1000	0	102	70-125	0			
Bromodichloromethane	879	30	1000	0	87.9	70-130	0			
Bromoform	788	30	1000	0	78.8	55-135	0			
Bromomethane	1033	75	1000	0	103	30-160	0			
Carbon disulfide	1246	30	1000	0	125	45-160	0			
Carbon tetrachloride	984	30	1000	0	98.4	65-135	0			
Chlorobenzene	1000	30	1000	0	100	75-125	0			
Chloroethane	964.5	100	1000	0	96.4	40-155	0			
Chloroform	996.5	30	1000	0	99.6	70-125	0			
Chloromethane	984	100	1000	0	98.4	50-130	0			
cis-1,2-Dichloroethene	970.5	30	1000	0	97	65-125	0			
cis-1,3-Dichloropropene	883	30	1000	0	88.3	70-125	0			
Dibromochloromethane	871	30	1000	0	87.1	65-135	0			
Dibromomethane	951.5	30	1000	0	95.2	75-130	0			
Dichlorodifluoromethane	965.5	30	1000	0	96.6	35-135	0			
Ethylbenzene	1040	30	1000	0	104	75-125	0			
Hexachloroethane	844	30	1000	0	84.4	70-135	0			
Isopropylbenzene	1054	30	1000	0	105	75-130	0			
m,p-Xylene	2071	60	2000	0	104	80-125	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **49326** Instrument ID **VMS8** Method: **SW8260**

Methyl tert-butyl ether	982	30	1000	0	98.2	75-125	0	
Methylene chloride	1022	30	1000	91	93.1	55-145	0	
Naphthalene	904	100	1000	0	90.4	40-140	0	
n-Propylbenzene	1014	30	1000	0	101	65-135	0	
o-Xylene	1032	30	1000	0	103	75-125	0	
Styrene	1040	30	1000	0	104	75-125	0	
Tetrachloroethene	1056	30	1000	0	106	64-140	0	
Toluene	1016	30	1000	0	102	70-125	0	
trans-1,2-Dichloroethene	1020	30	1000	0	102	65-135	0	
trans-1,3-Dichloropropene	921	30	1000	0	92.1	65-125	0	
trans-1,4-Dichloro-2-butene	619.5	30	1000	0	62	70-135	0	S
Trichloroethene	956	30	1000	0	95.6	75-125	0	
Trichlorofluoromethane	1010	30	1000	0	101	25-185	0	
Vinyl chloride	976	30	1000	0	97.6	60-125	0	
Xylenes, Total	3103	90	3000	0	103	75-125	0	
Surr: 1,2-Dichloroethane-d4	*978.5*	0	*1000*	0	*97.8*	*70-130*	0	
Surr: 4-Bromofluorobenzene	*999*	0	*1000*	0	*99.9*	*70-130*	0	
Surr: Dibromofluoromethane	*1012*	0	*1000*	0	*101*	*70-130*	0	
Surr: Toluene-d8	*1014*	0	*1000*	0	*101*	*70-130*	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49326** Instrument ID **VMS8** Method: **SW8260**

MSD Sample ID: **1306978-02A MSD** Units: **µg/Kg** Analysis Date: **6/27/2013 06:18 AM**

Client ID: **SB-05 7-8'** Run ID: **VMS6_130626A** SeqNo: **2363328** Prep Date: **6/26/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	920.5	30	1000	0	92	75-125	973	5.55	30	
1,1,1-Trichloroethane	1022	30	1000	0	102	70-135	1076	5.24	30	
1,1,2,2-Tetrachloroethane	887	30	1000	0	88.7	55-130	890.5	0.394	30	
1,1,2-Trichloroethane	876	30	1000	0	87.6	60-125	914	4.25	30	
1,1-Dichloroethane	992.5	30	1000	0	99.2	75-125	1046	5.2	30	
1,1-Dichloroethene	1006	30	1000	0	101	65-135	1048	4.14	30	
1,2,3-Trichloropropane	903	30	1000	0	90.3	65-130	900	0.333	30	
1,2,4-Trichlorobenzene	874.5	30	1000	0	87.4	65-130	891.5	1.93	30	
1,2,4-Trimethylbenzene	931.5	30	1000	0	93.2	65-135	979.5	5.02	30	
1,2-Dibromo-3-chloropropane	723	30	1000	0	72.3	40-135	718.5	0.624	30	
1,2-Dibromoethane	1002	30	1000	0	100	70-125	1024	2.17	30	
1,2-Dichlorobenzene	959.5	30	1000	0	96	75-120	982	2.32	30	
1,2-Dichloroethane	911.5	30	1000	0	91.2	70-135	998	9.06	30	
1,2-Dichloropropane	920.5	30	1000	0	92	70-120	963	4.51	30	
1,3,5-Trimethylbenzene	964.5	30	1000	0	96.4	65-135	1008	4.41	30	
1,3-Dichlorobenzene	946	30	1000	0	94.6	70-125	973	2.81	30	
1,4-Dichlorobenzene	931.5	30	1000	0	93.2	70-125	952.5	2.23	30	
2-Butanone	816.5	200	1000	0	81.6	30-160	772	5.6	30	
2-Hexanone	782	30	1000	0	78.2	45-145	773	1.16	30	
4-Methyl-2-pentanone	1110	30	1000	0	111	45-145	1110	0.045	30	
Acetone	846	100	1000	0	84.6	20-160	773	9.02	30	
Acrylonitrile	851	100	1000	0	85.1	70-135	833.5	2.08	30	
Benzene	982.5	30	1000	0	98.2	75-125	1042	5.93	30	
Bromochloromethane	1004	30	1000	0	100	70-125	1018	1.33	30	
Bromodichloromethane	829.5	30	1000	0	83	70-130	879	5.79	30	
Bromoform	762.5	30	1000	0	76.2	55-135	788	3.29	30	
Bromomethane	785.5	75	1000	0	78.6	30-160	1033	27.2	30	
Carbon disulfide	1168	30	1000	0	117	45-160	1246	6.46	30	
Carbon tetrachloride	918.5	30	1000	0	91.8	65-135	984	6.89	30	
Chlorobenzene	950	30	1000	0	95	75-125	1000	5.18	30	
Chloroethane	948.5	100	1000	0	94.8	40-155	964.5	1.67	30	
Chloroform	961	30	1000	0	96.1	70-125	996.5	3.63	30	
Chloromethane	974	100	1000	0	97.4	50-130	984	1.02	30	
cis-1,2-Dichloroethene	956.5	30	1000	0	95.6	65-125	970.5	1.45	30	
cis-1,3-Dichloropropene	828	30	1000	0	82.8	70-125	883	6.43	30	
Dibromochloromethane	832.5	30	1000	0	83.2	65-135	871	4.52	30	
Dibromomethane	935	30	1000	0	93.5	75-130	951.5	1.75	30	
Dichlorodifluoromethane	940.5	30	1000	0	94	35-135	965.5	2.62	30	
Ethylbenzene	984	30	1000	0	98.4	75-125	1040	5.58	30	
Hexachloroethane	804.5	30	1000	0	80.4	70-135	844	4.79	30	
Isopropylbenzene	991.5	30	1000	0	99.2	75-130	1054	6.06	30	
m,p-Xylene	1963	60	2000	0	98.2	80-125	2071	5.35	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **49326** Instrument ID **VMS8** Method: **SW8260**

Methyl tert-butyl ether	986	30	1000	0	98.6	75-125	982	0.407	30	
Methylene chloride	1013	30	1000	91	92.2	55-145	1022	0.885	30	
Naphthalene	916.5	100	1000	0	91.6	40-140	904	1.37	30	
n-Propylbenzene	973	30	1000	0	97.3	65-135	1014	4.18	30	
o-Xylene	978	30	1000	0	97.8	75-125	1032	5.37	30	
Styrene	977	30	1000	0	97.7	75-125	1040	6.2	30	
Tetrachloroethene	1006	30	1000	0	101	64-140	1056	4.9	30	
Toluene	972	30	1000	0	97.2	70-125	1016	4.43	30	
trans-1,2-Dichloroethene	978.5	30	1000	0	97.8	65-135	1020	4.15	30	
trans-1,3-Dichloropropene	880	30	1000	0	88	65-125	921	4.55	30	
trans-1,4-Dichloro-2-butene	568.5	30	1000	0	56.8	70-135	619.5	8.59	30	S
Trichloroethene	880	30	1000	0	88	75-125	956	8.28	30	
Trichlorofluoromethane	967	30	1000	0	96.7	25-185	1010	4.3	30	
Vinyl chloride	943.5	30	1000	0	94.4	60-125	976	3.39	30	
Xylenes, Total	2941	90	3000	0	98	75-125	3103	5.36	30	
Surr: 1,2-Dichloroethane-d4	*988.5*	0	*1000*	0	*98.8*	*70-130*	978.5	*1.02*	*30*	
Surr: 4-Bromofluorobenzene	*978*	0	*1000*	0	*97.8*	*70-130*	999	*2.12*	*30*	
Surr: Dibromofluoromethane	*976*	0	*1000*	0	*97.6*	*70-130*	1012	*3.62*	*30*	
Surr: Toluene-d8	*994*	0	*1000*	0	*99.4*	*70-130*	1014	*2.04*	*30*	

The following samples were analyzed in this batch:

1306978-01A	1306978-02A	1306978-03A
1306978-04A	1306978-05A	1306978-06A
1306978-07A	1306978-08A	1306978-09A
1306978-10A	1306978-11A	1306978-12A
1306978-13A	1306978-14A	1306978-15A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49337** Instrument ID **VMS6** Method: **SW8260**

MBLK Sample ID: **MBLK-49337-49337** Units: **µg/Kg** Analysis Date: **6/26/2013 11:44 PM**

Client ID: Run ID: **VMS6_130626A** SeqNo: **2363315** Prep Date: **6/26/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	ND	30								
1,1,1-Trichloroethane	ND	30								
1,1,2,2-Tetrachloroethane	ND	30								
1,1,2-Trichloroethane	ND	30								
1,1,2-Trichlorotrifluoroethane	ND	30								
1,1-Dichloroethane	ND	30								
1,1-Dichloroethene	ND	30								
1,2,3-Trichloropropane	ND	30								
1,2,4-Trichlorobenzene	ND	30								
1,2,4-Trimethylbenzene	ND	30								
1,2-Dibromo-3-chloropropane	ND	30								
1,2-Dibromoethane	ND	30								
1,2-Dichlorobenzene	ND	30								
1,2-Dichloroethane	ND	30								
1,2-Dichloropropane	ND	30								
1,3,5-Trimethylbenzene	ND	30								
1,3-Dichlorobenzene	ND	30								
1,4-Dichlorobenzene	ND	30								
2-Butanone	ND	200								
2-Hexanone	ND	30								
2-Methylnaphthalene	ND	100								
4-Methyl-2-pentanone	ND	30								
Acetone	ND	100								
Acrylonitrile	ND	100								
Benzene	ND	30								
Bromochloromethane	ND	30								
Bromodichloromethane	ND	30								
Bromoform	ND	30								
Bromomethane	ND	75								
Carbon disulfide	ND	30								
Carbon tetrachloride	ND	30								
Chlorobenzene	ND	30								
Chloroethane	ND	100								
Chloroform	ND	30								
Chloromethane	132	100								
cis-1,2-Dichloroethene	ND	30								
cis-1,3-Dichloropropene	ND	30								
Dibromochloromethane	ND	30								
Dibromomethane	ND	30								
Dichlorodifluoromethane	ND	30								
Diethyl ether	ND	30								
Ethylbenzene	ND	30								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **49337** Instrument ID **VMS6** Method: **SW8260**

Hexachloroethane	ND	30					
Isopropylbenzene	ND	30					
m,p-Xylene	ND	60					
Methyl iodide	ND	75					
Methyl tert-butyl ether	ND	30					
Methylene chloride	ND	30					
Naphthalene	ND	100					
n-Propylbenzene	ND	30					
o-Xylene	ND	30					
Styrene	ND	30					
Tetrachloroethene	ND	30					
Toluene	ND	30					
trans-1,2-Dichloroethene	ND	30					
trans-1,3-Dichloropropene	ND	30					
trans-1,4-Dichloro-2-butene	ND	30					
Trichloroethene	ND	30					
Trichlorofluoromethane	ND	30					
Vinyl acetate	ND	30					
Vinyl chloride	ND	30					
Xylenes, Total	ND	90					
Surr: 1,2-Dichloroethane-d4	*1028*	0	*1000*	0	*103*	*70-130*	0
Surr: 4-Bromofluorobenzene	*986*	0	*1000*	0	*98.6*	*70-130*	0
Surr: Dibromofluoromethane	*966.5*	0	*1000*	0	*96.6*	*70-130*	0
Surr: Toluene-d8	*1006*	0	*1000*	0	*101*	*70-130*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49337** Instrument ID **VMS6** Method: **SW8260**

LCS Sample ID: **LCS1-49337-49337** Units: **µg/Kg** Analysis Date: **6/26/2013 10:29 PM**

Client ID: Run ID: **VMS6_130626A** SeqNo: **2363314** Prep Date: **6/26/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	999.5	30	1000	0	100	75-125	0			
1,1,1-Trichloroethane	1076	30	1000	0	108	70-135	0			
1,1,2,2-Tetrachloroethane	941.5	30	1000	0	94.2	55-130	0			
1,1,2-Trichloroethane	931.5	30	1000	0	93.2	60-125	0			
1,1-Dichloroethane	1077	30	1000	0	108	75-125	0			
1,1-Dichloroethene	1104	30	1000	0	110	65-135	0			
1,2,3-Trichloropropane	943	30	1000	0	94.3	65-130	0			
1,2,4-Trichlorobenzene	882.5	30	1000	0	88.2	65-130	0			
1,2,4-Trimethylbenzene	987	30	1000	0	98.7	65-135	0			
1,2-Dibromo-3-chloropropane	776.5	30	1000	0	77.6	40-135	0			
1,2-Dibromoethane	1050	30	1000	0	105	70-125	0			
1,2-Dichlorobenzene	973.5	30	1000	0	97.4	75-120	0			
1,2-Dichloroethane	964	30	1000	0	96.4	70-135	0			
1,2-Dichloropropane	995.5	30	1000	0	99.6	70-120	0			
1,3,5-Trimethylbenzene	1024	30	1000	0	102	65-135	0			
1,3-Dichlorobenzene	980	30	1000	0	98	70-125	0			
1,4-Dichlorobenzene	961	30	1000	0	96.1	70-125	0			
2-Butanone	856	200	1000	0	85.6	30-160	0			
2-Hexanone	864	30	1000	0	86.4	45-145	0			
4-Methyl-2-pentanone	1198	30	1000	0	120	45-145	0			
Acetone	904.5	100	1000	0	90.4	20-160	0			
Acrylonitrile	864	100	1000	0	86.4	70-135	0			
Benzene	1044	30	1000	0	104	75-125	0			
Bromochloromethane	1052	30	1000	0	105	70-125	0			
Bromodichloromethane	900.5	30	1000	0	90	70-130	0			
Bromoform	824.5	30	1000	0	82.4	55-135	0			
Bromomethane	1135	75	1000	0	114	30-160	0			
Carbon disulfide	1266	30	1000	0	127	45-160	0			
Carbon tetrachloride	1015	30	1000	0	102	65-135	0			
Chlorobenzene	987.5	30	1000	0	98.8	75-125	0			
Chloroethane	997	100	1000	0	99.7	40-155	0			
Chloroform	1040	30	1000	0	104	70-125	0			
Chloromethane	999.5	100	1000	0	100	50-130	0			B
cis-1,2-Dichloroethene	1019	30	1000	0	102	65-125	0			
cis-1,3-Dichloropropene	926	30	1000	0	92.6	70-125	0			
Dibromochloromethane	898	30	1000	0	89.8	65-135	0			
Dibromomethane	994	30	1000	0	99.4	75-130	0			
Dichlorodifluoromethane	1040	30	1000	0	104	35-135	0			
Ethylbenzene	1026	30	1000	0	103	75-125	0			
Hexachloroethane	856.5	30	1000	0	85.6	70-135	0			
Isopropylbenzene	1042	30	1000	0	104	75-130	0			
m,p-Xylene	2043	60	2000	0	102	80-125	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **49337** Instrument ID **VMS6** Method: **SW8260**

Methyl tert-butyl ether	1030	30	1000	0	103	75-125	0
Methylene chloride	979.5	30	1000	0	98	55-145	0
Naphthalene	944.5	100	1000	0	94.4	40-140	0
n-Propylbenzene	1036	30	1000	0	104	65-135	0
o-Xylene	1022	30	1000	0	102	75-125	0
Styrene	1019	30	1000	0	102	75-125	0
Tetrachloroethene	1064	30	1000	0	106	64-140	0
Toluene	998	30	1000	0	99.8	70-125	0
trans-1,2-Dichloroethene	1052	30	1000	0	105	65-135	0
trans-1,3-Dichloropropene	966.5	30	1000	0	96.6	65-125	0
trans-1,4-Dichloro-2-butene	717.5	30	1000	0	71.8	70-135	0
Trichloroethene	952	30	1000	0	95.2	75-125	0
Trichlorofluoromethane	1048	30	1000	0	105	25-185	0
Vinyl chloride	987.5	30	1000	0	98.8	60-125	0
Xylenes, Total	3066	90	3000	0	102	75-125	0
Surr: 1,2-Dichloroethane-d4	*997*	0	*1000*	0	*99.7*	*70-130*	0
Surr: 4-Bromofluorobenzene	*986*	0	*1000*	0	*98.6*	*70-130*	0
Surr: Dibromofluoromethane	*1004*	0	*1000*	0	*100*	*70-130*	0
Surr: Toluene-d8	*988*	0	*1000*	0	*98.8*	*70-130*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49337** Instrument ID **VMS6** Method: **SW8260**

MS Sample ID: **1306978-17A MS** Units: **µg/Kg** Analysis Date: **6/27/2013 06:43 AM**

Client ID: **SB-01 9-10'** Run ID: **VMS6_130626A** SeqNo: **2363329** Prep Date: **6/26/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	1043	32	1081	0	96.5	75-125	0			
1,1,1-Trichloroethane	1142	32	1081	0	106	70-135	0			
1,1,2,2-Tetrachloroethane	937.8	32	1081	0	86.8	55-130	0			
1,1,2-Trichloroethane	951.9	32	1081	0	88	60-125	0			
1,1-Dichloroethane	1079	32	1081	0	99.8	75-125	0			
1,1-Dichloroethene	1095	32	1081	0	101	65-135	0			
1,2,3-Trichloropropane	983.2	32	1081	0	91	65-130	0			
1,2,4-Trichlorobenzene	913.5	32	1081	0	84.5	65-130	0			
1,2,4-Trimethylbenzene	1022	32	1081	0	94.6	65-135	0			
1,2-Dibromo-3-chloropropane	778.4	32	1081	0	72	40-135	0			
1,2-Dibromoethane	1085	32	1081	0	100	70-125	0			
1,2-Dichlorobenzene	1025	32	1081	0	94.8	75-120	0			
1,2-Dichloroethane	1050	32	1081	0	97.1	70-135	0			
1,2-Dichloropropane	1049	32	1081	0	97	70-120	0			
1,3,5-Trimethylbenzene	1060	32	1081	0	98	65-135	0			
1,3-Dichlorobenzene	1012	32	1081	0	93.6	70-125	0			
1,4-Dichlorobenzene	1013	32	1081	0	93.7	70-125	0			
2-Butanone	894.1	220	1081	0	82.7	30-160	0			
2-Hexanone	895.7	32	1081	0	82.8	45-145	0			
4-Methyl-2-pentanone	1217	32	1081	0	113	45-145	0			
Acetone	1006	110	1081	0	93.1	20-160	0			
Acrylonitrile	928.1	110	1081	0	85.8	70-135	0			
Benzene	1119	32	1081	0	104	75-125	0			
Bromochloromethane	1036	32	1081	0	95.8	70-125	0			
Bromodichloromethane	937.3	32	1081	0	86.7	70-130	0			
Bromoform	799.5	32	1081	0	74	55-135	0			
Bromomethane	835.7	81	1081	0	77.3	30-160	0			
Carbon disulfide	1311	32	1081	0	121	45-160	0			
Carbon tetrachloride	1012	32	1081	0	93.6	65-135	0			
Chlorobenzene	1061	32	1081	0	98.1	75-125	0			
Chloroethane	1021	110	1081	0	94.4	40-155	0			
Chloroform	1035	32	1081	0	95.8	70-125	0			
Chloromethane	1025	110	1081	0	94.8	50-130	0			B
cis-1,2-Dichloroethene	995.7	32	1081	0	92.1	65-125	0			
cis-1,3-Dichloropropene	944.9	32	1081	0	87.4	70-125	0			
Dibromochloromethane	913	32	1081	0	84.4	65-135	0			
Dibromomethane	1037	32	1081	0	96	75-130	0			
Dichlorodifluoromethane	987.6	32	1081	0	91.4	35-135	0			
Ethylbenzene	1096	32	1081	0	101	75-125	0			
Hexachloroethane	877.8	32	1081	0	81.2	70-135	0			
Isopropylbenzene	1084	32	1081	0	100	75-130	0			
m,p-Xylene	2164	65	2162	0	100	80-125	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **49337** Instrument ID **VMS6** Method: **SW8260**

Methyl tert-butyl ether	1030	32	1081	0	95.2	75-125	0	
Methylene chloride	987	32	1081	0	91.3	55-145	0	
Naphthalene	949.7	110	1081	0	87.8	40-140	0	
n-Propylbenzene	1062	32	1081	0	98.2	65-135	0	
o-Xylene	1080	32	1081	0	99.9	75-125	0	
Styrene	1079	32	1081	0	99.8	75-125	0	
Tetrachloroethene	1105	32	1081	0	102	64-140	0	
Toluene	1070	32	1081	0	99	70-125	0	
trans-1,2-Dichloroethene	1033	32	1081	0	95.6	65-135	0	
trans-1,3-Dichloropropene	965.4	32	1081	0	89.3	65-125	0	
trans-1,4-Dichloro-2-butene	599.5	32	1081	0	55.4	70-135	0	S
Trichloroethene	1021	32	1081	0	94.4	75-125	0	
Trichlorofluoromethane	1023	32	1081	0	94.6	25-185	0	
Vinyl chloride	997.3	32	1081	0	92.2	60-125	0	
Xylenes, Total	3244	97	3243	0	100	75-125	0	
Surr: 1,2-Dichloroethane-d4	*1056*	0	*1081*	0	*97.6*	*70-130*	0	
Surr: 4-Bromofluorobenzene	*1057*	0	*1081*	0	*97.8*	*70-130*	0	
Surr: Dibromofluoromethane	*1057*	0	*1081*	0	*97.8*	*70-130*	0	
Surr: Toluene-d8	*1070*	0	*1081*	0	*99*	*70-130*	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49337** Instrument ID **VMS6** Method: **SW8260**

MSD Sample ID: **1306978-17A MSD** Units: **µg/Kg** Analysis Date: **6/27/2013 07:08 AM**

Client ID: **SB-01 9-10'** Run ID: **VMS6_130626A** SeqNo: **2363330** Prep Date: **6/26/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	1037	32	1081	0	95.9	75-125	1043	0.624	30	
1,1,1-Trichloroethane	1098	32	1081	0	102	70-135	1142	3.91	30	
1,1,2,2-Tetrachloroethane	943.2	32	1081	0	87.2	55-130	937.8	0.575	30	
1,1,2-Trichloroethane	953	32	1081	0	88.2	60-125	951.9	0.114	30	
1,1-Dichloroethane	1046	32	1081	0	96.8	75-125	1079	3.05	30	
1,1-Dichloroethene	1067	32	1081	0	98.7	65-135	1095	2.6	30	
1,2,3-Trichloropropane	953	32	1081	0	88.2	65-130	983.2	3.13	30	
1,2,4-Trichlorobenzene	1018	32	1081	0	94.2	65-130	913.5	10.8	30	
1,2,4-Trimethylbenzene	1036	32	1081	0	95.8	65-135	1022	1.31	30	
1,2-Dibromo-3-chloropropane	783.2	32	1081	0	72.4	40-135	778.4	0.623	30	
1,2-Dibromoethane	1101	32	1081	0	102	70-125	1085	1.38	30	
1,2-Dichlorobenzene	1055	32	1081	0	97.6	75-120	1025	2.86	30	
1,2-Dichloroethane	1012	32	1081	0	93.6	70-135	1050	3.67	30	
1,2-Dichloropropane	1012	32	1081	0	93.6	70-120	1049	3.57	30	
1,3,5-Trimethylbenzene	1070	32	1081	0	99	65-135	1060	0.914	30	
1,3-Dichlorobenzene	1039	32	1081	0	96.2	70-125	1012	2.69	30	
1,4-Dichlorobenzene	1028	32	1081	0	95	70-125	1013	1.43	30	
2-Butanone	970.3	220	1081	0	89.8	30-160	894.1	8.18	30	
2-Hexanone	868.1	32	1081	0	80.3	45-145	895.7	3.13	30	
4-Methyl-2-pentanone	1210	32	1081	0	112	45-145	1217	0.624	30	
Acetone	1013	110	1081	0	93.7	20-160	1006	0.642	30	
Acrylonitrile	863.8	110	1081	0	79.9	70-135	928.1	7.18	30	
Benzene	1086	32	1081	0	100	75-125	1119	3.04	30	
Bromochloromethane	1064	32	1081	0	98.4	70-125	1036	2.68	30	
Bromodichloromethane	912.4	32	1081	0	84.4	70-130	937.3	2.69	30	
Bromoform	813	32	1081	0	75.2	55-135	799.5	1.68	30	
Bromomethane	970.3	81	1081	0	89.8	30-160	835.7	14.9	30	
Carbon disulfide	1237	32	1081	0	114	45-160	1311	5.81	30	
Carbon tetrachloride	982.2	32	1081	0	90.8	65-135	1012	2.98	30	
Chlorobenzene	1035	32	1081	0	95.8	75-125	1061	2.42	30	
Chloroethane	996.2	110	1081	0	92.2	40-155	1021	2.47	30	
Chloroform	1014	32	1081	0	93.8	70-125	1035	2.06	30	
Chloromethane	1001	110	1081	0	92.6	50-130	1025	2.35	30	B
cis-1,2-Dichloroethene	1003	32	1081	0	92.8	65-125	995.7	0.757	30	
cis-1,3-Dichloropropene	920.5	32	1081	0	85.2	70-125	944.9	2.61	30	
Dibromochloromethane	913.5	32	1081	0	84.5	65-135	913	0.0592	30	
Dibromomethane	1048	32	1081	0	97	75-130	1037	1.04	30	
Dichlorodifluoromethane	925.4	32	1081	0	85.6	35-135	987.6	6.5	30	
Ethylbenzene	1074	32	1081	0	99.3	75-125	1096	2.04	30	
Hexachloroethane	938.9	32	1081	0	86.8	70-135	877.8	6.72	30	
Isopropylbenzene	1094	32	1081	0	101	75-130	1084	0.844	30	
m,p-Xylene	2123	65	2162	0	98.2	80-125	2164	1.89	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49337** Instrument ID **VMS6** Method: **SW8260**

Methyl tert-butyl ether	1029	32	1081	0	95.2	75-125	1030	0.105	30	
Methylene chloride	1002	32	1081	0	92.7	55-145	987	1.52	30	
Naphthalene	1011	110	1081	0	93.5	40-140	949.7	6.23	30	
n-Propylbenzene	1072	32	1081	0	99.2	65-135	1062	0.912	30	
o-Xylene	1061	32	1081	0	98.1	75-125	1080	1.82	30	
Styrene	1071	32	1081	0	99.1	75-125	1079	0.754	30	
Tetrachloroethene	1077	32	1081	0	99.6	64-140	1105	2.58	30	
Toluene	1052	32	1081	0	97.4	70-125	1070	1.63	30	
trans-1,2-Dichloroethene	1016	32	1081	0	94	65-135	1033	1.64	30	
trans-1,3-Dichloropropene	966.5	32	1081	0	89.4	65-125	965.4	0.112	30	
trans-1,4-Dichloro-2-butene	599.5	32	1081	0	55.4	70-135	599.5	0	30	S
Trichloroethene	936.8	32	1081	0	86.6	75-125	1021	8.56	30	
Trichlorofluoromethane	984.9	32	1081	0	91.1	25-185	1023	3.82	30	
Vinyl chloride	936.8	32	1081	0	86.6	60-125	997.3	6.26	30	
Xylenes, Total	3184	97	3243	0	98.2	75-125	3244	1.87	30	
Surr: 1,2-Dichloroethane-d4	*1058*	0	*1081*	0	*97.8*	*70-130*	1056	*0.205*	*30*	
Surr: 4-Bromofluorobenzene	*1076*	0	*1081*	0	*99.5*	*70-130*	1057	*1.77*	*30*	
Surr: Dibromofluoromethane	*1068*	0	*1081*	0	*98.8*	*70-130*	1057	*1.07*	*30*	
Surr: Toluene-d8	*1085*	0	*1081*	0	*100*	*70-130*	1070	*1.4*	*30*	

The following samples were analyzed in this batch: 1306978-16A 1306978-17A 1306978-19A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **R122875A** Instrument ID **VMS5** Method: **SW8260**

MBLK Sample ID: **VBLKW1-130627-R122875A** Units: **µg/L** Analysis Date: **6/27/2013 12:33 PM**

Client ID: Run ID: **VMS5_130627A** SeqNo: **2364437** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	ND	1.0								
1,2-Dichloroethane	ND	1.0								
2-Butanone	ND	5.0								
Benzene	ND	1.0								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroform	ND	1.0								
Tetrachloroethene	ND	2.0								
Trichloroethene	ND	1.0								
Vinyl chloride	ND	1.0								
Surr: 1,2-Dichloroethane-d4	*19.5*	0	*20*	0	*97.5*	*70-120*	0			
Surr: 4-Bromofluorobenzene	*21.17*	0	*20*	0	*106*	*75-120*	0			
Surr: Dibromofluoromethane	*19.5*	0	*20*	0	*97.5*	*85-115*	0			
Surr: Toluene-d8	*21.39*	0	*20*	0	*107*	*85-120*	0			

LCS Sample ID: **VLCSW1-130627-R122875A** Units: **µg/L** Analysis Date: **6/27/2013 11:22 AM**

Client ID: Run ID: **VMS5_130627A** SeqNo: **2364435** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	22.86	1.0	20	0	114	70-130	0			
1,2-Dichloroethane	19.33	1.0	20	0	96.6	70-130	0			
2-Butanone	23.69	5.0	20	0	118	30-150	0			
Benzene	20.26	1.0	20	0	101	80-120	0			
Carbon tetrachloride	18.16	1.0	20	0	90.8	65-140	0			
Chlorobenzene	17.51	1.0	20	0	87.6	80-120	0			
Chloroform	19.51	1.0	20	0	97.6	65-135	0			
Tetrachloroethene	16.5	2.0	20	0	82.5	45-150	0			
Trichloroethene	18.5	1.0	20	0	92.5	70-125	0			
Vinyl chloride	25.07	1.0	20	0	125	50-145	0			
Surr: 1,2-Dichloroethane-d4	*17.92*	0	*20*	0	*89.6*	*70-120*	0			
Surr: 4-Bromofluorobenzene	*21.06*	0	*20*	0	*105*	*75-120*	0			
Surr: Dibromofluoromethane	*18.98*	0	*20*	0	*94.9*	*85-115*	0			
Surr: Toluene-d8	*20.19*	0	*20*	0	*101*	*85-120*	0			

The following samples were analyzed in this batch: 1306978-18A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **49361** Instrument ID **LACHAT** Method: **SW9012A**

MBLK Sample ID: **MBLK-49361-49361** Units: **mg/Kg** Analysis Date: **6/27/2013 12:56 PM**
Client ID: Run ID: **LACHAT_130627B** SeqNo: **2363245** Prep Date: **6/27/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Total	ND	0.50								

LCS Sample ID: **LCS-49361-49361** Units: **mg/Kg** Analysis Date: **6/27/2013 12:56 PM**
Client ID: Run ID: **LACHAT_130627B** SeqNo: **2363246** Prep Date: **6/27/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Total	2.409	0.50	2.5	0	96.4	85-119	0			

MS Sample ID: **1306978-05B MS** Units: **mg/Kg** Analysis Date: **6/27/2013 12:56 PM**
Client ID: **SB-07 1-2'** Run ID: **LACHAT_130627B** SeqNo: **2363248** Prep Date: **6/27/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Total	2.595	0.50	2.52	0.09904	99	70-130	0			

MSD Sample ID: **1306978-05B MSD** Units: **mg/Kg** Analysis Date: **6/27/2013 12:56 PM**
Client ID: **SB-07 1-2'** Run ID: **LACHAT_130627B** SeqNo: **2363249** Prep Date: **6/27/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Total	2.642	0.50	2.5	0.09904	102	70-130	2.595	1.8	30	

The following samples were analyzed in this batch: 1306978-05B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **R122880** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS-R122880** Units: **% of sample** Analysis Date: **6/26/2013 12:30 PM**
Client ID: Run ID: **MOIST_130626A** SeqNo: **2362984** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	ND	0.050								

LCS Sample ID: **LCS-R122880** Units: **% of sample** Analysis Date: **6/26/2013 12:30 PM**
Client ID: Run ID: **MOIST_130626A** SeqNo: **2362980** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.050	100	0	100	99.5-100.5	0			

DUP Sample ID: **1306851-08A DUP** Units: **% of sample** Analysis Date: **6/26/2013 12:30 PM**
Client ID: Run ID: **MOIST_130626A** SeqNo: **2362960** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	22.81	0.050	0	0	0	0-0	21.87	4.21	20	

DUP Sample ID: **1306978-04B DUP** Units: **% of sample** Analysis Date: **6/26/2013 12:30 PM**
Client ID: **SB-08 6.8-7.5'** Run ID: **MOIST_130626A** SeqNo: **2362969** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	3.3	0.050	0	0	0	0-0	3.58	8.14	20	

The following samples were analyzed in this batch:

1306978-01B	1306978-02B	1306978-03B
1306978-04B	1306978-05B	1306978-06B
1306978-07B	1306978-08B	1306978-09B
1306978-10B	1306978-11B	1306978-12B
1306978-13B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AKT Peerless Environmental Services
Work Order: 1306978
Project: Garland Street - 8100B

QC BATCH REPORT

Batch ID: **R122881** Instrument ID **MOIST** Method: **A2540 G**

MBLK Sample ID: **WBLKS-R122881** Units: **% of sample** Analysis Date: **6/26/2013 11:40 AM**
Client ID: Run ID: **MOIST_130626B** SeqNo: **2363013** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	ND	0.050								

LCS Sample ID: **LCS-R122881** Units: **% of sample** Analysis Date: **6/26/2013 11:40 AM**
Client ID: Run ID: **MOIST_130626B** SeqNo: **2363009** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.050	100	0	100	99.5-100.5	0			

DUP Sample ID: **1306977-07A DUP** Units: **% of sample** Analysis Date: **6/26/2013 11:40 AM**
Client ID: Run ID: **MOIST_130626B** SeqNo: **2362993** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	7.32	0.050	0	0	0	0-0	7.2	1.65	20	

DUP Sample ID: **1306978-14B DUP** Units: **% of sample** Analysis Date: **6/26/2013 11:40 AM**
Client ID: **SB-02 8-9'** Run ID: **MOIST_130626B** SeqNo: **2363004** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	3.48	0.050	0	0	0	0-0	3.38	2.92	20	

The following samples were analyzed in this batch:

1306978-14B	1306978-15B	1306978-16B
1306978-17B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Chain of Custody Form

ALS Environmental

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COC ID: 00963

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ALS Project Manager: | Work Order #: 1306978

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Garland Street	A	PNAs
Work Order		Project Number	8100B	B	VOCs
Company Name	AKT PEERLESS	Bill To Company		C	MI 10 Metals
Send Report To	Doug Kilmer	Invoice Attn.		D	8270 Phenols.
Address		Address		E	SW912A Cyanide
				F	TCLP - FULL
City/State/Zip		City/State/Zip		G	
Phone		Phone		H	
Fax		Fax		I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	SB-05 1'-2'	6/20/13	11:24AM	S	MeOH	2	Y	Y	Y								
2	SB-05 7-8'	6/20/13	12:05PM	S	MeOH	2	Y	Y	Y								
3	SB-08 1-2'	6/20/13	2:10PM	S	MeOH	2	Y	Y	Y								
4	SB-08 6.5-7.5'	6/20/13	2:20PM	S	MeOH	2	Y	Y	Y								
5	SB-07 1-2'	6/20/13	3:55PM	S	MeOH	2	Y	Y	Y	X	X						
6	SB-07 9-10'	6/20/13	4:20PM	S	MeOH	2	Y	Y	Y								
7	SB-06 1-2'	6/21/13	9:27AM	S	MeOH	2	Y	Y	Y								
8	SB-06 8-9'	6/21/13	10:00AM	S	MeOH	2	Y	Y	X								
9	SB-04 1-2'	6/21/13	12:20PM	S	MeOH	2	Y	Y	X								
10	SB-04 8-9'	6/21/13	12:32PM	S	MeOH	2	Y	Y	Y								

Sampler(s): Please Print & Sign: Teresa Ducsay Teresa Ducsay

Shipment Method:

Required Turnaround Time: ☐ STD 10 Wk Days ☐ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☐ Other _____

Results Due Date:

Relinquished by:	Date:	Time:	Received by:
Teresa Ducsay	6/21/13	16:45	Joel Voogt
Joel Voogt	6/21/13	16 55	Received by (Laboratory):
Logged by (Laboratory): DCS	Date: 6/24/13	Time: 14:00	Checked by (Laboratory): 6/25/13 KLS
DCS	6/28/13	1200	

Notes:

Cooler Temp.: 4.2°C

QC Package: (Check Box Below)
- ☐ Level II: Standard QC
- ☐ Level III: Std QC + Raw Data
- ☐ Level IV: SW846 CLP-Like
- ☐ Other: _____

Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.

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Chain of Custody Form

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COC ID: 00962

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ALS Project Manager: Work Order #: 1306928

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Garland Street	A	PNAs
Work Order		Project Number	81008	B	VOCs
Company Name	AKT PEERLESS	Bill To Company		C	MI 10 metals
Send Report To	Doug Kilmer	Invoice Attn.		D	8270 Phenols
Address		Address		E	SW912A Cyanide
				F	TCLP
City/State/Zip		City/State/Zip		G	
Phone		Phone		H	
Fax		Fax		I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	SB-03 1-2'	6/21/13	2:40PM	S	MeOH	2	x	x	x								
2	SB-03 7-8'	6/21/13	2:47PM	S	MeOH	2	x	x	x								
3	SB-02 1-2'	6/21/13	3:30PM	S	MeOH	2	x	x	x								
4	SB-02 8-9'	6/21/13	3:42PM	S	MeOH	2	x	x	x								
5	SB-02 Dup-1	6/21/13		S	MeOH	2	x	x	x								
6	SB-01 1-2'	6/21/13	4:22PM	S	MeOH	2	x	x	x								
7	SB-01 9-10'	6/21/13	4:34PM	S	MeOH	2	x	x	x								
8	SB-01 1-8'	6/21/13	4:42PM	S		2						x					
9																	
10																	

Sampler(s): Please Print & Sign: TERESA DUCSAY Teresa Ducsay

Shipment Method:

Required Turnaround Time: ☐ Other _____ ☐ STD 10 Wk Days ☐ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour

Results Due Date:

Relinquished by:	Date:	Time:	Received by:
Teresa Ducsay	6/21/13	16:45	Joel Hoogt
Joel Hoogt	6/21/13	1655	Received by (Laboratory):
Logged by (Laboratory): DES	6/24/13	14:00	Checked by (Laboratory): 6/25/13 1015
	6/28/13	1200	

Notes:

Cooler Temp. 4.2°C

QC Package: (Check Box Below)
- ☐ Level II: Standard QC
- ☐ Level III: Std QC + Raw Data
- ☐ Level IV: SW846 CLP-Like
- ☐ Other: _____

Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.

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ALS Environmental
3352 128th Avenue
Holland, Michigan 49424
Tel. +1 616 399 6070
Fax. +1 616 399 6185

CUSTODY SEAL

Date: 6/24/13 Time: 14:30
Name: [illegible]
Company: ALS

Seal Broken By:
Date:

From: (231) 421-3204
Gary Byar
ALS Environmental
781 Industrial Circle
Unit #3
Traverse City, MI 49686

Origin ID: TVCA

FedEx Express

J13111302120326

Ship Date: 24JUN13
ActWgt: 28.6 LB
CAD: 2264840/INET3370

Dims: 14 X 26 X 15 IN

Delivery Address Bar Code

Ref # ALS - TC
Invoice #
PO #
Dept #

SHIP TO: (616) 399-6070 BILL SENDER

SAMPLE RECEIVING
ALS Laboratory Group
3352 128th Avenue

HOLLAND, MI 49424

1 of 3

TUE - 25 JUN 3:00P
STANDARD OVERNIGHT

TRK# 7960 7940 1279
0201

MASTER

68 GRRA

49424
MI-US
GRR

ALS Environmental
3352 128th Avenue
Holland, Michigan 49424
Tel. +1 616 399 6070
Fax. +1 616 399 6185

CUSTODY SEAL
Date: 6/24/17 Time: 14:30
Name:
Company: ALS

Seal Broken By:
Date:

From: (231) 421-3204
Gary Byar
ALS Environmental
781 Industrial Circle
Unit #3
Traverse City, MI 49686

Origin ID: TVCA

FedEx Express

J13111302120326

Ship Date: 24JUN13
ActWgt: 39.0 LB
CAD: 2264840/INET3370

Dims: 15 X 26 X 19 IN

Delivery Address Bar Code

Ref # ALS - TC
Invoice #
PO #
Dept #

SHIP TO: (616) 399-6070
SAMPLE RECEIVING
ALS Laboratory Group
3352 128th Avenue

HOLLAND, MI 49424

BILL SENDER

2 of 3

MPS# 7960 7940 1430
0263
Mstr# 7960 7940 1279
0201

TUE - 25 JUN 3:00P
STANDARD OVERNIGHT

49424
MI-US
GRR

68 GRRA

518G1/D777/93AB

RT 828 5
ST 21

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **AKT PEERLESS - LANSING** Date/Time Received: **25-Jun-13 10:15**

Work Order: **1306978** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 25-Jun-13 (Date) Reviewed by: Joseph Ribar (eSignature) 25-Jun-13 (Date)

Matrices: Soil
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	4.2 c		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	6/25/2013 12:06:39 PM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:	-		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

APPENDIX C

Part 201 Generic Cleanup Criteria and Screening Levels

Attachment 1
TABLE 1. GROUNDWATER: RESIDENTIAL AND NONRESIDENTIAL PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS; PART 213 TIER 1 RISK-BASED SCREENING LEVELS (RBSLs)
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Acenaphthene	83329	1,300	3,800	38	4,200 (S)	4,200 (S)	4,200 (S)	4,240	ID	ID
Acenaphthylene	208968	52	150	ID	3,900 (S)	3,900 (S)	3,900 (S)	3,930	ID	ID
Acetaldehyde (I)	75070	950	2,700	130	1.1E+6	2.3E+6	4.2E+7	1.0E+9	8.9E+6	2.6E+7
Acetate	71501	4,200	12,000	(G)	ID	ID	ID	ID	ID	ID
Acetic acid	64197	4,200	12,000	(G)	NLV	NLV	1.8E+8	6.0E+9	1.0E+9 (D)	1.0E+9 (D)
Acetone (I)	67641	730	2,100	1,700	1.0E+9 (D,S)	1.0E+9 (D,S)	3.1E+7	1.0E+9	1.5E+7	1.0E+9 (D)
Acetonitrile	75058	140	400	NA	2.4E+7	4.5E+7	5.6E+6	2.00E+8	2.1E+7	2.0E+8
Acetophenone	98862	1,500	4,400	ID	6.1E+6 (S)	6.1E+6 (S)	6.1E+6 (S)	6.1E+6	ID	ID
Acrolein (I)	107028	120	330	NA	2,100	4,200	3.4E+6	2.10E+8	6.7E+6	3.4E+5
Acrylamide	79061	0.5 (A)	0.5 (A)	10 (X)	NLV	NLV	13,000	2.20E+9	NA	ID
Acrylic acid	79107	3,900	11,000	NA	1.2E+7	2.8E+7	7.6E+7	1.0E+9	1.0E+9 (D)	ID
Acrylonitrile (I)	107131	2.6	11	2.0 (M); 1.2	34,000	1.9E+5	14,000	7.50E+7	6.4E+6	ID
Alachlor	15972608	2.0 (A)	2.0 (A)	11 (X)	NLV	NLV	1,700	1.83E+5	ID	ID
Aldicarb	116063	3.0 (A)	3.0 (A)	NA	NLV	NLV	1.2E+5	6.00E+6	ID	ID
Aldicarb sulfone	1646884	2.0 (A)	2.0 (A)	NA	NLV	NLV	2.1E+6	7.80E+6	ID	ID
Aldicarb sulfoxide	1646873	4.0 (A)	4.0 (A)	NA	NLV	NLV	2.7E+6	2.80E+7	ID	ID
Aldrin	309002	0.098	0.4	0.01 (M); 8.7E-6	180 (S)	180 (S)	0.34 (AA)	180	ID	ID
Aluminum (B)	7429905	50 (V)	50 (V)	NA	NLV	NLV	6.4E+7	NA	ID	ID
Ammonia	7664417	10,000 (N)	10,000 (N)	(CC)	3.2E+6	7.1E+6	ID	5.30E+8	ID	3.5E+6
t-Amyl methyl ether (TAME)	994058	190 (E)	190 (E)	NA	2.6E+5	5.7E+5	2.6E+6 (S)	2.64E+6	NA	NA
Aniline	62533	53	220	4.0	NLV	NLV	1.4E+5	3.60E+7	NA	ID

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Anthracene	120127	43 (S)	43 (S)	ID	43 (S)	43 (S)	43 (S)	43.4	ID	ID
Antimony	7440360	6.0 (A)	6.0 (A)	130 (X)	NLV	NLV	68,000	NA	ID	ID
Arsenic	7440382	10 (A)	10 (A)	10	NLV	NLV	4,300	NA	ID	ID
Asbestos (BB)	1332214	7.0E+6 f/ml (A)	7.0E+6 f/ml (A)	NA	NLV	NLV	ID	NA	NA	ID
Atrazine	1912249	3.0 (A)	3.0 (A)	7.3	NLV	NLV	5,400	70,000	ID	ID
Azobenzene	103333	23	94	ID	6,400 (S)	6,400 (S)	1,600	6,400	ID	ID
Barium (B)	7440393	2,000 (A)	2,000 (A)	(G)	NLV	NLV	1.4E+7	NA	ID	ID
Benzene (I)	71432	5.0 (A)	5.0 (A)	200 (X)	5,600	35,000	11,000	1.75E+6	68,000	67,000
Benzidine	92875	0.3 (M); 0.0037	0.3 (M); 0.015	0.3 (M); 0.073	NLV	NLV	7.1	5.20E+5	ID	ID
Benzo(a)anthracene (Q)	56553	2.1	8.5	ID	NLV	NLV	9.4 (S,AA)	9.4	ID	ID
Benzo(b)fluoranthene (Q)	205992	1.5 (S,AA)	1.5 (S,AA)	ID	ID	ID	1.5 (S,AA)	1.5	ID	ID
Benzo(k)fluoranthene (Q)	207089	1.0 (M); 0.8 (S)	1.0 (M); 0.8 (S)	NA	NLV	NLV	1.0 (M,AA); 0.8 (S)	0.8	ID	ID
Benzo(g,h,i)perylene	191242	1.0 (M); 0.26 (S)	1.0 (M); 0.26 (S)	ID	NLV	NLV	1.0 (M,AA); 0.26 (S)	0.26	ID	ID
Benzo(a)pyrene (Q)	50328	5.0 (A)	5.0 (A)	ID	NLV	NLV	1.0 (M,AA); 0.64	1.62	ID	ID
Benzoic acid	65850	32,000	92,000	NA	NLV	NLV	3.5E+6 (S)	3.50E+6	ID	ID
Benzyl alcohol	100516	10,000	29,000	NA	NLV	NLV	4.4E+7 (S)	4.40E+7	ID	ID
Benzyl chloride	100447	7.7	32	NA	12,000	77,000	3,600	4.90E+5	NA	ID
Beryllium	7440417	4.0 (A)	4.0 (A)	(G)	NLV	NLV	2.9E+5	NA	ID	ID
bis(2-Chloroethoxy)ethane	112265	ID	ID	ID	NLV	NLV	ID	1.89E+7	ID	ID
bis(2-Chloroethyl)ether (I)	111444	2.0	8.3	1.0 (M); 0.79	38,000	2.1E+5	5,700	1.72E+7	1.7E+7 (S)	1.7E+7 (S)
bis(2-Ethylhexyl)phthalate	117817	6.0 (A)	6.0 (A)	25	NLV	NLV	320 (AA)	340	NA	340 (S)

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Boron (B)	7440428	500 (F)	500 (F)	7,200 (X)	NLV	NLV	6.2E+7	NA	ID	ID
Bromate	15541454	10 (A)	10 (A)	40 (X)	NLV	NLV	4,800	38,000	ID	ID
Bromobenzene (I)	108861	18	50	NA	1.8E+5	3.9E+5	12,000	4.13E+5	ID	ID
Bromodichloromethane	75274	80 (A,W)	80 (A,W)	ID	4,800	37,000	14,000	6.74E+6	ID	ID
Bromoform	75252	80 (A,W)	80 (A,W)	ID	4.7E+5	3.1E+6 (S)	1.4E+5	3.10E+6	ID	ID
Bromomethane	74839	10	29	35	4,000	9,000	70,000	1.45E+7	ID	ID
n-Butanol (I)	71363	950	2,700	9,800 (X)	NLV	NLV	8.8E+6	7.40E+7	4.7E+7	7.4E+7 (S)
2-Butanone (MEK) (I)	78933	13,000	38,000	2,200	2.4E+8 (S)	2.4E+8 (S)	2.4E+8 (S)	2.40E+8	ID	2.4E+8 (S)
n-Butyl acetate	123864	550	1,600	NA	6.7E+6 (S)	6.7E+6 (S)	1.8E+6	6.70E+6	2.5E+6	6.7E+6 (S)
t-Butyl alcohol	75650	3,900	11,000	NA	1.0E+9 (D,S)	1.0E+9 (D,S)	7.9E+7	1.0E+9	6.1E+7	ID
Butyl benzyl phthalate	85687	1,200	2,700 (S)	67 (X)	NLV	NLV	2,700 (S)	2,690	ID	ID
n-Butylbenzene	104518	80	230	ID	ID	ID	5,900	NA	ID	ID
sec-Butylbenzene	135988	80	230	ID	ID	ID	4,400	NA	ID	ID
t-Butylbenzene (I)	98066	80	230	ID	ID	ID	8,900	NA	ID	ID
Cadmium (B)	7440439	5.0 (A)	5.0 (A)	(G,X)	NLV	NLV	1.9E+5	NA	ID	ID
Camphene (I)	79925	ID	ID	NA	440	1,000	ID	33,400	ID	ID
Caprolactam	105602	5,800	17,000	NA	NLV	NLV	3.9E+8	5.25E+9	NA	1.0E+9 (D)
Carbaryl	63252	700	2,000	NA	ID	ID	1.3E+5 (S)	1.26E+5	ID	ID
Carbazole	86748	85	350	10 (M); 4.0	NLV	NLV	7,400	7,480	ID	ID
Carbofuran	1563662	40 (A)	40 (A)	NA	NLV	NLV	3.4E+5	7.00E+5	ID	ID
Carbon disulfide (I,R)	75150	800	2,300	ID	2.5E+5	5.5E+5	1.2E+6 (S)	1.19E+6	13,000	ID

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Carbon tetrachloride	56235	5.0 (A)	5.0 (A)	45 (X)	370	2,400	4,600	7.93E+5	ID	96,000
Chlordane (J)	57749	2.0 (A)	2.0 (A)	2.0 (M); 0.00025	56 (S)	56 (S)	15 (AA)	56	ID	ID
Chloride	16887006	2.5E+5 (E)	2.5E+5 (E)	(FF)	NLV	NLV	ID	NA	ID	ID
Chlorobenzene (I)	108907	100 (A)	100 (A)	25	2.1E+5	4.7E+5 (S)	86,000	4.72E+5	1.6E+5	ID
p-Chlorobenzene sulfonic acid	98668	7,300	21,000	ID	ID	ID	ID	NA	ID	ID
1-Chloro-1,1-difluoroethane	75683	15,000	44,000	NA	3.9E+6 (S)	3.9E+6 (S)	3.9E+6 (S)	3.9E+06	NA	ID
Chloroethane	75003	430	1,700	1,100 (X)	5.7E+6 (S)	5.7E+6 (S)	4.4E+5	5.74E+6	1.1E+5	ID
2-Chloroethyl vinyl ether	110758	ID	ID	NA	ID	ID	ID	1.50E+7	ID	ID
Chloroform	67663	80 (A,W)	80 (A,W)	350	28,000	1.8E+5	1.5E+5	7.92E+6	ID	ID
Chloromethane (I)	74873	260	1,100	ID	8,600	45,000	4.9E+5	6.34E+6	36,000	2.1E+5
4-Chloro-3-methylphenol	59507	150	420	7.4	NLV	NLV	79,000	3.90E+6	ID	ID
beta-Chloronaphthalene	91587	1,800	5,200	NA	ID	ID	6,700 (S)	6,740	ID	ID
2-Chlorophenol	95578	45	130	18	4.9E+5	1.1E+6	94,000	2.20E+7	ID	ID
o-Chlorotoluene (I)	95498	150	420	ID	2.2E+5	3.7E+5 (S)	44,000	3.73E+5	ID	ID
Chlorpyrifos	2921882	22	63	2.0 (M); 0.002	2.9	6.6	1,100 (S)	1,120	ID	ID
Chromium (III) (B,H)	16065831	100 (A)	100 (A)	(G,X)	NLV	NLV	2.9E+8	NA	ID	ID
Chromium (VI)	18540299	100 (A)	100 (A)	11	NLV	NLV	4.6E+5	NA	ID	ID
Chrysene (Q)	218019	1.6 (S)	1.6 (S)	ID	ID	ID	1.6 (S,AA)	1.6	ID	ID
Cobalt	7440484	40	100	100	NLV	NLV	2.4E+6	NA	ID	ID
Copper (B)	7440508	1,000 (E)	1,000 (E)	(G)	NLV	NLV	7.4E+6	NA	ID	ID
Cyanazine	21725462	2.3	9.4	56 (X)	NLV	NLV	2,800	1.70E+5	ID	ID

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Cyanide (P,R)	57125	200 (A)	200 (A)	5.2	NLV	NLV	57,000	NA	ID	ID
Cyclohexanone	108941	33,000	94,000	NA	1,500	3,300	2.3E+7 (S)	2.30E+7	NA	ID
Dacthal	1861321	73	210	NA	NLV	NLV	500 (S)	500	ID	ID
Dalapon	75990	200 (A)	200 (A)	NA	NLV	NLV	1.2E+7	5.02E+8	ID	ID
4-4'-DDD	72548	9.1	37	NA	NLV	NLV	44 (AA)	90	ID	ID
4-4'-DDE	72559	4.3	15	NA	NLV	NLV	27 (AA)	120	ID	ID
4-4'-DDT	50293	3.6	10	0.02 (M); 1.1E-5	NLV	NLV	13 (AA)	25	NA	ID
Decabromodiphenyl ether	1163195	30 (S)	30 (S)	NA	30 (S)	30 (S)	30 (S)	30	ID	ID
Di-n-butyl phthalate	84742	880	2,500	9.7	NLV	NLV	11,000 (S)	11,200	NA	ID
Di(2-ethylhexyl) adipate	103231	400 (A)	400 (A)	ID	NLV	NLV	470 (S)	471	ID	ID
Di-n-octyl phthalate	117840	130	380	ID	NLV	NLV	400	3,000	ID	ID
Diacetone alcohol (I)	123422	ID	ID	NA	NLV	NLV	ID	1.0E+9	1.0E+9 (S)	ID
Diazinon	333415	1.3	3.8	1.0 (M); 0.004	NLV	NLV	1,300	68,800	NA	ID
Dibenzo(a,h)anthracene (Q)	53703	2.0 (M); 0.21	2.0 (M); 0.85	ID	NLV	NLV	2.0 (M,AA); 0.31	2.49	ID	ID
Dibenzofuran	132649	ID	ID	4.0	10,000 (S)	10,000 (S)	ID	10,000	ID	ID
Dibromochloromethane	124481	80 (A,W)	80 (A,W)	ID	14,000	1.1E+5	18,000	2.60E+6	ID	ID
Dibromochloropropane	96128	0.2 (A)	0.2 (A)	ID	220	1,200 (S)	390	1,230	NA	ID
Dibromomethane	74953	80	230	NA	ID	ID	5.3E+5	1.10E+7	ID	ID
Dicamba	1918009	220	630	NA	NLV	NLV	5.9E+5	4.5E+6	ID	ID
1,2-Dichlorobenzene	95501	600 (A)	600 (A)	13	1.6E+5 (S)	1.6E+5 (S)	1.6E+5 (S)	1.56E+5	NA	1.6E+5 (S)
1,3-Dichlorobenzene	541731	6.6	19	28	18,000	41,000	2,000	1.11E+5	ID	ID

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1,4-Dichlorobenzene	106467	75 (A)	75 (A)	17	16,000	74,000 (S)	6,400	73,800	NA	ID
3,3'-Dichlorobenzidine	91941	1.1	4.3	0.3 (M); 0.2	NLV	NLV	180	3,110	ID	ID
Dichlorodifluoromethane	75718	1,700	4,800	ID	2.2E+5	3.0E+5 (S)	3.0E+5 (S)	3.00E+5	ID	ID
1,1-Dichloroethane	75343	880	2,500	740	1.0E+6	2.3E+6	2.4E+6	5.06E+6	3.8E+5	ID
1,2-Dichloroethane (I)	107062	5.0 (A)	5.0 (A)	360 (X)	9,600	59,000	19,000	8.52E+6	2.5E+6	ID
1,1-Dichloroethylene (I)	75354	7.0 (A)	7.0 (A)	130	200	1,300	11,000	2.25E+6	97,000	1.4E+5
cis-1,2-Dichloroethylene	156592	70 (A)	70 (A)	620	93,000	2.1E+5	2.0E+5	3.50E+6	5.3E+5	ID
trans-1,2-Dichloroethylene	156605	100 (A)	100 (A)	1,500 (X)	85,000	2.0E+5	2.2E+5	6.30E+6	2.3E+5	ID
2,6-Dichloro-4-nitroaniline	99309	2,200	6,300	NA	NLV	NLV	7,000 (S)	7,000	ID	ID
2,4-Dichlorophenol	120832	73	210	11	NLV	NLV	48,000	4.50E+6	ID	ID
2,4-Dichlorophenoxyacetic acid	94757	70 (A)	70 (A)	220	NLV	NLV	1.2E+5	6.80E+5	ID	ID
1,2-Dichloropropane (I)	78875	5.0 (A)	5.0 (A)	230 (X)	16,000	36,000	16,000	2.80E+6	5.5E+5	2.8E+6 (S)
1,3-Dichloropropene	542756	8.5	35	9.0 (X)	3,900	26,000	5,500	2.80E+6	1.3E+5	ID
Dichlorovos	62737	1.6	6.7	NA	NLV	NLV	5,900	1.60E+7	NA	ID
Dicyclohexyl phthalate	84617	ID	ID	NA	ID	ID	ID	4,000	ID	ID
Dieldrin	60571	0.11	0.43	0.02 (M); 6.5E-6	200 (S)	200 (S)	2.4 (AA)	195	ID	ID
Diethyl ether	60297	10 (E)	10 (E)	ID	6.1E+7 (S)	6.1E+7 (S)	3.5E+7	6.10E+7	6.5E+5	6.1E+7 (S)
Diethyl phthalate	84662	5,500	16,000	110	NLV	NLV	1.1E+6 (S)	1.08E+6	NA	ID
Diethylene glycol monobutyl ether	112345	88	250	NA	NLV	NLV	4.0E+6	1.0E+9	ID	ID
Diisopropyl ether	108203	30	86	ID	8,000 (S)	8,000 (S)	8,000 (S)	8,041	8,000 (S)	ID
Diisopropylamine (I)	108189	5.6	16	NA	2.1E+7	3.7E+7 (S)	21,000	3.69E+7	4.6E+6	ID

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Dimethyl phthalate	131113	73,000	2.1E+5	NA	NLV	NLV	4.2E+6 (S)	4.19E+6	NA	ID
N,N-Dimethylacetamide	127195	180	520	4,100 (X)	NLV	NLV	2.3E+7	1.0E+9	NA	ID
N,N-Dimethylaniline	121697	16	46	NA	2.4E+5	1.3E+6 (S)	20,000	1.27E+6	NA	1.3E+6 (S)
Dimethylformamide (I)	68122	700	2,000	NA	NLV	NLV	1.1E+8	1.0E+9	ID	ID
2,4-Dimethylphenol	105679	370	1,000	380	NLV	NLV	5.2E+5	7.87E+6	ID	ID
2,6-Dimethylphenol	576261	4.4	13	NA	NLV	NLV	6,300	6.14E+6	ID	ID
3,4-Dimethylphenol	95658	10	29	25	NLV	NLV	18,000	4.93E+6	ID	ID
Dimethylsulfoxide	67685	2.2E+5	6.3E+5	1.9E+5	NLV	NLV	1.7E+8 (S)	1.66E+8	ID	ID
2,4-Dinitrotoluene	121142	7.7	32	NA	NLV	NLV	8,600	2.70E+5	ID	ID
Dinoseb	88857	7.0 (A)	7.0 (A)	1.0 (M); 0.48	NLV	NLV	7,000	52,000	ID	ID
1,4-Dioxane (I)	123911	85	350	2,800 (X)	NLV	NLV	1.7E+6	9.00E+8	1.4E+8	ID
Diquat	85007	20 (A)	20 (A)	20 (M); 6.0	NLV	NLV	7.0E+5 (S)	7.00E+5	ID	ID
Dissolved oxygen (DO)	NA	ID	ID	(EE)	ID	ID	ID	NA	NA	NA
Diuron	330541	31	90	NA	NLV	NLV	37,000 (S)	37,300	ID	ID
Endosulfan (J)	115297	44	130	0.03 (M); 0.029	ID	ID	510 (S)	510	ID	ID
Endothall	145733	100 (A)	100 (A)	NA	NLV	NLV	2.5E+7 (AA)	1.00E+8	ID	ID
Endrin	72208	2.0 (A)	2.0 (A)	ID	NLV	NLV	160 (AA)	250	ID	ID
Epichlorohydrin (I)	106898	5.0 (M); 2.0 (A)	5.0 (M); 2.0 (A)	NA	3.2E+5	6.3E+5	11,000	6.60E+7	4.7E+7	ID
Ethanol (I)	64175	1.9E+6	3.8E+6	ID	NLV	NLV	1.0E+9 (D,S)	1.0E+9	9.7E+7	ID
Ethyl acetate (I)	141786	6,600	19,000	NA	6.4E+7 (S)	6.4E+7 (S)	6.4E+7 (S)	6.40E+7	4.2E+6	ID
Ethyl-tert-butyl ether (ETBE)	637923	49 (E)	49 (E)	ID	2.9E+6	5.6E+6 (S)	ID	5.63E+6	ID	ID

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Ethylbenzene (I)	100414	74 (E)	74 (E)	18	1.1E+5	1.7E+5 (S)	1.7E+5 (S)	1.69E+5	43,000	1.7E+5 (S)
Ethylene dibromide	106934	0.05 (A)	0.05 (A)	5.7 (X)	2,400	15,000	25	4.20E+6	ID	ID
Ethylene glycol	107211	15,000	42,000	1.9E+5 (X)	NLV	NLV	1.0E+9 (D,S)	1.0E+9	NA	1.0E+9 (D,S)
Ethylene glycol monobutyl ether	111762	3,700	10,000	NA	2.9E+6	6.5E+6	5.3E+7	2.24E+8	NA	ID
Fluoranthene	206440	210 (S)	210 (S)	1.6	210 (S)	210 (S)	210 (S)	206	ID	ID
Fluorene	86737	880	2,000 (S)	12	2,000 (S)	2,000 (S)	2,000 (S)	1,980	ID	ID
Fluorine (soluble fluoride) (B)	7782414	2,000 (E)	2,000 (E)	ID	NLV	NLV	1.2E+7	NA	ID	ID
Formaldehyde	50000	1,300	3,800	120	63,000	3.6E+5	3.0E+7	5.50E+8	ID	61,000
Formic acid (I,U)	64186	10,000	29,000	ID	7.7E+6	1.5E+7	6.0E+8	1.0E+9	1.0E+9 (D)	3.5E+8
1-Formylpiperidine	2591868	80	230	NA	ID	ID	ID	NA	ID	ID
Gentian violet	548629	15	63	NA	NLV	NLV	1.0E+6 (S)	1.00E+6	ID	ID
Glyphosate	1071836	700 (A)	700 (A)	NA	NLV	NLV	1.2E+7 (S,AA)	1.16E+7	ID	ID
Heptachlor	76448	0.4 (A)	0.4 (A)	0.01 (M); 0.0018	180 (S)	180 (S)	2.9 (AA)	180	ID	ID
Heptachlor epoxide	1024573	0.2 (A)	0.2 (A)	ID	NLV	NLV	9.0 (AA)	200	ID	ID
n-Heptane	142825	2,700 (S)	2,700 (S)	NA	2,700 (S)	2,700 (S)	2,700 (S)	2,690	200	2,700 (S)
Hexabromobenzene	87821	0.17 (S); 20	0.17 (S); 58	ID	ID	ID	0.17 (S); 1,500	0.17	ID	ID
Hexachlorobenzene (C-66)	118741	1.0 (A)	1.0 (A)	0.2 (M); 0.0003	440	3,000	4.6	6,200	ID	ID
Hexachlorobutadiene (C-46)	87683	15	42	0.053	1,600	3,200 (S)	400	3,230	ID	ID
alpha-Hexachlorocyclohexane	319846	0.43	1.7	ID	2,000 (S)	2,000 (S)	60	2,000	ID	ID
beta-Hexachlorocyclohexane	319857	0.88	3.6	ID	NLV	NLV	120	240	ID	ID
Hexachlorocyclopentadiene (C-56)	77474	50 (A)	50 (A)	ID	130	420	1,600	1,800	ID	ID

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Hexachloroethane	67721	7.3	21	6.7 (X)	27,000	50,000 (S)	1,900	50,000	ID	ID
n-Hexane	110543	3,000	8,600	NA	12,000 (S)	12,000 (S)	12,000 (S)	12,000	12,000 (S)	ID
2-Hexanone	591786	1,000	2,900	ID	4.2E+6	8.7E+6	5.2E+6	1.60E+7	NA	ID
Indeno(1,2,3-cd)pyrene (Q)	193395	2.0 (M); 0.022 (S)	2.0 (M); 0.022 (S)	ID	NLV	NLV	2.0 (M,AA); 0.022 (S)	0.022	ID	ID
Iron (B)	7439896	300 (E)	300 (E)	NA	NLV	NLV	5.8E+7	NA	ID	ID
Isobutyl alcohol (I)	78831	2,300	6,700	NA	7.6E+7 (S)	7.6E+7 (S)	2.5E+7	7.60E+7	ID	ID
Isophorone	78591	770	3,100	1,300 (X)	NLV	NLV	9.9E+5	1.20E+7	ID	1.2E+7 (S)
Isopropyl alcohol (I)	67630	470	1,300	57,000 (X)	NLV	NLV	1.3E+7	1.0E+9	6.0E+7	1.0E+9 (D,S)
Isopropyl benzene	98828	800	2,300	28	56,000 (S)	56,000 (S)	56,000 (S)	56,000	29,000	ID
Lead (B)	7439921	4.0 (L)	4.0 (L)	(G,X)	NLV	NLV	ID	NA	ID	ID
Lindane	58899	0.2 (A)	0.2 (A)	0.03 (M); 0.026	ID	ID	190	6,800	ID	ID
Lithium (B)	7439932	170	350	440	NLV	NLV	5.4E+6	NA	ID	ID
Magnesium (B)	7439954	4.0E+5	1.1E+6	NA	NLV	NLV	1.0E+9 (D)	NA	ID	ID
Manganese (B)	7439965	50 (E)	50 (E)	(G,X)	NLV	NLV	9.1E+6	NA	ID	ID
Mercury (Total) (B,Z)	Varies	2.0 (A)	2.0 (A)	0.0013	56 (S)	56 (S)	56 (S)	56	ID	ID
Methane	74828	ID	ID	NA	(K)	(K)	ID	NA	520	ID
Methanol	67561	3,700	10,000	5.9E+5 (X)	2.9E+7 (S)	2.9E+7 (S)	2.9E+7 (S)	2.90E+7	4.5E+6	2.9E+7 (S)
Methoxychlor	72435	40 (A)	40 (A)	NA	ID	ID	45 (S)	45	ID	ID
2-Methoxyethanol (I)	109864	7.3	21	NA	NLV	NLV	8.3E+5	1.0E+9	ID	ID
2-Methyl-4-chlorophenoxyacetic acid	94746	7.3	21	NA	NLV	NLV	9,200	9.24E+5	ID	ID
2-Methyl-4,6-dinitrophenol	534521	20 (M); 2.6	20 (M); 7.3	NA	NLV	NLV	9,500	2.00E+5	ID	ID

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PART 213 TIER 1 RISK-BASED SCREENING LEVELS (RBSLs)
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N-Methyl-morpholine (I)	109024	20	56	NA	NLV	NLV	1.5E+6	1.0E+9	ID	ID
Methyl parathion	298000	1.8	5.2	NA	NLV	NLV	3,000	50,000	ID	ID
4-Methyl-2-pentanone (MIBK) (I)	108101	1,800	5,200	ID	2.0E+7 (S)	2.0E+7 (S)	1.3E+7	2.00E+7	ID	2.0E+7 (S)
Methyl-tert-butyl ether (MTBE)	1634044	40 (E)	40 (E)	7,100 (X)	4.7E+7 (S)	4.7E+7 (S)	6.1E+5	4.68E+7	ID	ID
Methylcyclopentane (I)	96377	ID	ID	NA	22,000	49,000	ID	73,890	ID	ID
4,4'-Methylene-bis-2-chloroaniline (MBOCA)	101144	1.1	4.5	NA	NLV	NLV	110 (AA)	14,000	ID	ID
Methylene chloride	75092	5.0 (A)	5.0 (A)	1,500 (X)	2.2E+5	1.4E+6	2.2E+5	1.70E+7	ID	ID
2-Methylnaphthalene	91576	260	750	19	25,000 (S)	25,000 (S)	25,000 (S)	24,600	ID	ID
Methylphenols (J)	1319773	370	1,000	30 (M); 25	NLV	NLV	8.1E+5	2.80E+7	NA	ID
Metolachlor	51218452	240	990	15	NLV	NLV	91,000	5.30E+5	ID	ID
Metribuzin	21087649	180	520	NA	ID	ID	1.2E+6 (S)	1.2E+6	ID	ID
Mirex	2385855	0.02 (M); 6.8E-6 (S)	0.02 (M); 6.8E-6 (S)	.02 (M); 6.8E-6 (S	ID	ID	0.02 (M); 6.8E-6 (S)	6.8E-6	NA	ID
Molybdenum (B)	7439987	73	210	3,200 (X)	NLV	NLV	9.7E+5	NA	ID	ID
Naphthalene	91203	520	1,500	11	31,000 (S)	31,000 (S)	31,000 (S)	31,000	NA	31,000 (S)
Nickel (B)	7440020	100 (A)	100 (A)	(G)	NLV	NLV	7.4E+7	NA	ID	ID
Nitrate (B,N)	14797558	10,000 (A,N)	10,000 (A,N)	ID	NLV	NLV	3.1E+8	NA	ID	ID
Nitrite (B,N)	14797650	1,000 (A,N)	1,000 (A,N)	NA	NLV	NLV	ID	NA	ID	ID
Nitrobenzene (I)	98953	3.4	9.6	180 (X)	2.8E+5	5.5E+5	11,000	2.09E+6	NA	ID
2-Nitrophenol	88755	20	58	ID	NLV	NLV	79,000	2.50E+6	ID	ID
n-Nitroso-di-n-propylamine	621647	5.0 (M); 0.19	5.0 (M); 0.77	NA	NLV	NLV	360	9.89E+6	ID	ID

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N-Nitrosodiphenylamine	86306	270	1,100	NA	NLV	NLV	35,000 (S)	35,100	ID	ID
Oxamyl	23135220	200 (A)	200 (A)	NA	NLV	NLV	6.2E+7	2.80E+8	ID	ID
Oxo-hexyl acetate	88230357	73	210	NA	ID	ID	ID	NA	ID	ID
Pendimethalin	40487421	280 (S)	280 (S)	NA	NLV	NLV	280 (S)	275	ID	ID
Pentachlorobenzene	608935	6.1	17	5.0 (M); 0.019	ID	ID	240	650	ID	ID
Pentachloronitrobenzene	82688	32 (S)	32 (S)	NA	32 (S)	32 (S)	32 (S)	32	ID	ID
Pentachlorophenol	87865	1.0 (A)	1.0 (A)	(G,X)	NLV	NLV	200	1.85E+6	ID	ID
Pentane	109660	ID	ID	NA	38,000 (S)	38,000 (S)	ID	38,200	340	38,000 (S)
2-Pentene (I)	109682	ID	ID	NA	ID	ID	ID	2.03E+5	ID	ID
pH	NA	6.5 to 8.5 (E)	6.5 to 8.5 (E)	6.5 to 9.0	ID	ID	ID	NA	NA	NA
Phenanthrene	85018	52	150	2.0 (M); 1.4	1,000 (S)	1,000 (S)	1,000 (S)	1,000	ID	ID
Phenol	108952	4,400	13,000	450	NLV	NLV	2.9E+7	8.28E+7	NA	ID
Phenytoin	57410	17	68	89 (X)	NLV	NLV	14,000	3.2E+4	ID	ID
Phosphorus (Total)	7723140	63,000	2.4E+5	(EE)	NLV	NLV	ID	NA	ID	ID
Phthalic acid	88993	14,000	40,000	NA	NLV	NLV	1.4E+7 (S)	1.42E+7	ID	ID
Phthalic anhydride	85449	15,000	44,000	NA	NLV	NLV	6.2E+6 (S)	6.2E+6	NA	ID
Picloram	1918021	500 (A)	500 (A)	46	NLV	NLV	4.3E+5 (S)	4.30E+5	ID	ID
Piperidine	110894	3.2	9.2	NA	NLV	NLV	34,000	1.0E+9	ID	ID
Polybrominated biphenyls (J)	67774327	0.03	0.09	ID	NLV	NLV	ID	1.66E+7	ID	ID
Polychlorinated biphenyls (PCBs) (J,T)	1336363	0.5 (A)	0.5 (A)	0.2 (M); 2.6E-5	45 (S)	45 (S)	3.3 (AA)	44.7	ID	ID
Prometon	1610180	160	460	NA	NLV	NLV	1.8E+5	7.50E+5	ID	ID

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Propachlor	1918167	95	270	NA	NLV	NLV	4.4E+5	6.55E+5	ID	ID
Propazine	139402	200	560	NA	NLV	NLV	8,600 (S)	8,600	ID	ID
Propionic acid	79094	12,000	35,000	ID	NLV	NLV	2.8E+8	1.0E+9	1.0E+9 (D)	ID
Propyl alcohol (I)	71238	1,400	4,000	NA	NLV	NLV	2.8E+7	1.0E+9	7.1E+7	1.0E+9 (D,S)
n-Propylbenzene (I)	103651	80	230	ID	ID	ID	15,000	NA	ID	ID
Propylene glycol	57556	1.5E+5	4.2E+5	2.9E+5	NLV	NLV	1.0E+9 (D,S)	1.0E+9	ID	ID
Pyrene	129000	140 (S)	140 (S)	ID	140 (S)	140 (S)	140 (S)	135	ID	ID
Pyridine (I)	110861	20 (M); 7.3	21	NA	5,500	12,000	94,000	3.00E+5	81,000	ID
Selenium (B)	7782492	50 (A)	50 (A)	5.0	NLV	NLV	9.7E+5	NA	ID	ID
Silver (B)	7440224	34	98	0.2 (M); 0.06	NLV	NLV	1.5E+6	NA	ID	ID
Silvex (2,4,5-TP)	93721	50 (A)	50 (A)	30	NLV	NLV	43,000	1.40E+5	ID	ID
Simazine	122349	4.0 (A)	4.0 (A)	17	NLV	NLV	4,500 (S)	4,470	ID	ID
Sodium	17341252	1.2E+5	3.5E+5	NA	NLV	NLV	1.0E+9 (D)	NA	ID	ID
Sodium azide	26628228	88	250	50 (M); 7.3	ID	ID	ID	NA	ID	ID
Strontium (B)	7440246	4,600	13,000	21,000	NLV	NLV	1.2E+8	NA	ID	ID
Styrene	100425	100 (A)	100 (A)	80 (X)	1.7E+5	3.1E+5 (S)	9,700	3.10E+5	1.4E+5	3.1E+5 (S)
Sulfate	14808798	2.5E+5 (E)	2.5E+5 (E)	NA	NLV	NLV	ID	NA	ID	ID
Tebuthiuron	34014181	510	1,500	NA	NLV	NLV	2.5E+6 (S)	2.50E+6	ID	ID
2,3,7,8-Tetrabromodibenzo-p-dio (O)	50585416	(O)	(O)	(O)	NLV	NLV	(O)	0.00996	ID	ID
1,2,4,5-Tetrachlorobenzene	95943	1,300 (S)	1,300 (S)	2.9 (X)	1,300 (S)	1,300 (S)	1,300 (S)	1,300	ID	ID
2,3,7,8-Tetrachlorodibenzo-p-dio (O)	1746016	3.0E-5 (A)	3.0E-5 (A)	1.0E-5 (M); 3.1E-9	NLV	NLV	1.0E-5 (M,O,AA)	0.019	ID	ID

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1,1,1,2-Tetrachloroethane	630206	77	320	ID	15,000	96,000	30,000	1.10E+6	ID	ID
1,1,2,2-Tetrachloroethane	79345	8.5	35	78 (X)	12,000	77,000	4,700	2.97E+6	ID	ID
Tetrachloroethylene	127184	5.0 (A)	5.0 (A)	60 (X)	25,000	1.7E+5	12,000	2.0E+5	ID	2.0E+5 (S)
Tetrahydrofuran	109999	95	270	11,000 (X)	6.9E+6	1.6E+7	1.6E+6	1.0E+9	60,000	3.6E+6
Tetranitromethane	509148	ID	ID	NA	580	3,200	ID	85,000	ID	ID
Thallium (B)	7440280	2.0 (A)	2.0 (A)	3.7 (X)	NLV	NLV	13,000	NA	ID	ID
Toluene (I)	108883	790 (E)	790 (E)	270	5.3E+5 (S)	5.3E+5 (S)	5.3E+5 (S)	5.26E+5	61,000	ID
p-Toluidine	106490	15	62	NA	NLV	NLV	24,000	7.60E+6	NA	ID
Total dissolved solids (TDS)	NA	5.0E+5 (E)	5.0E+5 (E)	(EE)	ID	ID	ID	NA	NA	NA
Toxaphene	8001352	3.0 (A)	3.0 (A)	1.0 (M); 6.8E-5	NLV	NLV	44	740	ID	740 (S)
Triallate	2303175	95	270	NA	ID	ID	4,000 (S)	4,000	ID	ID
Tributylamine	102829	10	29	ID	14,000	32,000	2,300	75,400	ID	ID
1,2,4-Trichlorobenzene	120821	70 (A)	70 (A)	99 (X)	3.0E+5 (S)	3.0E+5 (S)	19,000	3.00E+5	NA	3.0E+5 (S)
1,1,1-Trichloroethane	71556	200 (A)	200 (A)	89	6.6E+5	1.3E+6 (S)	1.3E+6 (S)	1.33E+6	ID	1.3E+6 (S)
1,1,2-Trichloroethane	79005	5.0 (A)	5.0 (A)	330 (X)	17,000	1.1E+5	21,000	4.42E+6	NA	ID
Trichloroethylene	79016	5.0 (A)	5.0 (A)	200 (X)	2,200	4,900	22,000	1.10E+6	ID	1.1E+6 (S)
Trichlorofluoromethane	75694	2,600	7,300	NA	1.1E+6 (S)	1.1E+6 (S)	1.1E+6 (S)	1.10E+6	ID	1.1E+6 (S)
2,4,5-Trichlorophenol	95954	730	2,100	NA	NLV	NLV	1.7E+5	1.20E+6	ID	ID
2,4,6-Trichlorophenol	88062	120	470	5.0	NLV	NLV	10,000	8.00E+5	ID	ID
1,2,3-Trichloropropane	96184	42	120	NA	8,300	18,000	84,000	1.90E+6	NA	ID
1,1,2-Trichloro-1,2,2-trifluoroetha	76131	1.7E+5 (S)	1.7E+5 (S)	32	1.7E+5 (S)	1.7E+5 (S)	1.7E+5 (S)	1.70E+5	ID	1.7E+5 (S)

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Triethanolamine	102716	3,700	10,000	NA	NLV	NLV	1.0E+9 (D,S)	1.0E+9	ID	ID
Triethylene glycol	112276	4,300	12,000	NA	NLV	NLV	1.0E+6 (S)	1.00E+6	ID	ID
3-Trifluoromethyl-4-nitrophenol	88302	4,500	13,000	NA	NLV	NLV	5.0E+6 (S)	5.00E+6	ID	ID
Trifluralin	1582098	37	110	NA	ID	ID	2,400	8,100	ID	ID
2,2,4-Trimethyl pentane	540841	ID	ID	NA	2,300 (S)	2,300 (S)	ID	2,330	160	ID
2,4,4-Trimethyl-2-pentene (I)	107404	ID	ID	NA	ID	ID	ID	11,900	ID	ID
1,2,4-Trimethylbenzene (I)	95636	63 (E)	63 (E)	17	56,000 (S)	56,000 (S)	56,000 (S)	55,890	56,000 (S)	ID
1,3,5-Trimethylbenzene (I)	108678	72 (E)	72 (E)	45	61,000 (S)	61,000 (S)	61,000 (S)	61,150	ID	ID
Triphenyl phosphate	115866	1,200	1,400 (S)	NA	NLV	NLV	1,400 (S)	1,430	ID	ID
tris(2,3-Dibromopropyl)phosphate	126727	10 (M); 0.71	10 (M); 2.9	ID	4,700 (S)	4,700 (S)	2,100	4,700	ID	ID
Urea	57136	ID	ID	NA	NLV	NLV	ID	NA	ID	ID
Vanadium	7440622	4.5	62	27	NLV	NLV	9.7E+5	NA	ID	ID
Vinyl acetate (I)	108054	640	1,800	NA	4.1E+6	8.9E+6	8.0E+6	2.00E+7	1.8E+6	4.8E+6
Vinyl chloride	75014	2.0 (A)	2.0 (A)	13 (X)	1,100	13,000	1,000	2.76E+6	33,000	ID
White phosphorus (R)	12185103	0.11	0.31	NA	NLV	NLV	2,900	NA	ID	ID
Xylenes (I)	1330207	280 (E)	280 (E)	41	1.9E+5 (S)	1.9E+5 (S)	1.9E+5 (S)	1.86E+5	70,000	1.9E+5 (S)
Zinc (B)	7440666	2,400	5,000 (E)	(G)	NLV	NLV	1.1E+8	NA	ID	ID

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TABLE 2. SOIL: RESIDENTIAL
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			Groundwater Protection			Indoor Air	Ambient Air (Y)				Direct Contact	
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Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Levels	Drinking Water Protection Criteria & RBSLs	Groundwater Surface Water Interface Protection Criteria & RBSLs	Groundwater Contact Protection Criteria & RBSLs	Soil Volatilization to Indoor Air Inhalation Criteria & RBSLs	Infinite Source Volatile Soil Inhalation Criteria (VSIC) & RBSLs	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria & RBSLs	Direct Contact Criteria & RBSLs	Soil Saturation Concentration Screening Levels
Acenaphthene	83329	NA	3.0E+5	**8,700**	9.7E+5	1.9E+8	8.1E+7	8.1E+7	8.1E+7	1.4E+10	4.1E+7	NA
Acenaphthylene	208968	NA	5,900	ID	4.4E+5	1.6E+6	2.2E+6	2.2E+6	2.2E+6	2.3E+9	1.6E+6	NA
Acetaldehyde (I)	75070	NA	19,000	**2,600**	1.1E+8 (C)	2.2E+5	1.7E+5	1.7E+5	2.8E+5	6.0E+8	2.9E+7	1.1E+8
Acetate	71501	NA	ID	(G)	ID	ID	ID	ID	ID	ID	ID	ID
Acetic acid	64197	NA	84,000	(G)	6.5E+8 (C)	NLV	NLV	NLV	NLV	1.7E+10	1.3E+8	6.5E+8
Acetone (I)	67641	NA	**15,000**	34,000	1.1E+8 (C)	1.1E+8 (C)	1.3E+8	1.3E+8	1.9E+8	3.9E+11	2.3E+7	1.1E+8
Acetonitrile	75058	NA	2,800	NA	2.2E+7 (C)	4.8E+6	1.6E+6	1.6E+6	2.1E+6	4.0E+9	4.3E+6	2.2E+7
Acetophenone	98862	NA	30,000	ID	1.1E+6 (C)	1.1E+6 (C)	4.4E+7	4.4E+7	4.4E+7	3.3E+10	1.1E+6 (C)	1.1E+6
Acrolein (I)	107028	NA	2,400	NA	2.3E+7 (C)	410	310	310	610	1.3E+6	3.6E+6	2.3E+7
Acrylamide	79061	NA	10	200 (X)	2.6E+5	NLV	NLV	NLV	NLV	2.4E+6	1,900	NA
Acrylic acid	79107	NA	78,000	NA	1.1E+8 (C)	2.4E+6	1.9E+5	2.3E+5	2.3E+5	6.7E+7	3.5E+7 (DD)	1.1E+8
Acrylonitrile (I)	107131	NA	**100 (M); 52**	100 (M); 40	2.8E+5	6,600	5,000	5,100	10,000	4.6E+7	16,000	8.3E+6
Alachlor	15972608	NA	**52**	290 (X)	44,000	NLV	NLV	NLV	NLV	ID	93,000	NA
Aldicarb	116063	NA	60	NA	2.4E+6	NLV	NLV	NLV	NLV	ID	2.3E+5	NA
Aldicarb sulfone	1646884	NA	200 (M); 40	NA	4.2E+7	NLV	NLV	NLV	NLV	ID	2.5E+5	NA
Aldicarb sulfoxide	1646873	NA	200(M); 80	NA	5.4E+7	NLV	NLV	NLV	NLV	ID	2.9E+5	NA
Aldrin	309002	NA	NLL	NLL	NLL	1.3E+6	58,000	58,000	58,000	6.4E+5	**1,000**	NA
Aluminum (B)	7429905	6.9E+6	1,000	NA	1.0E+9 (D)	NLV	NLV	NLV	NLV	ID	5.0E+7 (DD)	NA
Ammonia	7664417	NA	ID	(CC)	ID	ID	ID	ID	ID	6.7E+9	ID	1.0E+7
t-Amyl methyl ether (TAME)	994058	NA	3,900	NA	4.4E+5 (C)	58,000	3.4E+5	7.6E+5	1.8E+6	4.1E+9	4.4E+5 (C)	4.4E+5
Aniline	62533	NA	1,100	**330 (M); 80**	2.8E+6	NLV	NLV	NLV	NLV	6.7E+7	3.3E+5	4.5E+6

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Anthracene	120127	NA	41,000	ID	41,000	1.0E+9 (D)	1.4E+9	1.4E+9	1.4E+9	6.7E+10	2.3E+8	NA
Antimony	7440360	NA	**4,300**	94,000 (X)	4.9E+7	NLV	NLV	NLV	NLV	1.3E+7	1.8E+5	NA
Arsenic	7440382	5,800	**4,600**	4,600	2.0E+6	NLV	NLV	NLV	NLV	7.2E+5	7,600	NA
Asbestos (BB)	1332214	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	**1.0E+7 (M); 68,000**	ID	NA
Atrazine	1912249	NA	**60**	150	1.1E+5	NLV	NLV	NLV	NLV	ID	71,000 (DD)	NA
Azobenzene	103333	NA	4,200	ID	3.0E+5	6.1E+6	6.3E+5	6.3E+5	6.3E+5	1.0E+8	1.4E+5	NA
Barium (B)	7440393	75,000	1.3E+6	(G)	1.0E+9 (D)	NLV	NLV	NLV	NLV	3.3E+8	3.7E+7	NA
Benzene (I)	71432	NA	**100**	4,000 (X)	2.2E+5	1,600	13,000	34,000	79,000	3.8E+8	1.8E+5	4.0E+5
Benzidine	92875	NA	1,000 (M); 6.0	1,000 (M); 6.0	1,000 (M); 140	NLV	NLV	NLV	NLV	46,000	1,000 (M); 23	NA
Benzo(a)anthracene (Q)	56553	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	**20,000**	NA
Benzo(b)fluoranthene (Q)	205992	NA	NLL	NLL	NLL	ID	ID	ID	ID	ID	20,000	NA
Benzo(k)fluoranthene (Q)	207089	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	**2.0E+5**	NA
Benzo(g,h,i)perylene	191242	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	8.0E+8	**2.5E+6**	NA
Benzo(a)pyrene (Q)	50328	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	1.5E+6	**2,000**	NA
Benzoic acid	65850	NA	6.4E+5	NA	7.0E+7	NLV	NLV	NLV	NLV	ID	9.9E+8	NA
Benzyl alcohol	100516	NA	2.0E+5	NA	5.8E+6 (C)	NLV	NLV	NLV	NLV	3.3E+11	5.8E+6 (C)	5.8E+6
Benzyl chloride	100447	NA	150	NA	72,000	6,300	14,000	14,000	17,000	6.2E+7	48,000	2.3E+5
Beryllium	7440417	NA	51,000	(G)	1.0E+9 (D)	NLV	NLV	NLV	NLV	1.3E+6	4.1E+5	NA
bis(2-Chloroethoxy)ethane	112265	NA	ID	ID	ID	NLV	NLV	NLV	NLV	ID	ID	2.7E+6
bis(2-Chloroethyl)ether (I)	111444	NA	**100**	100 (M); 20	1.1E+5	8,300	3,800	3,800	3,800	9.4E+6	13,000	2.2E+6
bis(2-Ethylhexyl)phthalate	117817	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	7.0E+8	**2.8E+6**	1.0E+7

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			Groundwater Protection			Indoor Air	Ambient Air (Y)				Direct Contact	
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Boron (B)	7440428	NA	10,000	1.4E+5 (X)	1.0E+9 (D)	NLV	NLV	NLV	NLV	ID	4.8E+7 (DD)	NA
Bromate	15541454	NA	200	800 (X)	96,000	NLV	NLV	NLV	NLV	ID	17,000	NA
Bromobenzene (I)	108861	NA	550	NA	3.6E+5	3.1E+5	4.5E+5	4.5E+5	4.5E+5	5.3E+8	5.4E+5	7.6E+5
Bromodichloromethane	75274	NA	1,600 (W)	ID	2.8E+5	1,200	9,100	9,700	19,000	8.4E+7	1.1E+5	1.5E+6
Bromoform	75252	NA	1,600 (W)	ID	8.7E+5 (C)	1.5E+5	9.0E+5	9.0E+5	9.0E+5	2.8E+9	8.2E+5	8.7E+5
Bromomethane	74839	NA	200	700	1.4E+6	860	11,000	57,000	1.4E+5	3.3E+8	3.2E+5	2.2E+6
n-Butanol (I)	71363	NA	19,000	2.0E+5	8.7E+6 (C)	NLV	NLV	NLV	NLV	2.3E+10	8.7E+6 (C)	8.7E+6
2-Butanone (MEK) (I)	78933	NA	2.6E+5	44,000	2.7E+7 (C)	2.7E+7 (C)	2.9E+7	2.9E+7	3.5E+7	6.7E+10	2.7E+7 (C,DD)	2.7E+7
n-Butyl acetate	123864	NA	11,000	NA	1.1E+6 (C)	1.1E+6 (C)	1.1E+8	2.6E+8	3.2E+8	4.7E+11	1.1E+6 (C)	1.1E+6
t-Butyl alcohol	75650	NA	78,000	NA	1.1E+8 (C)	1.1E+8 (C)	9.7E+7	2.0E+8	2.0E+8	1.3E+11	1.1E+8 (C)	1.1E+8
Butyl benzyl phthalate	85687	NA	3.1E+5 (C)	1.2E+5 (X)	3.1E+5 (C)	NLV	NLV	NLV	NLV	4.7E+10	3.1E+5 (C)	3.1E+5
n-Butylbenzene	104518	NA	1,600	ID	1.2E+5	ID	ID	ID	ID	2.0E+9	2.5E+6	1.0E+7
sec-Butylbenzene	135988	NA	1,600	ID	88,000	ID	ID	ID	ID	4.0E+8	2.5E+6	1.0E+7
t-Butylbenzene (I)	98066	NA	1,600	ID	1.8E+5	ID	ID	ID	ID	6.7E+8	2.5E+6	1.0E+7
Cadmium (B)	7440439	1,200	6,000	(G,X)	2.3E+8	NLV	NLV	NLV	NLV	1.7E+6	5.5E+5	NA
Camphene (I)	79925	NA	ID	NA	ID	3,700	1.5E+5	9.1E+5	2.2E+6	5.3E+9	ID	NA
Caprolactam	105602	NA	1.2E+5	NA	1.0E+9 (D)	NLV	NLV	NLV	NLV	6.7E+8	5.3E+7 (DD)	NA
Carbaryl	63252	NA	14,000	NA	2.6E+6	ID	ID	ID	ID	ID	2.2E+7	NA
Carbazole	86748	NA	9,400	1,100	8.2E+5	NLV	NLV	NLV	NLV	6.2E+7	5.3E+5	NA
Carbofuran	1563662	NA	800	NA	6.8E+6	NLV	NLV	NLV	NLV	ID	1.1E+6	NA
Carbon disulfide (I,R)	75150	NA	16,000	ID	2.8E+5 (C)	76,000	1.3E+6	7.9E+6	1.9E+7	4.7E+10	2.8E+5 (C,DD)	2.8E+5

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Carbon tetrachloride	56235	NA	**100**	900 (X)	92,000	190	3,500	12,000	28,000	1.3E+8	96,000	3.9E+5
Chlordane (J)	57749	NA	NLL	NLL	NLL	1.1E+7	1.2E+6	1.2E+6	1.2E+6	3.1E+7	**31,000**	NA
Chloride	16887006	NA	5.0E+6	(X)	ID	NLV	NLV	NLV	NLV	ID	5.0E+5 (F)	NA
Chlorobenzene (I)	108907	NA	2,000	**500**	2.6E+5 (C)	1.2E+5	7.7E+5	9.9E+5	2.1E+6	4.7E+9	2.6E+5 (C)	2.6E+5
p-Chlorobenzene sulfonic acid	98668	NA	1.5E+5	ID	NA	ID	ID	ID	ID	ID	2.3E+8	ID
1-Chloro-1,1-difluoroethane	75683	NA	3.0E+5	NA	9.6E+5 (C)	9.6E+5 (C)	7.9E+7	5.6E+8	1.4E+9	3.3E+12	9.6E+5 (C)	9.6E+5
Chloroethane	75003	NA	8,600	22,000 (X)	9.5E+5 (C)	9.5E+5 (C)	3.0E+7	1.2E+8	2.8E+8	6.7E+11	9.5E+5 (C)	9.5E+5
2-Chloroethyl vinyl ether	110758	NA	ID	NA	ID	ID	ID	ID	ID	ID	ID	1.9E+6
Chloroform	67663	NA	**1,600 (W)**	7,000	1.5E+6 (C)	7,200	45,000	1.2E+5	2.7E+5	1.3E+9	1.2E+6	1.5E+6
Chloromethane (I)	74873	NA	5,200	ID	1.1E+6 (C)	2,300	40,000	4.1E+5	1.0E+6	4.9E+9	1.1E+6 (C)	1.1E+6
4-Chloro-3-methylphenol	59507	NA	5,800	**280**	3.0E+6	NLV	NLV	NLV	NLV	ID	4.5E+6	NA
beta-Chloronaphthalene	91587	NA	6.2E+5	NA	2.3E+6	ID	ID	ID	ID	ID	5.6E+7	NA
2-Chlorophenol	95578	NA	900	360	1.9E+6	4.3E+5	9.6E+5	9.6E+5	9.6E+5	1.2E+9	1.4E+6	1.9E+7
o-Chlorotoluene (I)	95498	NA	3,300	ID	5.0E+5 (C)	2.7E+5	1.2E+6	2.9E+6	6.3E+6	4.7E+9	5.0E+5 (C)	5.0E+5
Chlorpyrifos	2921882	NA	17,000	1,500	8.4E+5	**130**	4,600	23,000	55,000	1.3E+8	1.1E+7	NA
Chromium (III) (B,H)	16065831	18,000 (total)	1.0E+9 (D)	(G,X)	1.0E+9 (D)	NLV	NLV	NLV	NLV	3.3E+8	7.9E+8	NA
Chromium (VI)	18540299	NA	30,000	**3,300**	1.4E+8	NLV	NLV	NLV	NLV	2.6E+5	2.5E+6	NA
Chrysene (Q)	218019	NA	NLL	NLL	NLL	ID	ID	ID	ID	ID	2.0E+6	NA
Cobalt	7440484	6,800	**800**	2,000	4.8E+7	NLV	NLV	NLV	NLV	1.3E+7	2.6E+6	NA
Copper (B)	7440508	32,000	5.8E+6	(G)	1.0E+9 (D)	NLV	NLV	NLV	NLV	1.3E+8	2.0E+7	NA
Cyanazine	21725462	NA	**200**	1,100 (X)	56,000	NLV	NLV	NLV	NLV	ID	14,000	NA

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Cyanide (P,R)	57125	390 (total)	4,000	**100**	2.5E+5	NLV	NLV	NLV	NLV	2.5E+5	12,000	NA
Cyclohexanone	108941	NA	5.2E+6	NA	2.2E+8 (C)	17,000	1.0E+6	1.1E+7	2.7E+7	6.7E+10	2.2E+8 (C)	2.2E+8
Dacthal	1861321	NA	50,000	NA	3.4E+5	NLV	NLV	NLV	NLV	ID	2.3E+6	NA
Dalapon	75990	NA	4,000	NA	5.9E+7 (C)	NLV	NLV	NLV	NLV	ID	1.9E+7	5.9E+7
4-4'-DDD	72548	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	4.4E+7	**95,000**	NA
4-4'-DDE	72559	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	3.2E+7	**45,000**	NA
4-4'-DDT	50293	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	3.2E+7	**57,000**	NA
Decabromodiphenyl ether	1163195	NA	1.4E+5	NA	1.4E+5	1.0E+9 (D)	8.6E+7	8.6E+7	8.6E+7	2.3E+9	3.8E+6	NA
Di-n-butyl phthalate	84742	NA	7.6E+5 (C)	**11,000**	7.6E+5 (C)	NLV	NLV	NLV	NLV	3.3E+9	7.6E+5 (C)	7.6E+5
Di(2-ethylhexyl) adipate	103231	NA	9.6E+5 (C)	ID	9.6E+5 (C)	NLV	NLV	NLV	NLV	9.2E+9	9.6E+5 (C,DD)	9.6E+5
Di-n-octyl phthalate	117840	NA	1.0E+8	ID	1.4E+8 (C)	NLV	NLV	NLV	NLV	3.1E+10	6.9E+6	1.4E+8
Diacetone alcohol (I)	123422	NA	ID	NA	ID	NLV	NLV	NLV	NLV	1.6E+11	ID	1.1E+8
Diazinon	333415	NA	95	72	95,000	NLV	NLV	NLV	NLV	ID	12,000 (DD)	3.1E+5
Dibenzo(a,h)anthracene (Q)	53703	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	**2,000**	NA
Dibenzofuran	132649	NA	ID	1,700	ID	2.0E+6	1.3E+5	1.3E+5	1.3E+5	6.7E+6	ID	NA
Dibromochloromethane	124481	NA	1,600 (W)	ID	3.6E+5	3,900	24,000	24,000	33,000	1.3E+8	1.1E+5	6.1E+5
Dibromochloropropane	96128	NA	10 (M); 4.0	ID	1,200 (C)	220	260	260	260	5.6E+5	1,200 (C)	1,200
Dibromomethane	74953	NA	1,600	NA	2.0E+6 (C)	ID	ID	ID	ID	ID	2.0E+6 (C)	2.0E+6
Dicamba	1918009	NA	4,400	NA	1.2E+7	NA	NLV	NLV	NLV	ID	3.4E+6	NA
1,2-Dichlorobenzene	95501	NA	14,000	**280**	2.1E+5 (C)	2.1E+5 (C)	3.9E+7	3.9E+7	5.2E+7	1.0E+11	2.1E+5 (C)	2.1E+5
1,3-Dichlorobenzene	541731	NA	170	680	51,000	26,000	79,000	79,000	1.1E+5	2.0E+8	1.7E+5 (C)	1.7E+5

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			Groundwater Protection			Indoor Air	Ambient Air (Y)				Direct Contact	
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1,4-Dichlorobenzene	106467	NA	1,700	**360**	1.4E+5	19,000	77,000	77,000	1.1E+5	4.5E+8	4.0E+5	NA
3,3'-Dichlorobenzidine	91941	NA	**2,000 (M); 28**	2,000 (M); 7.4	4,600	NLV	NLV	NLV	NLV	6.5E+6	6,600	NA
Dichlorodifluoromethane	75718	NA	95,000	ID	1.0E+6 (C)	9.0E+5	5.3E+7	5.5E+8	1.4E+9	3.3E+12	1.0E+6 (C)	1.0E+6
1,1-Dichloroethane	75343	NA	18,000	**15,000**	8.9E+5 (C)	2.3E+5	2.1E+6	5.9E+6	1.4E+7	3.3E+10	8.9E+5 (C)	8.9E+5
1,2-Dichloroethane (I)	107062	NA	**100**	7,200 (X)	3.8E+5	2,100	6,200	11,000	26,000	1.2E+8	91,000	1.2E+6
1,1-Dichloroethylene (I)	75354	NA	140	2,600	2.2E+5	**62**	1,100	5,300	13,000	6.2E+7	2.0E+5	5.7E+5
cis-1,2-Dichloroethylene	156592	NA	**1,400**	12,000	6.4E+5 (C)	22,000	1.8E+5	4.2E+5	9.9E+5	2.3E+9	6.4E+5 (C)	6.4E+5
trans-1,2-Dichloroethylene	156605	NA	**2,000**	30,000 (X)	1.4E+6 (C)	23,000	2.8E+5	8.3E+5	2.0E+6	4.7E+9	1.4E+6 (C)	1.4E+6
2,6-Dichloro-4-nitroaniline	99309	NA	44,000	NA	1.4E+5	NLV	NLV	NLV	NLV	ID	6.8E+7	NA
2,4-Dichlorophenol	120832	NA	1,500	**330 (M); 220**	9.6E+5	NLV	NLV	NLV	NLV	5.1E+9	6.6E+5 (DD)	1.8E+6
2,4-Dichlorophenoxyacetic acid	94757	NA	**1,400**	4,400	2.4E+6	NLV	NLV	NLV	NLV	6.7E+9	2.5E+6	NA
1,2-Dichloropropane (I)	78875	NA	**100**	4,600 (X)	3.2E+5	4,000	25,000	50,000	1.1E+5	2.7E+8	1.4E+5	5.5E+5
1,3-Dichloropropene	542756	NA	170	180 (X)	1.1E+5	1,000	18,000	68,000	1.6E+5	7.8E+8	10,000	6.2E+5
Dichlorovos	62737	NA	50 (M); 32	NA	1.2E+5	NLV	NLV	NLV	NLV	3.3E+7	10,000	2.2E+6
Dicyclohexyl phthalate	84617	NA	ID	NA	ID	ID	ID	ID	ID	ID	ID	NA
Dieldrin	60571	NA	NLL	NLL	NLL	1.4E+5	19,000	19,000	19,000	6.8E+5	**1,100**	NA
Diethyl ether	60297	NA	200	ID	7.4E+6 (C)	7.4E+6 (C)	8.5E+7	1.5E+8	3.4E+8	8.0E+11	7.4E+6 (C)	7.4E+6
Diethyl phthalate	84662	NA	1.1E+5	**2,200**	7.4E+5 (C)	NLV	NLV	NLV	NLV	3.3E+9	7.4E+5 (C)	7.4E+5
Diethylene glycol monobutyl ether	112345	NA	1,800	NA	8.0E+7	NLV	NLV	NLV	NLV	1.3E+9	2.7E+6	1.1E+8
Diisopropyl ether	108203	NA	600	ID	1,300 (C)	1,300 (C)	3.4E+5	7.6E+5	1.8E+6	4.1E+9	1,300 (C)	1,300
Diisopropylamine (I)	108189	NA	110	NA	4.2E+5	5.5E+6	6.2E+6	6.2E+6	7.3E+6	1.3E+10	1.7E+5	6.7E+6

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			Groundwater Protection			Indoor Air	Ambient Air (Y)				Direct Contact	
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Dimethyl phthalate	131113	NA	7.9E+5 (C)	NA	7.9E+5 (C)	NLV	NLV	NLV	NLV	3.3E+9	7.9E+5 (C)	7.9E+5
N,N-Dimethylacetamide	127195	NA	**3,600**	82,000 (X)	1.1E+8 (C)	NLV	NLV	NLV	NLV	ID	5.6E+6	1.1E+8
N,N-Dimethylaniline	121697	NA	320	NA	4.0E+5	1.7E+5	1.5E+5	1.5E+5	1.5E+5	2.6E+8	5.0E+5	8.0E+5
Dimethylformamide (I)	68122	NA	14,000	NA	1.1E+8 (C)	NLV	NLV	NLV	NLV	2.0E+9	2.2E+7	1.1E+8
2,4-Dimethylphenol	105679	NA	**7,400**	7,600	1.0E+7	NLV	NLV	NLV	NLV	4.7E+9	1.1E+7	NA
2,6-Dimethylphenol	576261	NA	330 (M); 88	NA	1.3E+5	NLV	NLV	NLV	NLV	1.3E+8	1.4E+5	NA
3,4-Dimethylphenol	95658	NA	330 (M); 200	500	3.6E+5	NLV	NLV	NLV	NLV	2.3E+8	3.2E+5	NA
Dimethylsulfoxide	67685	NA	4.4E+6	**3.8E+6**	1.8E+7 (C)	NLV	NLV	NLV	NLV	1.3E+9	1.8E+7 (C)	1.8E+7
2,4-Dinitrotoluene	121142	NA	430	NA	1.7E+5	NLV	NLV	NLV	NLV	1.6E+7	48,000	NA
Dinoseb	88857	NA	300	**200 (M); 43**	1.4E+5 (C)	NLV	NLV	NLV	NLV	2.7E+8	66,000 (DD)	1.4E+5
1,4-Dioxane (I)	123911	NA	**1,700**	56,000 (X)	3.4E+7	NLV	NLV	NLV	NLV	5.7E+8	5.3E+5	9.7E+7
Diquat	85007	NA	400	400	1.4E+7	NLV	NLV	NLV	NLV	ID	5.0E+5	NA
Diuron	330541	NA	620	NA	7.4E+5	NLV	NLV	NLV	NLV	4.7E+8	9.7E+5	NA
Endosulfan (J)	115297	NA	NLL	NLL	NLL	ID	ID	ID	ID	ID	1.4E+6	NA
Endothall	145733	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	2.3E+9	**3.8E+6**	NA
Endrin	72208	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	**65,000**	NA
Epichlorohydrin (I)	106898	NA	100	NA	2.2E+5	64,000	31,000	31,000	35,000	6.7E+7	8,900	7.3E+6
Ethanol (I)	64175	NA	3.8E+7	ID	1.1E+8 (C)	NLV	NLV	NLV	NLV	1.3E+12	1.1E+8 (C,DD)	1.1E+8
Ethyl acetate (I)	141786	NA	1.3E+5	NA	7.5E+6 (C)	7.5E+6 (C)	4.9E+7	4.9E+7	9.8E+7	2.1E+11	7.5E+6 (C)	7.5E+6
Ethyl-tert-butyl ether (ETBE)	637923	NA	980	ID	ID	5.4E+5	1.9E+6	4.5E+6	1.1E+7	2.5E+10	ID	6.5E+5
Ethylbenzene (I)	100414	NA	1,500	**360**	1.4E+5 (C)	87,000	7.2E+5	1.0E+6	2.2E+6	1.0E+10	1.4E+5 (C)	1.4E+5

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Ethylene dibromide	106934	NA	**20 (M); 1.0**	110 (X)	500	670	1,700	1,700	3,300	1.4E+7	92	8.9E+5
Ethylene glycol	107211	NA	3.0E+5	3.8E+6 (X)	1.1E+8 (C)	NLV	NLV	NLV	NLV	6.7E+10	1.1E+8 (C)	1.1E+8
Ethylene glycol monobutyl ether	111762	NA	74,000	NA	4.1E+7 (C)	7.4E+5	1.8E+7	1.5E+8	3.6E+8	8.7E+11	4.1E+7 (C)	4.1E+7
Fluoranthene	206440	NA	7.3E+5	**5,500**	7.3E+5	1.0E+9 (D)	7.4E+8	7.4E+8	7.4E+8	9.3E+9	4.6E+7	NA
Fluorene	86737	NA	3.9E+5	**5,300**	8.9E+5	5.8E+8	1.3E+8	1.3E+8	1.3E+8	9.3E+9	2.7E+7	NA
Fluorine (soluble fluoride) (B)	7782414	NA	40,000	ID	2.4E+8	NLV	NLV	NLV	NLV	ID	9.0E+6 (DD)	NA
Formaldehyde	50000	NA	26,000	**2,400**	6.0E+7 (C)	12,000	13,000	23,000	52,000	2.4E+8	4.1E+7	6.0E+7
Formic acid (I,U)	64186	NA	2.0E+5	ID	1.1E+8 (C)	1.5E+6	2.1E+5	1.4E+5	1.4E+5	1.3E+8	1.1E+8 (C)	1.1E+8
1-Formylpiperidine	2591868	NA	1,600	NA	ID	ID	ID	ID	ID	ID	2.5E+6	1.0E+7
Gentian violet	548629	NA	300	NA	2.0E+7	NLV	NLV	NLV	NLV	ID	96,000	NA
Glyphosate	1071836	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	**1.1E+7 (DD)**	NA
Heptachlor	76448	NA	NLL	NLL	NLL	3.5E+5	62,000	62,000	62,000	2.4E+6	**5,600**	NA
Heptachlor epoxide	1024573	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	1.2E+6	**3,100**	NA
n-Heptane	142825	NA	2.4E+5 (C)	NA	2.4E+5 (C)	2.4E+5 (C)	2.1E+7	4.4E+7	1.0E+8	2.3E+11	2.4E+5 (C)	2.4E+5
Hexabromobenzene	87821	NA	5,400	ID	5,400	ID	ID	ID	ID	ID	1.1E+6	NA
Hexachlorobenzene (C-66)	118741	NA	1,800	**350**	8,200	41,000	17,000	17,000	17,000	6.8E+6	8,900	NA
Hexachlorobutadiene (C-46)	87683	NA	26,000	**91**	3.5E+5 (C)	1.3E+5	1.3E+5	1.3E+5	1.3E+5	1.4E+8	1.0E+5	3.5E+5
alpha-Hexachlorocyclohexane	319846	NA	18	ID	2,500	30,000	12,000	22,000	25,000	1.7E+6	2,600	NA
beta-Hexachlorocyclohexane	319857	NA	37	ID	5,100	NLV	NLV	NLV	NLV	5.9E+6	5,400	NA
Hexachlorocyclopentadiene (C-56)	77474	NA	3.2E+5	ID	7.2E+5 (C)	30,000	50,000	50,000	50,000	1.3E+7	7.2E+5 (C)	7.2E+5
Hexachloroethane	67721	NA	**430**	1,800 (X)	1.1E+5	40,000	5.5E+5	9.3E+5	9.3E+5	2.3E+8	2.3E+5	NA

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n-Hexane	110543	NA	44,000 (C)	NA	44,000 (C)	44,000 (C)	3.0E+6	3.2E+6	6.2E+6	1.3E+10	44,000 (C)	44,000
2-Hexanone	591786	NA	20,000	ID	2.5E+6 (C)	9.9E+5	1.1E+6	1.1E+6	1.4E+6	2.7E+9	2.5E+6 (C)	2.5E+6
Indeno(1,2,3-cd)pyrene (Q)	193395	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	20,000	NA
Iron (B)	7439896	1.2E+7	6,000	NA	1.0E+9 (D)	NLV	NLV	NLV	NLV	ID	1.6E+8	NA
Isobutyl alcohol (I)	78831	NA	46,000	NA	8.9E+6 (C)	8.9E+6 (C)	7.9E+7	7.9E+7	7.9E+7	1.0E+11	8.9E+6 (C)	8.9E+6
Isophorone	78591	NA	15,000	26,000 (X)	2.4E+6 (C)	NLV	NLV	NLV	NLV	1.2E+10	2.4E+6 (C)	2.4E+6
Isopropyl alcohol (I)	67630	NA	9,400	1.1E+6 (X)	1.1E+8 (C)	NLV	NLV	NLV	NLV	1.5E+10	1.4E+7	1.1E+8
Isopropyl benzene	98828	NA	91,000	3,200	3.9E+5 (C)	3.9E+5 (C)	1.7E+6	1.7E+6	2.8E+6	5.8E+9	3.9E+5 (C)	3.9E+5
Lead (B)	7439921	21,000	7.0E+5	(G,X)	ID	NLV	NLV	NLV	NLV	1.0E+8	4.0E+5	NA
Lindane	58899	NA	20 (M); 7.0	20 (M); 1.1	7,100	ID	ID	ID	ID	ID	8,300	NA
Lithium (B)	7439932	9,800	3,400	8,800	1.1E+8	NLV	NLV	NLV	NLV	2.3E+9	4.2E+6 (DD)	NA
Magnesium (B)	7439954	NA	8.0E+6	NA	1.0E+9 (D)	NLV	NLV	NLV	NLV	6.7E+9	1.0E+9 (D)	NA
Manganese (B)	7439965	4.4E+5	1,000	(G,X)	1.8E+8	NLV	NLV	NLV	NLV	3.3E+6	2.5E+7	NA
Mercury (Total) (B,Z)	Varies	130	1,700	50 (M); 1.2	47,000	48,000	52,000	52,000	52,000	2.0E+7	1.6E+5	NA
Methane	74828	NA	ID	NA	ID	8.4E+6 ug/m3 (GG)	ID	ID	ID	ID	ID	ID
Methanol	67561	NA	74,000	3.1E+6 (C)	3.1E+6 (C)	3.1E+6 (C)	3.1E+7	4.4E+7	9.6E+7	2.2E+11	3.1E+6 (C)	3.1E+6
Methoxychlor	72435	NA	16,000	NA	18,000	ID	ID	ID	ID	ID	1.9E+6	NA
2-Methoxyethanol (I)	109864	NA	150	NA	1.7E+7	NLV	NLV	NLV	NLV	1.3E+9	2.3E+5	1.1E+8
2-Methyl-4-chlorophenoxyacetic acid	94746	NA	390	NA	4.9E+5	NLV	NLV	NLV	NLV	ID	2.3E+5	NA
2-Methyl-4,6-dinitrophenol	534521	NA	830 (M); 400	NA	1.9E+5	NLV	NLV	NLV	NLV	1.3E+8	79,000	NA
N-Methyl-morpholine (I)	109024	NA	400	NA	3.0E+7	NLV	NLV	NLV	NLV	ID	6.1E+5	1.1E+8

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Methyl parathion	298000	NA	46	NA	76,000	NLV	NLV	NLV	NLV	ID	56,000	NA
4-Methyl-2-pentanone (MIBK) (I)	108101	NA	36,000	ID	2.7E+6 (C)	2.7E+6 (C)	4.5E+7	4.5E+7	6.7E+7	1.4E+11	2.7E+6 (C)	2.7E+6
Methyl-tert-butyl ether (MTBE)	1634044	NA	800	1.4E+5 (X)	5.9E+6 (C)	5.9E+6 (C)	2.5E+7	3.9E+7	8.7E+7	2.0E+11	1.5E+6	5.9E+6
Methylcyclopentane (I)	96377	NA	ID	NA	ID	92,000	2.3E+6	8.2E+6	2.0E+7	4.7E+10	ID	3.5E+5
4,4'-Methylene-bis-2-chloroaniline (MBOCA)	101144	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	8.4E+7	6,800	NA
Methylene chloride	75092	NA	100	30,000 (X)	2.3E+6 (C)	45,000	2.1E+5	5.9E+5	1.4E+6	6.6E+9	1.3E+6	2.3E+6
2-Methylnaphthalene	91576	NA	57,000	4,200	5.5E+6	2.7E+6	1.5E+6	1.5E+6	1.5E+6	6.7E+8	8.1E+6	NA
Methylphenols (J)	1319773	NA	7,400	1,000 (M); 600	1.6E+7	NLV	NLV	NLV	NLV	6.7E+9	1.1E+7	NA
Metolachlor	51218452	NA	4,800	300	4.4E+5 (C)	NLV	NLV	NLV	NLV	ID	4.4E+5 (C,DD)	4.4E+5
Metribuzin	21087649	NA	3,600	NA	2.4E+7	ID	ID	ID	ID	ID	9.6E+6	NA
Mirex	2385855	NA	NLL	NLL	NLL	ID	ID	ID	ID	ID	9,600	NA
Molybdenum (B)	7439987	NA	1,500	64,000 (X)	1.9E+7	NLV	NLV	NLV	NLV	ID	2.6E+6	NA
Naphthalene	91203	NA	35,000	730	2.1E+6	2.5E+5	3.0E+5	3.0E+5	3.0E+5	2.0E+8	1.6E+7	NA
Nickel (B)	7440020	20,000	1.0E+5	(G)	1.0E+9 (D)	NLV	NLV	NLV	NLV	1.3E+7	4.0E+7	NA
Nitrate (B,N)	14797558	NA	2.0E+5 (N)	ID	1.0E+9 (D)	NLV	NLV	NLV	NLV	ID	ID	NA
Nitrite (B,N)	14797650	NA	20,000 (N)	NA	3.8E+8	NLV	NLV	NLV	NLV	ID	ID	NA
Nitrobenzene (I)	98953	NA	330 (M); 68	3,600 (X)	2.2E+5	91,000	54,000	54,000	54,000	4.7E+7	1.0E+5	4.9E+5
2-Nitrophenol	88755	NA	400	ID	1.6E+6	NLV	NLV	NLV	NLV	ID	6.3E+5	NA
n-Nitroso-di-n-propylamine	621647	NA	330 (M); 100	NA	7,200	NLV	NLV	NLV	NLV	1.6E+6	1,200	1.5E+6
N-Nitrosodiphenylamine	86306	NA	5,400	NA	7.0E+5	NLV	NLV	NLV	NLV	2.2E+9	1.7E+6	NA

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Oxamyl	23135220	NA	4,000	NA	1.0E+9 (D)	NLV	NLV	NLV	NLV	ID	8.6E+6	NA
Oxo-hexyl acetate	88230357	NA	1,500	NA	ID	ID	ID	ID	ID	5.4E+9	2.3E+6	1.0E+7
Pendimethalin	40487421	NA	1.1E+6	NA	1.1E+6	NLV	NLV	NLV	NLV	ID	4.6E+7	NA
Pentachlorobenzene	608935	NA	29,000	9,500	1.9E+5 (C)	ID	ID	ID	ID	ID	1.9E+5 (C)	1.9E+5
Pentachloronitrobenzene	82688	NA	37,000	NA	37,000	1.2E+5	2.3E+5	2.3E+5	2.3E+5	3.3E+8	1.7E+6	NA
Pentachlorophenol	87865	NA	22	(G,X)	4,300	NLV	NLV	NLV	NLV	1.0E+8	90,000	NA
Pentane	109660	NA	ID	NA	ID	2.4E+5 (C)	3.7E+7	3.1E+8	5.8E+8	1.2E+12	ID	2.4E+5
2-Pentene (I)	109682	NA	ID	NA	ID	ID	ID	ID	ID	ID	ID	2.2E+5
Phenanthrene	85018	NA	56,000	2,100	1.1E+6	2.8E+6	1.6E+5	1.6E+5	1.6E+5	6.7E+6	1.6E+6	NA
Phenol	108952	NA	88,000	9,000	1.2E+7 (C)	NLV	NLV	NLV	NLV	4.0E+10	1.2E+7 (C,DD)	1.2E+7
Phenytoin	57410	NA	830	4300 (X)	6.8E+5	NLV	NLV	NLV	NLV	2.2E+8	1.0E+5	NA
Phosphorus (Total)	7723140	NA	1.3E+6	(EE)	ID	NLV	NLV	NLV	NLV	6.7E+7	1.0E+9 (D)	NA
Phthalic acid	88993	NA	2.8E+5	NA	1.7E+6 (C)	NLV	NLV	NLV	NLV	ID	1.7E+6 (C)	1.7E+6
Phthalic anhydride	85449	NA	3.0E+5	NA	1.1E+6 (C)	NLV	NLV	NLV	NLV	ID	1.1E+6 (C)	1.1E+6
Picloram	1918021	NA	10,000	920	8.6E+6	NLV	NLV	NLV	NLV	ID	1.6E+7	NA
Piperidine	110894	NA	64	NA	6.8E+5	NLV	NLV	NLV	NLV	9.3E+9	99,000	1.2E+8
Polybrominated biphenyls (J)	67774327	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	1,200	NA
Polychlorinated biphenyls (PCBs) (J,T)	1336363	NA	NLL	NLL	NLL	3.0E+6	2.4E+5	7.9E+6	7.9E+6	5.2E+6	(T)	NA
Prometon	1610180	NA	4,900	NA	5.5E+6	NLV	NLV	NLV	NLV	ID	5.0E+6	NA
Propachlor	1918167	NA	1,900	NA	8.8E+6	NLV	NLV	NLV	NLV	ID	2.9E+6	NA
Propazine	139402	NA	4,000	NA	1.7E+5	NLV	NLV	NLV	NLV	ID	6.1E+6	NA

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Propionic acid	79094	NA	2.4E+5	ID	1.1E+8 (C)	NLV	NLV	NLV	NLV	2.0E+10	1.1E+8 (C)	1.1E+8
Propyl alcohol (I)	71238	NA	28,000	NA	1.1E+8 (C)	NLV	NLV	NLV	NLV	4.9E+10	1.3E+7 (DD)	1.1E+8
n-Propylbenzene (I)	103651	NA	1,600	ID	3.0E+5	ID	ID	ID	ID	1.3E+9	2.5E+6	1.0E+7
Propylene glycol	57556	NA	3.0E+6	5.8E+6	1.1E+8 (C)	NLV	NLV	NLV	NLV	4.0E+11	1.1E+8 (C)	1.1E+8
Pyrene	129000	NA	4.8E+5	ID	4.8E+5	1.0E+9 (D)	6.5E+8	6.5E+8	6.5E+8	6.7E+9	2.9E+7	NA
Pyridine (I)	110861	NA	400	NA	37,000 (C)	1,100	8,200	40,000	97,000	2.3E+8	37,000 (C)	37,000
Selenium (B)	7782492	410	4,000	400	7.8E+7	NLV	NLV	NLV	NLV	1.3E+8	2.6E+6	NA
Silver (B)	7440224	1,000	4,500	100 (M); 27	2.0E+8	NLV	NLV	NLV	NLV	6.7E+6	2.5E+6	NA
Silvex (2,4,5-TP)	93721	NA	3,600	2,200	3.1E+6	NLV	NLV	NLV	NLV	ID	1.7E+6	NA
Simazine	122349	NA	80	340	90,000	NLV	NLV	NLV	NLV	ID	1.2E+6	NA
Sodium	17341252	NA	2.5E+6	NA	1.0E+9 (D)	NLV	NLV	NLV	NLV	ID	1.0E+9 (D)	NA
Sodium azide	26628228	NA	1,800	1,000	ID	ID	ID	ID	ID	ID	2.7E+6	NA
Strontium (B)	7440246	NA	92,000	4.2E+5	1.0E+9 (D)	NLV	NLV	NLV	NLV	ID	3.3E+8	NA
Styrene	100425	NA	2,700	2,100 (X)	2.7E+5	2.5E+5	9.7E+5	9.7E+5	1.4E+6	5.5E+9	4.0E+5	5.2E+5
Sulfate	14808798	NA	5.0E+6	NA	ID	NLV	NLV	NLV	NLV	ID	ID	NA
Tebuthiuron	34014181	NA	10,000	NA	5.0E+7	NLV	NLV	NLV	NLV	ID	4.6E+6 (DD)	NA
2,3,7,8-Tetrabromodibenzo-p-dio (O)	50585416	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	(O)	(O)	NA
1,2,4,5-Tetrachlorobenzene	95943	NA	1.5E+6	3,400 (X)	1.5E+6	5.8E+5	2.3E+5	2.3E+5	2.3E+5	6.7E+7	7.7E+7	NA
2,3,7,8-Tetrachlorodibenzo-p-dio (O)	1746016	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	71 (O)	0.09 (O)	NA
1,1,1,2-Tetrachloroethane	630206	NA	1,500	ID	4.4E+5 (C)	6,200	36,000	54,000	1.0E+5	4.2E+8	4.4E+5 (C)	4.4E+5
1,1,2,2-Tetrachloroethane	79345	NA	170	1,600 (X)	94,000	4,300	10,000	10,000	14,000	5.4E+7	53,000	8.7E+5

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Tetrachloroethylene	127184	NA	**100**	1,200 (X)	88,000 (C)	11,000	1.7E+5	4.8E+5	1.1E+6	2.7E+9	88,000 (C)	88,000
Tetrahydrofuran	109999	NA	**1,900**	2.2E+5 (X)	3.2E+7	1.3E+6	1.3E+7	6.7E+7	1.6E+8	3.9E+11	2.9E+6	1.2E+8
Tetranitromethane	509148	NA	ID	NA	ID	500(M); 110	500 (M); 51	ID	ID	2.1E+5	ID	ID
Thallium (B)	7440280	NA	**2,300**	4,200 (X)	1.5E+7	NLV	NLV	NLV	NLV	1.3E+7	35,000	NA
Toluene (I)	108883	NA	16,000	**5,400**	2.5E+5 (C)	2.5E+5 (C)	2.8E+6	5.1E+6	1.2E+7	2.7E+10	2.5E+5 (C)	2.5E+5
p-Toluidine	106490	NA	660 (M); 300	NA	4.8E+5	NLV	NLV	NLV	NLV	1.0E+8	94,000	1.2E+6
Toxaphene	8001352	NA	24,000	**8,200**	3.6E+5	NLV	NLV	NLV	NLV	9.7E+6	20,000	NA
Triallate	2303175	NA	95,000	NA	2.5E+5 (C)	ID	ID	ID	ID	ID	2.5E+5 (C)	2.5E+5
Tributylamine	102829	NA	7,800	ID	1.8E+6	5.8E+5	6.0E+5	6.0E+5	6.0E+5	4.7E+8	7.9E+5	3.7E+6
1,2,4-Trichlorobenzene	120821	NA	4,200	**5,900 (X)**	1.1E+6 (C)	1.1E+6 (C)	2.8E+7	2.8E+7	2.8E+7	2.5E+10	9.9E+5 (DD)	1.1E+6
1,1,1-Trichloroethane	71556	NA	4,000	1,800	4.6E+5 (C)	2.5E+5	3.8E+6	1.2E+7	2.8E+7	6.7E+10	4.6E+5 (C)	4.6E+5
1,1,2-Trichloroethane	79005	NA	**100**	6,600 (X)	4.2E+5	4,600	17,000	21,000	44,000	1.9E+8	1.8E+5	9.2E+5
Trichloroethylene	79016	NA	**100**	4,000 (X)	4.4E+5	1,000	11,000	25,000	57,000	1.3E+8	5.0E+5 (C,DD)	5.0E+5
Trichlorofluoromethane	75694	NA	52,000	NA	5.6E+5 (C)	5.6E+5 (C)	9.2E+7	6.3E+8	1.5E+9	3.8E+12	5.6E+5 (C)	5.6E+5
2,4,5-Trichlorophenol	95954	NA	39,000	NA	9.1E+6	NLV	NLV	NLV	NLV	2.3E+10	2.3E+7	NA
2,4,6-Trichlorophenol	88062	NA	2,400	330 (M); 100	2.0E+5	NLV	NLV	NLV	NLV	1.0E+9	7.1E+5	NA
1,2,3-Trichloropropane	96184	NA	840	NA	8.3E+5 (C)	4,000	9,200	9,200	11,000	2.0E+7	8.3E+5 (C)	8.3E+5
1,1,2-Trichloro-1,2,2-trifluoroetha	76131	NA	5.5E+5 (C)	**1,700**	5.5E+5 (C)	5.5E+5 (C)	1.8E+8	8.8E+8	2.1E+9	5.1E+12	5.5E+5 (C)	5.5E+5
Triethanolamine	102716	NA	74,000	NA	1.1E+8 (C)	NLV	NLV	NLV	NLV	3.3E+9	1.1E+8	1.1E+8
Triethylene glycol	112276	NA	1.1E+5 (C)	NA	1.1E+5 (C)	NLV	NLV	NLV	NLV	ID	1.1E+5 (C,DD)	1.1E+5
3-Trifluoromethyl-4-nitrophenol	88302	NA	1.1E+5	NA	1.2E+8	NLV	NLV	NLV	NLV	ID	4.1E+7 (DD)	NA

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PART 213 TIER 1 RISK-BASED SCREENING LEVELS (RBSLs)
DOCUMENT RELEASE DATE: SEPTEMBER 28, 2012

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			Groundwater Protection			Indoor Air	Ambient Air (Y)				Direct Contact	
Guidesheet Number ⟶		#10	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20
Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Levels	Drinking Water Protection Criteria & RBSLs	Groundwater Surface Water Interface Protection Criteria & RBSLs	Groundwater Contact Protection Criteria & RBSLs	Soil Volatilization to Indoor Air Inhalation Criteria & RBSLs	Infinite Source Volatile Soil Inhalation Criteria (VSIC) & RBSLs	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria & RBSLs	Direct Contact Criteria & RBSLs	Soil Saturation Concentration Screening Levels
Trifluralin	1582098	NA	1.9E+5	NA	1.2E+7	ID	ID	ID	ID	ID	2.0E+6	NA
2,2,4-Trimethyl pentane	540841	NA	ID	NA	ID	19,000 (C)	5.2E+6	3.9E+7	9.6E+7	2.3E+11	ID	19,000
2,4,4-Trimethyl-2-pentene (I)	107404	NA	ID	NA	ID	ID	ID	ID	ID	ID	ID	56,000
1,2,4-Trimethylbenzene (I)	95636	NA	2,100	570	1.1E+5 (C)	1.1E+5 (C)	2.1E+7	5.0E+8	5.0E+8	8.2E+10	1.1E+5 (C)	1.1E+5
1,3,5-Trimethylbenzene (I)	108678	NA	1,800	1,100	94,000 (C)	94,000 (C)	1.6E+7	3.8E+8	3.8E+8	8.2E+10	94,000 (C)	94,000
Triphenyl phosphate	115866	NA	1.1E+5 (C)	NA	1.1E+5 (C)	NLV	NLV	NLV	NLV	ID	1.1E+5 (C)	1.1E+5
tris(2,3-Dibromopropyl)phosphate	126727	NA	930	ID	27,000 (C)	27,000 (C)	18,000	18,000	18,000	5.9E+6	4,400	27,000
Urea	57136	NA	ID	NA	ID	NLV	NLV	NLV	NLV	ID	ID	NA
Vanadium	7440622	NA	72,000	4.3E+5	1.0E+9 (D)	NLV	NLV	NLV	NLV	ID	7.5E+5 (DD)	NA
Vinyl acetate (I)	108054	NA	13,000	NA	2.4E+6 (C)	7.9E+5	1.7E+6	2.6E+6	5.8E+6	1.3E+10	2.4E+6 (C,DD)	2.4E+6
Vinyl chloride	75014	NA	40	260 (X)	20,000	270	4,200	30,000	73,000	3.5E+8	3,800	4.9E+5
White phosphorus (R)	12185103	NA	2.2	NA	58,000	NLV	NLV	NLV	NLV	ID	2,300 (DD)	NA
Xylenes (I)	1330207	NA	5,600	820	1.5E+5 (C)	1.5E+5 (C)	4.6E+7	6.1E+7	1.3E+8	2.9E+11	1.5E+5 (C)	1.5E+5
Zinc (B)	7440666	47,000	2.4E+6	(G)	1.0E+9 (D)	NLV	NLV	NLV	NLV	ID	1.7E+8	NA

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Acenaphthene	83329	NA	3.0E+5	8.8E+5	8,700	9.7E+5	3.5E+8	9.7E+7	9.7E+7	9.7E+7	6.2E+9	1.3E+8	NA
Acenaphthylene	208968	NA	5,900	17,000	ID	4.4E+5	3.0E+6	2.7E+6	2.7E+6	2.7E+6	1.0E+9	5.2E+6	NA
Acetaldehyde (I)	75070	NA	19,000	54,000	2,600	1.1E+8 (C)	4.0E+5	2.1E+5	2.1E+5	2.9E+5	2.6E+8	9.5E+7	1.1E+8
Acetate	71501	NA	ID	ID	(G)	ID	ID	ID	ID	ID	ID	ID	ID
Acetic acid	64197	NA	84,000	2.4E+5	(G)	6.5E+8 (C)	NLV	NLV	NLV	NLV	7.4E+9	4.2E+8	6.5E+8
Acetone (I)	67641	NA	15,000	42,000	34,000	1.1E+8 (C)	1.1E+8 (C)	1.6E+8	1.6E+8	2.0E+8	1.7E+11	7.3E+7	1.1E+8
Acetonitrile	75058	NA	2,800	8,000	NA	2.2E+7 (C)	8.8E+6	1.9E+6	1.9E+6	2.2E+6	1.8E+9	1.4E+7	2.2E+7
Acetophenone	98862	NA	30,000	88,000	ID	1.1E+6 (C)	1.1E+6 (C)	5.2E+7	5.2E+7	5.2E+7	1.4E+10	1.1E+6 (C)	1.1E+6
Acrolein (I)	107028	NA	2,400	6,600	NA	2.3E+7 (C)	760	370	370	630	5.9E+5	1.2E+7	2.3E+7
Acrylamide	79061	NA	10	10	200 (X)	2.6E+5	NLV	NLV	NLV	NLV	3.0E+6	8,700	NA
Acrylic acid	79107	NA	78,000	2.2E+5	NA	1.1E+8 (C)	5.5E+6	2.2E+5	2.7E+5	2.7E+5	2.9E+7	1.1E+8 (C,DD)	1.1E+8
Acrylonitrile (I)	107131	NA	100 (M); 52	220	100 (M); 40	2.8E+5	35,000	17,000	17,000	31,000	5.8E+7	74,000	8.3E+6
Alachlor	15972608	NA	52	52	290 (X)	44,000	NLV	NLV	NLV	NLV	ID	3.9E+5	NA
Aldicarb	116063	NA	60	60	NA	2.4E+6	NLV	NLV	NLV	NLV	ID	7.3E+5	NA
Aldicarb sulfone	1646884	NA	200 (M); 40	200 (M); 40	NA	4.2E+7	NLV	NLV	NLV	NLV	ID	8.0E+5	NA
Aldicarb sulfoxide	1646873	NA	200(M); 80	200 (M); 80	NA	5.4E+7	NLV	NLV	NLV	NLV	ID	9.5E+5	NA
Aldrin	309002	NA	NLL	NLL	NLL	NLL	7.1E+6	2.0E+5	2.0E+5	2.0E+5	8.0E+5	4,300	NA
Aluminum (B)	7429905	6.9E+6	1,000	1,000	NA	1.0E+9 (D)	NLV	NLV	NLV	NLV	ID	3.7E+8 (DD)	NA
Ammonia	7664417	NA	ID	ID	(CC)	ID	ID	ID	ID	ID	2.9E+9	ID	1.0E+7
t-Amyl methyl ether (TAME)	994058	NA	3,900	3,900	NA	4.4E+5 (C)	1.1E+5	4.0E+5	7.8E+5	1.8E+6	1.8E+9	4.4E+5 (C)	4.4E+5
Aniline	62533	NA	1,100	4,400	330 (M); 80	2.8E+6	NLV	NLV	NLV	NLV	2.9E+7	1.5E+6	4.5E+6

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Anthracene	120127	NA	41,000	41,000	ID	41,000	1.0E+9 (D)	1.6E+9	1.6E+9	1.6E+9	2.9E+10	7.3E+8	NA
Antimony	7440360	NA	4,300	4,300	94,000 (X)	4.9E+7	NLV	NLV	NLV	NLV	5.9E+6	6.7E+5	NA
Arsenic	7440382	5,800	4,600	4,600	4,600	2.0E+6	NLV	NLV	NLV	NLV	9.1E+5	37,000	NA
Asbestos (BB)	1332214	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	1.0E+7 (M); 85,000	ID	NA
Atrazine	1912249	NA	60	60	150	1.1E+5	NLV	NLV	NLV	NLV	ID	3.3E+5 (DD)	NA
Azobenzene	103333	NA	4,200	17,000	ID	3.0E+5	3.2E+7	2.1E+6	2.1E+6	2.1E+6	1.3E+8	6.6E+5	NA
Barium (B)	7440393	75,000	1.3E+6	1.3E+6	(G)	1.0E+9 (D)	NLV	NLV	NLV	NLV	1.5E+8	1.3E+8	NA
Benzene (I)	71432	NA	100	100	4,000 (X)	2.2E+5	8,400	45,000	99,000	2.3E+5	4.7E+8	4.0E+5 (C)	4.0E+5
Benzidine	92875	NA	1,000 (M); 6.0	1,000 (M); 6.0	1,000 (M); 6.0	1,000 (M); 140	NLV	NLV	NLV	NLV	59,000	1,000 (M); 110	NA
Benzo(a)anthracene (Q)	56553	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	80,000	NA
Benzo(b)fluoranthene (Q)	205992	NA	NLL	NLL	NLL	NLL	ID	ID	ID	ID	ID	80,000	NA
Benzo(k)fluoranthene (Q)	207089	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	8.0E+5	NA
Benzo(g,h,i)perylene	191242	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	3.5E+8	7.0E+6	NA
Benzo(a)pyrene (Q)	50328	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	1.9E+6	8,000	NA
Benzoic acid	65850	NA	6.4E+5	1.8E+6	NA	7.0E+7	NLV	NLV	NLV	NLV	ID	1.0E+9 (D)	NA
Benzyl alcohol	100516	NA	2.0E+5	5.8E+5	NA	5.8E+6 (C)	NLV	NLV	NLV	NLV	1.5E+11	5.8E+6 (C)	5.8E+6
Benzyl chloride	100447	NA	150	640	NA	72,000	33,000	48,000	48,000	52,000	7.8E+7	2.2E+5	2.3E+5
Beryllium	7440417	NA	51,000	51,000	(G)	1.0E+9 (D)	NLV	NLV	NLV	NLV	5.9E+5	1.6E+6	NA
bis(2-Chloroethoxy)ethane	112265	NA	ID	ID	ID	ID	NLV	NLV	NLV	NLV	ID	ID	2.7E+6
bis(2-Chloroethyl)ether (I)	111444	NA	100	170	100 (M); 20	1.1E+5	44,000	13,000	13,000	13,000	1.2E+7	58,000	2.2E+6

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bis(2-Ethylhexyl)phthalate	117817	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	8.9E+8	1.0E+7 (C)	1.0E+7
Boron (B)	7440428	NA	10,000	10,000	1.4E+5 (X)	1.0E+9 (D)	NLV	NLV	NLV	NLV	ID	3.5E+8 (DD)	NA
Bromate	15541454	NA	200	200	800 (X)	96,000	NLV	NLV	NLV	NLV	ID	91,000	NA
Bromobenzene (I)	108861	NA	550	1,500	NA	3.6E+5	5.8E+5	5.4E+5	5.4E+5	5.4E+5	2.4E+8	7.6E+5 (C)	7.6E+5
Bromodichloromethane	75274	NA	1,600 (W)	1,600 (W)	ID	2.8E+5	6,400	31,000	31,000	57,000	1.1E+8	4.9E+5	1.5E+6
Bromoform	75252	NA	1,600 (W)	1,600 (W)	ID	8.7E+5 (C)	7.7E+5	3.1E+6	3.1E+6	3.1E+6	3.6E+9	8.7E+5 (C)	8.7E+5
Bromomethane	74839	NA	200	580	700	1.4E+6	1,600	13,000	57,000	1.4E+5	1.5E+8	1.0E+6	2.2E+6
n-Butanol (I)	71363	NA	19,000	54,000	2.0E+5	8.7E+6 (C)	NLV	NLV	NLV	NLV	1.0E+10	8.7E+6 (C)	8.7E+6
2-Butanone (MEK) (I)	78933	NA	2.6E+5	7.6E+5	44,000	2.7E+7 (C)	2.7E+7 (C)	3.5E+7	3.5E+7	3.6E+7	2.9E+10	2.7E+7 (C,DD)	2.7E+7
n-Butyl acetate	123864	NA	11,000	32,000	NA	1.1E+6 (C)	1.1E+6 (C)	1.4E+8	3.1E+8	3.5E+8	2.1E+11	1.1E+6 (C)	1.1E+6
t-Butyl alcohol	75650	NA	78,000	2.2E+5	NA	1.1E+8 (C)	1.1E+8 (C)	1.2E+8	2.4E+8	2.4E+8	5.6E+10	1.1E+8 (C)	1.1E+8
Butyl benzyl phthalate	85687	NA	3.1E+5 (C)	3.1E+5 (C)	1.2E+5 (X)	3.1E+5 (C)	NLV	NLV	NLV	NLV	2.1E+10	3.1E+5 (C)	3.1E+5
n-Butylbenzene	104518	NA	1,600	4,600	ID	1.2E+5	ID	ID	ID	ID	8.8E+8	8.0E+6	1.0E+7
sec-Butylbenzene	135988	NA	1,600	4,600	ID	88,000	ID	ID	ID	ID	1.8E+8	8.0E+6	1.0E+7
t-Butylbenzene (I)	98066	NA	1,600	4,600	ID	1.8E+5	ID	ID	ID	ID	2.9E+8	8.0E+6	1.0E+7
Cadmium (B)	7440439	1,200	6,000	6,000	(G,X)	2.3E+8	NLV	NLV	NLV	NLV	2.2E+6	2.1E+6	NA
Camphene (I)	79925	NA	ID	ID	NA	ID	6,700	1.8E+5	9.1E+5	2.2E+6	2.4E+9	ID	NA
Caprolactam	105602	NA	1.2E+5	3.4E+5	NA	1.0E+9 (D)	NLV	NLV	NLV	NLV	2.9E+8	3.1E+8 (DD)	NA
Carbaryl	63252	NA	14,000	40,000	NA	2.6E+6	ID	ID	ID	ID	ID	7.0E+7	NA
Carbazole	86748	NA	9,400	39,000	1,100	8.2E+5	NLV	NLV	NLV	NLV	7.8E+7	2.4E+6	NA
Carbofuran	1563662	NA	800	800	NA	6.8E+6	NLV	NLV	NLV	NLV	ID	3.6E+6	NA

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Carbon disulfide (I,R)	75150	NA	16,000	46,000	ID	2.8E+5 (C)	1.4E+5	1.6E+6	8.0E+6	1.9E+7	2.1E+10	2.8E+5 (C,DD)	2.8E+5
Carbon tetrachloride	56235	NA	100	100	900 (X)	92,000	990	12,000	34,000	79,000	1.7E+8	3.9E+5 (C)	3.9E+5
Chlordane (J)	57749	NA	NLL	NLL	NLL	NLL	5.9E+7	4.2E+6	4.2E+6	4.2E+6	2.1E+7	1.5E+5	NA
Chloride	16887006	NA	5.0E+6	5.0E+6	(X)	ID	NLV	NLV	NLV	NLV	ID	5.0E+5 (F)	NA
Chlorobenzene (I)	108907	NA	2,000	2,000	500	2.6E+5 (C)	2.2E+5	9.2E+5	1.1E+6	2.1E+6	2.1E+9	2.6E+5 (C)	2.6E+5
p-Chlorobenzene sulfonic acid	98668	NA	1.5E+5	4.2E+5	ID	NA	ID	ID	ID	ID	ID	7.3E+8	ID
1-Chloro-1,1-difluoroethane	75683	NA	3.0E+5	8.8E+5	NA	9.6E+5 (C)	9.6E+5 (C)	9.4E+7	5.7E+8	1.4E+9	1.5E+12	9.6E+5 (C)	9.6E+5
Chloroethane	75003	NA	8,600	34,000	22,000 (X)	9.5E+5 (C)	9.5E+5 (C)	3.6E+7	1.2E+8	2.8E+8	2.9E+11	9.5E+5 (C)	9.5E+5
2-Chloroethyl vinyl ether	110758	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	1.9E+6
Chloroform	67663	NA	1,600 (W)	1,600 (W)	7,000	1.5E+6 (C)	38,000	1.5E+5	3.4E+5	7.9E+5	1.6E+9	1.5E+6 (C)	1.5E+6
Chloromethane (I)	74873	NA	5,200	22,000	ID	1.1E+6 (C)	10,000	1.2E+5	1.0E+6	2.5E+6	2.6E+9	1.1E+6 (C)	1.1E+6
4-Chloro-3-methylphenol	59507	NA	5,800	16,000	280	3.0E+6	NLV	NLV	NLV	NLV	ID	1.5E+7	NA
beta-Chloronaphthalene	91587	NA	6.2E+5	1.8E+6	NA	2.3E+6	ID	ID	ID	ID	ID	1.8E+8	NA
2-Chlorophenol	95578	NA	900	2,600	360	1.9E+6	8.0E+5	1.1E+6	1.1E+6	1.1E+6	5.3E+8	4.5E+6	1.9E+7
o-Chlorotoluene (I)	95498	NA	3,300	9,300	ID	5.0E+5 (C)	5.0E+5 (C)	1.5E+6	3.1E+6	6.4E+6	2.1E+9	5.0E+5 (C)	5.0E+5
Chlorpyrifos	2921882	NA	17,000	48,000	1,500	8.4E+5	240	5,500	23,000	56,000	5.9E+7	3.4E+7	NA
Chromium (III) (B,H)	16065831	18,000 (total)	1.0E+9 (D)	1.0E+9 (D)	(G,X)	1.0E+9 (D)	NLV	NLV	NLV	NLV	1.5E+8	1.0E+9 (D)	NA
Chromium (VI)	18540299	NA	30,000	30,000	3,300	1.4E+8	NLV	NLV	NLV	NLV	2.4E+5	9.2E+6	NA
Chrysene (Q)	218019	NA	NLL	NLL	NLL	NLL	ID	ID	ID	ID	ID	8.0E+6	NA
Cobalt	7440484	6,800	800	2,000	2,000	4.8E+7	NLV	NLV	NLV	NLV	5.9E+6	9.0E+6	NA
Copper (B)	7440508	32,000	5.8E+6	5.8E+6	(G)	1.0E+9 (D)	NLV	NLV	NLV	NLV	5.9E+7	7.3E+7	NA

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Cyanazine	21725462	NA	200	200	1,100 (X)	56,000	NLV	NLV	NLV	NLV	ID	66,000	NA
Cyanide (P,R)	57125	390 (total)	4,000	4,000	100	2.5E+5	NLV	NLV	NLV	NLV	2.5E+5	2.5E+5	NA
Cyclohexanone	108941	NA	5.2E+6	1.5E+7	NA	2.2E+8 (C)	32,000	1.3E+6	1.1E+7	2.7E+7	2.9E+10	2.2E+8 (C)	2.2E+8
Dacthal	1861321	NA	50,000	1.4E+5	NA	3.4E+5	NLV	NLV	NLV	NLV	ID	7.3E+6	NA
Dalapon	75990	NA	4,000	4,000	NA	5.9E+7 (C)	NLV	NLV	NLV	NLV	ID	5.9E+7 (C)	5.9E+7
4-4'-DDD	72548	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	5.6E+7	4.0E+5	NA
4-4'-DDE	72559	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	4.0E+7	1.9E+5	NA
4-4'-DDT	50293	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	4.0E+7	2.8E+5	NA
Decabromodiphenyl ether	1163195	NA	1.4E+5	1.4E+5	NA	1.4E+5	1.0E+9 (D)	1.0E+8	1.0E+8	1.0E+8	1.0E+9	1.1E+7	NA
Di-n-butyl phthalate	84742	NA	7.6E+5 (C)	7.6E+5 (C)	11,000	7.6E+5 (C)	NLV	NLV	NLV	NLV	1.5E+9	7.6E+5 (C)	7.6E+5
Di(2-ethylhexyl) adipate	103231	NA	9.6E+5 (C)	9.6E+5 (C)	ID	9.6E+5 (C)	NLV	NLV	NLV	NLV	1.2E+10	9.6E+5 (C,DD)	9.6E+5
Di-n-octyl phthalate	117840	NA	1.0E+8	1.4E+8 (C)	ID	1.4E+8 (C)	NLV	NLV	NLV	NLV	1.4E+10	2.0E+7	1.4E+8
Diacetone alcohol (I)	123422	NA	ID	ID	NA	ID	NLV	NLV	NLV	NLV	7.1E+10	ID	1.1E+8
Diazinon	333415	NA	95	280	72	95,000	NLV	NLV	NLV	NLV	ID	70,000 (DD)	3.1E+5
Dibenzo(a,h)anthracene (Q)	53703	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	8,000	NA
Dibenzofuran	132649	NA	ID	ID	1,700	ID	3.6E+6	1.6E+5	1.6E+5	1.6E+5	2.9E+6	ID	NA
Dibromochloromethane	124481	NA	1,600 (W)	1,600 (W)	ID	3.6E+5	21,000	80,000	80,000	98,000	1.6E+8	5.0E+5	6.1E+5
Dibromochloropropane	96128	NA	10 (M); 4.0	10 (M); 4.0	ID	1,200 (C)	1,200 (C)	900	900	900	7.0E+5	1,200 (C)	1,200
Dibromomethane	74953	NA	1,600	4,600	NA	2.0E+6 (C)	ID	ID	ID	ID	ID	2.0E+6 (C)	2.0E+6
Dicamba	1918009	NA	4,400	13,000	NA	1.2E+7	NLV	NLV	NLV	NLV	ID	1.7E+7	NA
1,2-Dichlorobenzene	95501	NA	14,000	14,000	280	2.1E+5 (C)	2.1E+5 (C)	4.6E+7	4.6E+7	5.5E+7	4.4E+10	2.1E+5 (C)	2.1E+5

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1,3-Dichlorobenzene	541731	NA	170	480	680	51,000	48,000	94,000	94,000	1.1E+5	8.8E+7	1.7E+5 (C)	1.7E+5
1,4-Dichlorobenzene	106467	NA	1,700	1,700	360	1.4E+5	1.0E+5	2.6E+5	2.6E+5	3.4E+5	5.7E+8	1.9E+6	NA
3,3'-Dichlorobenzidine	91941	NA	2,000 (M); 28	2,000 (M); 110	2,000 (M); 7.4	4,600	NLV	NLV	NLV	NLV	8.2E+6	30,000	NA
Dichlorodifluoromethane	75718	NA	95,000	2.7E+5	ID	1.0E+6 (C)	1.7E+6	6.3E+7	5.5E+8	1.4E+9	1.5E+12	1.0E+6 (C)	1.0E+6
1,1-Dichloroethane	75343	NA	18,000	50,000	15,000	8.9E+5 (C)	4.3E+5	2.5E+6	6.0E+6	1.4E+7	1.5E+10	8.9E+5 (C)	8.9E+5
1,2-Dichloroethane (I)	107062	NA	100	100	7,200 (X)	3.8E+5	11,000	21,000	33,000	74,000	1.5E+8	4.2E+5	1.2E+6
1,1-Dichloroethylene (I)	75354	NA	140	140	2,600	2.2E+5	330	3,700	15,000	37,000	7.8E+7	5.7E+5 (C)	5.7E+5
cis-1,2-Dichloroethylene	156592	NA	1,400	1,400	12,000	6.4E+5 (C)	41,000	2.1E+5	4.3E+5	1.0E+6	1.0E+9	6.4E+5 (C)	6.4E+5
trans-1,2-Dichloroethylene	156605	NA	2,000	2,000	30,000 (X)	1.4E+6 (C)	43,000	3.3E+5	8.4E+5	2.0E+6	2.1E+9	1.4E+6 (C)	1.4E+6
2,6-Dichloro-4-nitroaniline	99309	NA	44,000	1.3E+5	NA	1.4E+5	NLV	NLV	NLV	NLV	ID	2.2E+8	NA
2,4-Dichlorophenol	120832	NA	1,500	4,200	330 (M); 220	9.6E+5	NLV	NLV	NLV	NLV	2.3E+9	1.8E+6 (C,DD)	1.8E+6
2,4-Dichlorophenoxyacetic acid	94757	NA	1,400	1,400	4,400	2.4E+6	NLV	NLV	NLV	NLV	2.9E+9	8.6E+6	NA
1,2-Dichloropropane (I)	78875	NA	100	100	4,600 (X)	3.2E+5	7,400	30,000	51,000	1.2E+5	1.2E+8	5.5E+5 (C)	5.5E+5
1,3-Dichloropropene	542756	NA	170	700	180 (X)	1.1E+5	5,400	60,000	2.0E+5	4.7E+5	5.9E+8	2.4E+5	6.2E+5
Dichlorovos	62737	NA	50 (M); 32	130	NA	1.2E+5	NLV	NLV	NLV	NLV	1.5E+7	47,000	2.2E+6
Dicyclohexyl phthalate	84617	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	NA
Dieldrin	60571	NA	NLL	NLL	NLL	NLL	7.2E+5	64,000	64,000	64,000	8.5E+5	4,700	NA
Diethyl ether	60297	NA	200	200	ID	7.4E+6 (C)	7.4E+6 (C)	1.0E+8	1.6E+8	3.5E+8	3.5E+11	7.4E+6 (C)	7.4E+6
Diethyl phthalate	84662	NA	1.1E+5	3.2E+5	2,200	7.4E+5 (C)	NLV	NLV	NLV	NLV	1.5E+9	7.4E+5 (C)	7.4E+5
Diethylene glycol monobutyl ether	112345	NA	1,800	5,000	NA	8.0E+7	NLV	NLV	NLV	NLV	5.9E+8	8.7E+6	1.1E+8
Diisopropyl ether	108203	NA	600	1,300 (C)	ID	1,300 (C)	1,300 (C)	3.2E+6	4.8E+6	1.0E+7	1.1E+10	1,300 (C)	1,300

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Diisopropylamine (I)	108189	NA	110	320	NA	4.2E+5	6.7E+6 (C)	7.4E+6	7.4E+6	7.7E+6	5.9E+9	5.6E+5	6.7E+6
Dimethyl phthalate	131113	NA	7.9E+5 (C)	7.9E+5 (C)	NA	7.9E+5 (C)	NLV	NLV	NLV	NLV	1.5E+9	7.9E+5 (C)	7.9E+5
N,N-Dimethylacetamide	127195	NA	3,600	10,000	82,000 (X)	1.1E+8 (C)	NLV	NLV	NLV	NLV	ID	1.8E+7	1.1E+8
N,N-Dimethylaniline	121697	NA	320	920	NA	4.0E+5	8.0E+5 (C)	5.2E+5	5.2E+5	5.2E+5	3.3E+8	8.0E+5 (C)	8.0E+5
Dimethylformamide (I)	68122	NA	14,000	40,000	NA	1.1E+8 (C)	NLV	NLV	NLV	NLV	8.8E+8	7.0E+7	1.1E+8
2,4-Dimethylphenol	105679	NA	7,400	20,000	7,600	1.0E+7	NLV	NLV	NLV	NLV	2.1E+9	3.6E+7	NA
2,6-Dimethylphenol	576261	NA	330 (M); 88	330 (M); 260	NA	1.3E+5	NLV	NLV	NLV	NLV	5.9E+7	4.4E+5	NA
3,4-Dimethylphenol	95658	NA	330 (M); 200	580	500	3.6E+5	NLV	NLV	NLV	NLV	1.0E+8	1.0E+6	NA
Dimethylsulfoxide	67685	NA	4.4E+6	1.3E+7	3.8E+6	1.8E+7 (C)	NLV	NLV	NLV	NLV	5.9E+8	1.8E+7 (C)	1.8E+7
2,4-Dinitrotoluene	121142	NA	430	640	NA	1.7E+5	NLV	NLV	NLV	NLV	2.0E+7	2.2E+5	NA
Dinoseb	88857	NA	300	300	200 (M); 43	1.4E+5 (C)	NLV	NLV	NLV	NLV	1.2E+8	1.4E+5 (C,DD)	1.4E+5
1,4-Dioxane (I)	123911	NA	1,700	7,000	56,000 (X)	3.4E+7	NLV	NLV	NLV	NLV	7.1E+8	2.4E+6	9.7E+7
Diquat	85007	NA	400	400	400	1.4E+7	NLV	NLV	NLV	NLV	ID	1.6E+6	NA
Diuron	330541	NA	620	1,800	NA	7.4E+5	NLV	NLV	NLV	NLV	2.1E+8	3.1E+6	NA
Endosulfan (J)	115297	NA	NLL	NLL	NLL	NLL	ID	ID	ID	ID	ID	4.4E+6	NA
Endothall	145733	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	1.0E+9	1.2E+7	NA
Endrin	72208	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	1.9E+5	NA
Epichlorohydrin (I)	106898	NA	100	100	NA	2.2E+5	1.2E+5	37,000	37,000	37,000	2.9E+7	41,000	7.3E+6
Ethanol (I)	64175	NA	3.8E+7	7.6E+7	ID	1.1E+8 (C)	NLV	NLV	NLV	NLV	5.6E+11	1.1E+8 (C,DD)	1.1E+8
Ethyl acetate (I)	141786	NA	1.3E+5	3.8E+5	NA	7.5E+6 (C)	7.5E+6 (C)	5.9E+7	5.9E+7	1.0E+8	9.4E+10	7.5E+6 (C)	7.5E+6
Ethyl-tert-butyl ether (ETBE)	637923	NA	980	980	ID	ID	6.5E+5 (C)	2.3E+6	4.6E+6	1.1E+7	1.1E+10	ID	6.5E+5

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Ethylbenzene (I)	100414	NA	1,500	1,500	360	1.4E+5 (C)	1.4E+5 (C)	2.4E+6	3.1E+6	6.5E+6	1.3E+10	1.4E+5 (C)	1.4E+5
Ethylene dibromide	106934	NA	20 (M); 1.0	20 (M); 1.0	110 (X)	500	3,600	5,800	5,800	9,800	1.8E+7	430	8.9E+5
Ethylene glycol	107211	NA	3.0E+5	8.4E+5	3.8E+6 (X)	1.1E+8 (C)	NLV	NLV	NLV	NLV	2.9E+10	1.1E+8 (C)	1.1E+8
Ethylene glycol monobutyl ether	111762	NA	74,000	2.0E+5	NA	4.1E+7 (C)	1.4E+6	2.1E+7	1.5E+8	3.6E+8	3.8E+11	4.1E+7 (C)	4.1E+7
Fluoranthene	206440	NA	7.3E+5	7.3E+5	5,500	7.3E+5	1.0E+9 (D)	8.9E+8	8.8E+8	8.8E+8	4.1E+9	1.3E+8	NA
Fluorene	86737	NA	3.9E+5	8.9E+5	5,300	8.9E+5	1.0E+9 (D)	1.5E+8	1.5E+8	1.5E+8	4.1E+9	8.7E+7	NA
Fluorine (soluble fluoride) (B)	7782414	NA	40,000	40,000	ID	2.4E+8	NLV	NLV	NLV	NLV	ID	6.7E+7 (DD)	NA
Formaldehyde	50000	NA	26,000	76,000	2,400	6.0E+7 (C)	65,000	43,000	69,000	1.5E+5	2.6E+8	6.0E+7 (C)	6.0E+7
Formic acid (I,U)	64186	NA	2.0E+5	5.8E+5	ID	1.1E+8 (C)	2.8E+6	2.6E+5	1.6E+5	1.6E+5	5.9E+7	1.1E+8 (C)	1.1E+8
1-Formylpiperidine	2591868	NA	1,600	4,600	NA	ID	ID	ID	ID	ID	ID	8.0E+6	1.0E+7
Gentian violet	548629	NA	300	1,300	NA	2.0E+7	NLV	NLV	NLV	NLV	ID	4.4E+5	NA
Glyphosate	1071836	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	5.7E+7 (DD)	NA
Heptachlor	76448	NA	NLL	NLL	NLL	NLL	1.9E+6	2.1E+5	2.1E+5	2.1E+5	3.0E+6	23,000	NA
Heptachlor epoxide	1024573	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	1.5E+6	9,500	NA
n-Heptane	142825	NA	2.4E+5 (C)	2.4E+5 (C)	NA	2.4E+5 (C)	2.4E+5 (C)	2.5E+7	4.5E+7	1.0E+8	1.0E+11	2.4E+5 (C)	2.4E+5
Hexabromobenzene	87821	NA	5,400	5,400	ID	5,400	ID	ID	ID	ID	ID	3.1E+6	NA
Hexachlorobenzene (C-66)	118741	NA	1,800	1,800	350	8,200	2.2E+5	56,000	56,000	56,000	8.5E+6	37,000	NA
Hexachlorobutadiene (C-46)	87683	NA	26,000	72,000	91	3.5E+5 (C)	3.5E+5 (C)	4.6E+5	4.6E+5	4.6E+5	1.8E+8	3.5E+5 (C)	3.5E+5
alpha-Hexachlorocyclohexane	319846	NA	18	71	ID	2,500	1.6E+5	41,000	86,000	86,000	2.1E+6	12,000	NA
beta-Hexachlorocyclohexane	319857	NA	37	150	ID	5,100	NLV	NLV	NLV	NLV	7.4E+6	25,000	NA
Hexachlorocyclopentadiene (C-56)	77474	NA	3.2E+5	3.2E+5	ID	7.2E+5 (C)	56,000	60,000	60,000	60,000	5.9E+6	7.2E+5 (C)	7.2E+5

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Hexachloroethane	67721	NA	430	1,200	1,800 (X)	1.1E+5	79,000	6.6E+5	1.4E+6	1.4E+6	1.0E+8	7.3E+5	NA
n-Hexane	110543	NA	44,000 (C)	44,000 (C)	NA	44,000 (C)	44,000 (C)	3.5E+6	3.5E+6	6.4E+6	5.9E+9	44,000 (C)	44,000
2-Hexanone	591786	NA	20,000	58,000	ID	2.5E+6 (C)	1.8E+6	1.3E+6	1.3E+6	1.5E+6	1.2E+9	2.5E+6 (C)	2.5E+6
Indeno(1,2,3-cd)pyrene (Q)	193395	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	80,000	NA
Iron (B)	7439896	1.2E+7	6,000	6,000	NA	1.0E+9 (D)	NLV	NLV	NLV	NLV	ID	5.8E+8	NA
Isobutyl alcohol (I)	78831	NA	46,000	1.3E+5	NA	8.9E+6 (C)	8.9E+6 (C)	9.5E+7	9.5E+7	9.5E+7	4.4E+10	8.9E+6 (C)	8.9E+6
Isophorone	78591	NA	15,000	62,000	26,000 (X)	2.4E+6 (C)	NLV	NLV	NLV	NLV	8.2E+9	2.4E+6 (C)	2.4E+6
Isopropyl alcohol (I)	67630	NA	9,400	26,000	1.1E+6 (X)	1.1E+8 (C)	NLV	NLV	NLV	NLV	6.5E+9	4.7E+7	1.1E+8
Isopropyl benzene	98828	NA	91,000	2.6E+5	3,200	3.9E+5 (C)	3.9E+5 (C)	2.0E+6	2.0E+6	3.0E+6	2.6E+9	3.9E+5 (C)	3.9E+5
Lead (B)	7439921	21,000	7.0E+5	7.0E+5	(G,X)	ID	NLV	NLV	NLV	NLV	4.4E+7	9.0E+5 (DD)	NA
Lindane	58899	NA	20 (M); 7.0	20 (M); 7.0	20 (M); 1.1	7,100	ID	ID	ID	ID	ID	42,000	NA
Lithium (B)	7439932	9,800	3,400	7,000	8,800	1.1E+8	NLV	NLV	NLV	NLV	1.0E+9	3.1E+7 (DD)	NA
Magnesium (B)	7439954	NA	8.0E+6	2.2E+7	NA	1.0E+9 (D)	NLV	NLV	NLV	NLV	2.9E+9	1.0E+9 (D)	NA
Manganese (B)	7439965	4.4E+5	1,000	1,000	(G,X)	1.8E+8	NLV	NLV	NLV	NLV	1.5E+6	9.0E+7	NA
Mercury (Total) (B,Z)	Varies	130	1,700	1,700	50 (M); 1.2	47,000	89,000	62,000	62,000	62,000	8.8E+6	5.8E+5	NA
Methane	74828	NA	ID	ID	NA	ID	8.4E+6 ug/m3 (GG)	ID	ID	ID	ID	ID	ID
Methanol	67561	NA	74,000	2.0E+5	3.1E+6 (C)	3.1E+6 (C)	3.1E+6 (C)	3.7E+7	4.6E+7	9.7E+7	9.6E+10	3.1E+6 (C)	3.1E+6
Methoxychlor	72435	NA	16,000	16,000	NA	18,000	ID	ID	ID	ID	ID	5.6E+6	NA
2-Methoxyethanol (I)	109864	NA	150	420	NA	1.7E+7	NLV	NLV	NLV	NLV	5.9E+8	7.3E+5	1.1E+8
2-Methyl-4-chlorophenoxyacetic acid	94746	NA	390	1,100	NA	4.9E+5	NLV	NLV	NLV	NLV	ID	7.3E+5	NA
2-Methyl-4,6-dinitrophenol	534521	NA	830 (M); 400	830 (M); 400	NA	1.9E+5	NLV	NLV	NLV	NLV	5.9E+7	2.6E+5	NA

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N-Methyl-morpholine (I)	109024	NA	400	1,100	NA	3.0E+7	NLV	NLV	NLV	NLV	ID	2.0E+6	1.1E+8
Methyl parathion	298000	NA	46	130	NA	76,000	NLV	NLV	NLV	NLV	ID	1.8E+5	NA
4-Methyl-2-pentanone (MIBK) (I)	108101	NA	36,000	1.0E+5	ID	2.7E+6 (C)	2.7E+6 (C)	5.3E+7	5.3E+7	7.0E+7	6.0E+10	2.7E+6 (C)	2.7E+6
Methyl-tert-butyl ether (MTBE)	1634044	NA	800	800	1.4E+5 (X)	5.9E+6 (C)	5.9E+6 (C)	3.0E+7	4.1E+7	8.9E+7	8.8E+10	5.9E+6 (C)	5.9E+6
Methylcyclopentane (I)	96377	NA	ID	ID	NA	ID	1.7E+5	2.8E+6	8.3E+6	2.0E+7	2.1E+10	ID	3.5E+5
4,4'-Methylene-bis-2- chloroaniline (MBOCA)	101144	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	1.1E+8	32,000	NA
Methylene chloride	75092	NA	100	100	30,000 (X)	2.3E+6 (C)	2.4E+5	7.0E+5	1.7E+6	4.0E+6	8.3E+9	2.3E+6 (C)	2.3E+6
2-Methylnaphthalene	91576	NA	57,000	1.7E+5	4,200	5.5E+6	4.9E+6	1.8E+6	1.8E+6	1.8E+6	2.9E+8	2.6E+7	NA
Methylphenols (J)	1319773	NA	7,400	20,000	1,000 (M); 600	1.6E+7	NLV	NLV	NLV	NLV	2.9E+9	3.6E+7	NA
Metolachlor	51218452	NA	4,800	20,000	300	4.4E+5 (C)	NLV	NLV	NLV	NLV	ID	4.4E+5 (C,DD)	4.4E+5
Metribuzin	21087649	NA	3,600	10,000	NA	2.4E+7	ID	ID	ID	ID	ID	2.8E+7	NA
Mirex	2385855	NA	NLL	NLL	NLL	NLL	ID	ID	ID	ID	ID	40,000	NA
Molybdenum (B)	7439987	NA	1,500	4,200	64,000 (X)	1.9E+7	NLV	NLV	NLV	NLV	ID	9.6E+6	NA
Naphthalene	91203	NA	35,000	1.0E+5	730	2.1E+6	4.7E+5	3.5E+5	3.5E+5	3.5E+5	8.8E+7	5.2E+7	NA
Nickel (B)	7440020	20,000	1.0E+5	1.0E+5	(G)	1.0E+9 (D)	NLV	NLV	NLV	NLV	1.6E+7	1.5E+8	NA
Nitrate (B,N)	14797558	NA	2.0E+5 (N)	2.0E+5 (N)	ID	1.0E+9 (D)	NLV	NLV	NLV	NLV	ID	ID	NA
Nitrite (B,N)	14797650	NA	20,000 (N)	20,000 (N)	NA	3.8E+8	NLV	NLV	NLV	NLV	ID	ID	NA
Nitrobenzene (I)	98953	NA	330 (M); 68	330 (M); 190	3,600 (X)	2.2E+5	1.7E+5	64,000	64,000	64,000	2.1E+7	3.4E+5	4.9E+5
2-Nitrophenol	88755	NA	400	1,200	ID	1.6E+6	NLV	NLV	NLV	NLV	ID	2.0E+6	NA
n-Nitroso-di-n-propylamine	621647	NA	330 (M); 100	330 (M); 100	NA	7,200	NLV	NLV	NLV	NLV	2.0E+6	5,400	1.5E+6
N-Nitrosodiphenylamine	86306	NA	5,400	22,000	NA	7.0E+5	NLV	NLV	NLV	NLV	2.8E+9	7.8E+6	NA

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Oxamyl	23135220	NA	4,000	4,000	NA	1.0E+9 (D)	NLV	NLV	NLV	NLV	ID	2.8E+7	NA
Oxo-hexyl acetate	88230357	NA	1,500	4,200	NA	ID	ID	ID	ID	ID	2.4E+9	7.3E+6	1.0E+7
Pendimethalin	40487421	NA	1.1E+6	1.1E+6	NA	1.1E+6	NLV	NLV	NLV	NLV	ID	1.3E+8	NA
Pentachlorobenzene	608935	NA	29,000	81,000	9,500	1.9E+5 (C)	ID	ID	ID	ID	ID	1.9E+5 (C)	1.9E+5
Pentachloronitrobenzene	82688	NA	37,000	37,000	NA	37,000	2.2E+5	2.8E+5	2.8E+5	2.8E+5	1.5E+8	5.5E+6	NA
Pentachlorophenol	87865	NA	22	22	(G,X)	4,300	NLV	NLV	NLV	NLV	1.3E+8	3.2E+5	NA
Pentane	109660	NA	ID	ID	NA	ID	1.8E+5	4.4E+7	3.4E+8	6.0E+8	5.3E+11	ID	2.4E+5
2-Pentene (I)	109682	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	2.2E+5
Phenanthrene	85018	NA	56,000	1.6E+5	2,100	1.1E+6	5.1E+6	1.9E+5	1.9E+5	1.9E+5	2.9E+6	5.2E+6	NA
Phenol	108952	NA	88,000	2.6E+5	9,000	1.2E+7 (C)	NLV	NLV	NLV	NLV	1.8E+10	1.2E+7 (C,DD)	1.2E+7
Phenytoin	57410	NA	830	3300	4300 (X)	6.8E+5	NLV	NLV	NLV	NLV	2.8E+8	4.8E+5	NA
Phosphorus (Total)	7723140	NA	1.3E+6	4.8E+6	(EE)	ID	NLV	NLV	NLV	NLV	2.9E+7	1.0E+9 (D)	NA
Phthalic acid	88993	NA	2.8E+5	8.0E+5	NA	1.7E+6 (C)	NLV	NLV	NLV	NLV	ID	1.7E+6 (C)	1.7E+6
Phthalic anhydride	85449	NA	3.0E+5	8.8E+5	NA	1.1E+6 (C)	NLV	NLV	NLV	NLV	ID	1.1E+6 (C)	1.1E+6
Picloram	1918021	NA	10,000	10,000	920	8.6E+6	NLV	NLV	NLV	NLV	ID	5.1E+7	NA
Piperidine	110894	NA	64	180	NA	6.8E+5	NLV	NLV	NLV	NLV	4.1E+9	3.2E+5	1.2E+8
Polybrominated biphenyls (J)	67774327	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	4,800	NA
Polychlorinated biphenyls (PCBs) (J,T)	1336363	NA	NLL	NLL	NLL	NLL	1.6E+7	8.1E+5	2.8E+7	2.8E+7	6.5E+6	(T)	NA
Prometon	1610180	NA	4,900	14,000	NA	5.5E+6	NLV	NLV	NLV	NLV	ID	1.6E+7	NA
Propachlor	1918167	NA	1,900	5,400	NA	8.8E+6	NLV	NLV	NLV	NLV	ID	9.5E+6	NA
Propazine	139402	NA	4,000	11,000	NA	1.7E+5	NLV	NLV	NLV	NLV	ID	2.0E+7	NA

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Propionic acid	79094	NA	2.4E+5	7.0E+5	ID	1.1E+8 (C)	NLV	NLV	NLV	NLV	8.8E+9	1.1E+8 (C)	1.1E+8
Propyl alcohol (I)	71238	NA	28,000	80,000	NA	1.1E+8 (C)	NLV	NLV	NLV	NLV	2.1E+10	7.4E+7 (DD)	1.1E+8
n-Propylbenzene (I)	103651	NA	1,600	4,600	ID	3.0E+5	ID	ID	ID	ID	5.9E+8	8.0E+6	1.0E+7
Propylene glycol	57556	NA	3.0E+6	8.4E+6	5.8E+6	1.1E+8 (C)	NLV	NLV	NLV	NLV	1.8E+11	1.1E+8 (C)	1.1E+8
Pyrene	129000	NA	4.8E+5	4.8E+5	ID	4.8E+5	1.0E+9 (D)	7.8E+8	7.8E+8	7.8E+8	2.9E+9	8.4E+7	NA
Pyridine (I)	110861	NA	400	420	NA	37,000 (C)	2,000	9,800	40,000	97,000	1.0E+8	37,000 (C)	37,000
Selenium (B)	7782492	410	4,000	4,000	400	7.8E+7	NLV	NLV	NLV	NLV	5.9E+7	9.6E+6	NA
Silver (B)	7440224	1,000	4,500	13,000	100 (M); 27	2.0E+8	NLV	NLV	NLV	NLV	2.9E+6	9.0E+6	NA
Silvex (2,4,5-TP)	93721	NA	3,600	3,600	2,200	3.1E+6	NLV	NLV	NLV	NLV	ID	5.5E+6	NA
Simazine	122349	NA	80	80	340	90,000	NLV	NLV	NLV	NLV	ID	3.8E+6	NA
Sodium	17341252	NA	2.5E+6	7.0E+6	NA	1.0E+9 (D)	NLV	NLV	NLV	NLV	ID	1.0E+9 (D)	NA
Sodium azide	26628228	NA	1,800	5,000	1,000	ID	ID	ID	ID	ID	ID	8.7E+6	NA
Strontium (B)	7440246	NA	92,000	2.6E+5	4.2E+5	1.0E+9 (D)	NLV	NLV	NLV	NLV	ID	1.0E+9 (D)	NA
Styrene	100425	NA	2,700	2,700	2,100 (X)	2.7E+5	5.2E+5 (C)	3.3E+6	3.3E+6	4.2E+6	6.9E+9	5.2E+5 (C)	5.2E+5
Sulfate	14808798	NA	5.0E+6	5.0E+6	NA	ID	NLV	NLV	NLV	NLV	ID	ID	NA
Tebuthiuron	34014181	NA	10,000	30,000	NA	5.0E+7	NLV	NLV	NLV	NLV	ID	2.7E+7 (DD)	NA
2,3,7,8-Tetrabromodibenzo-p-dioxin (O)	50585416	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	(O)	(O)	NA
1,2,4,5-Tetrachlorobenzene	95943	NA	1.5E+6	1.5E+6	3,400 (X)	1.5E+6	1.1E+6	2.7E+5	2.7E+5	2.7E+5	2.9E+7	2.5E+8	NA
2,3,7,8-Tetrachlorodibenzo-p-dioxin (O)	1746016	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	59 (O)	0.99 (O)	NA
1,1,1,2-Tetrachloroethane	630206	NA	1,500	6,400	ID	4.4E+5 (C)	33,000	1.2E+5	2.1E+5	3.3E+5	5.3E+8	4.4E+5 (C)	4.4E+5
1,1,2,2-Tetrachloroethane	79345	NA	170	700	1,600 (X)	94,000	23,000	34,000	34,000	34,000	6.8E+7	2.4E+5	8.7E+5

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DOCUMENT RELEASE DATE: SEPTEMBER 28, 2012

All criteria, unless otherwise noted, are expressed in units of parts per billion (ppb). One ppb is equivalent to one microgram per kilogram (ug/kg). Criteria with six or more digits are expressed in scientific notation. For example, 200,000 is presented as 2.0E+5. The lowest generic soil criterion for a given hazardous substance is presented in a bold box. A footnote is designated by a letter in parentheses and is explained in the footnote pages that follow the criteria tables. When the risk-based criterion is less than the target detection limit (TDL), the TDL is listed as the criterion (R 299.5707). In these cases, two numbers are present in the cell. The first number is the criterion (i.e., TDL), and the second number is the risk-based value. Criteria were originally promulgated December 21, 2002 within the Administrative Rules for Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. This table reflects revisions to the criteria pursuant to the December 2010 Part 201 amendments and new criteria consistent with the provisions of R299.5706a. The effective dates of the criteria and screening levels in this table vary. Please contact the Remediation Division Toxicology Unit for additional information.

			Groundwater Protection				Indoor Air	Ambient Air (Y)				Direct Contact	
Guidesheet Number —— >		#10	#11	#21	#12	#13	#22	#23	#24	#25	#26	#27	#20
Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Levels	Residential Drinking Water Protection Criteria & RBSLs	Non-Residential Drinking Water Protection Criteria & RBSLs	Groundwater Surface Water Interface Protection Criteria & RBSLs	Groundwater Contact Protection Criteria & RBSLs	Soil Volatilization to Indoor Air Inhalation Criteria & RBSLs	Infinite Source Volatile Soil Inhalation Criteria (VSIC) & RBSLs	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria & RBSLs	Direct Contact Criteria & RBSLs	Soil Saturation Concentration Screening Levels
Tetrachloroethylene	127184	NA	100	100	1,200 (X)	88,000 (C)	21,000	2.1E+5	4.9E+5	1.1E+6	1.2E+9	88,000 (C)	88,000
Tetrahydrofuran	109999	NA	1,900	5,400	2.2E+5 (X)	3.2E+7	2.4E+6	1.5E+7	6.7E+7	1.6E+8	1.7E+11	9.5E+6	1.2E+8
Tetranitromethane	509148	NA	ID	ID	NA	ID	600	500 (M); 180	ID	ID	2.6E+5	ID	ID
Thallium (B)	7440280	NA	2,300	2,300	4,200 (X)	1.5E+7	NLV	NLV	NLV	NLV	5.9E+6	1.3E+5	NA
Toluene (I)	108883	NA	16,000	16,000	5,400	2.5E+5 (C)	2.5E+5 (C)	3.3E+6	3.6E+7	3.6E+7	1.2E+10	2.5E+5 (C)	2.5E+5
p-Toluidine	106490	NA	660 (M); 300	1,200	NA	4.8E+5	NLV	NLV	NLV	NLV	1.3E+8	4.3E+5	1.2E+6
Toxaphene	8001352	NA	24,000	24,000	8,200	3.6E+5	NLV	NLV	NLV	NLV	1.2E+7	85,000	NA
Triallate	2303175	NA	95,000	2.5E+5 (C)	NA	2.5E+5 (C)	ID	ID	ID	ID	ID	2.5E+5 (C)	2.5E+5
Tributylamine	102829	NA	7,800	23,000	ID	1.8E+6	1.1E+6	7.2E+5	7.2E+5	7.2E+5	2.1E+8	2.6E+6	3.7E+6
1,2,4-Trichlorobenzene	120821	NA	4,200	4,200	5,900 (X)	1.1E+6 (C)	1.1E+6 (C)	3.4E+7	3.4E+7	3.4E+7	1.1E+10	1.1E+6 (C,DD)	1.1E+6
1,1,1-Trichloroethane	71556	NA	4,000	4,000	1,800	4.6E+5 (C)	4.6E+5	4.5E+6	1.5E+7	3.1E+7	2.9E+10	4.6E+5 (C)	4.6E+5
1,1,2-Trichloroethane	79005	NA	100	100	6,600 (X)	4.2E+5	24,000	57,000	57,000	1.2E+5	2.5E+8	8.4E+5	9.2E+5
Trichloroethylene	79016	NA	100	100	4,000 (X)	4.4E+5	1,900	14,000	25,000	58,000	5.9E+7	5.0E+5 (C,DD)	5.0E+5
Trichlorofluoromethane	75694	NA	52,000	1.5E+5	NA	5.6E+5 (C)	5.6E+5 (C)	1.1E+8	1.4E+11	1.4E+11	1.7E+12	5.6E+5 (C)	5.6E+5
2,4,5-Trichlorophenol	95954	NA	39,000	1.1E+5	NA	9.1E+6	NLV	NLV	NLV	NLV	1.0E+10	7.3E+7	NA
2,4,6-Trichlorophenol	88062	NA	2,400	9,400	330 (M); 100	2.0E+5	NLV	NLV	NLV	NLV	1.3E+9	3.3E+6	NA
1,2,3-Trichloropropane	96184	NA	840	2,400	NA	8.3E+5 (C)	7,500	11,000	11,000	12,000	8.8E+6	8.3E+5 (C)	8.3E+5
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	NA	5.5E+5 (C)	5.5E+5 (C)	1,700	5.5E+5 (C)	5.5E+5 (C)	2.1E+8	8.9E+8	2.1E+9	2.3E+12	5.5E+5 (C)	5.5E+5
Triethanolamine	102716	NA	74,000	2.0E+5	NA	1.1E+8 (C)	NLV	NLV	NLV	NLV	1.5E+9	1.1E+8 (C)	1.1E+8
Triethylene glycol	112276	NA	1.1E+5 (C)	1.1E+5 (C)	NA	1.1E+5 (C)	NLV	NLV	NLV	NLV	ID	1.1E+5 (C,DD)	1.1E+5
3-Trifluoromethyl-4-nitrophenol	88302	NA	1.1E+5	3.1E+5	NA	1.2E+8	NLV	NLV	NLV	NLV	ID	2.4E+8 (DD)	NA

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Trifluralin	1582098	NA	1.9E+5	5.7E+5	NA	1.2E+7	ID	ID	ID	ID	ID	5.7E+6	NA
2,2,4-Trimethyl pentane	540841	NA	ID	ID	NA	ID	19,000 (C)	6.3E+6	4.0E+7	9.6E+7	1.0E+11	ID	19,000
2,4,4-Trimethyl-2-pentene (I)	107404	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	ID	56,000
1,2,4-Trimethylbenzene (I)	95636	NA	2,100	2,100	570	1.1E+5 (C)	1.1E+5 (C)	2.5E+7	6.0E+8	6.0E+8	3.6E+10	1.1E+5 (C)	1.1E+5
1,3,5-Trimethylbenzene (I)	108678	NA	1,800	1,800	1,100	94,000 (C)	94,000 (C)	1.9E+7	4.6E+8	4.6E+8	3.6E+10	94,000 (C)	94,000
Triphenyl phosphate	115866	NA	1.1E+5 (C)	1.1E+5 (C)	NA	1.1E+5 (C)	NLV	NLV	NLV	NLV	ID	1.1E+5 (C)	1.1E+5
tris(2,3-Dibromopropyl)phosphate	126727	NA	930	930	ID	27,000 (C)	27,000 (C)	60,000	60,000	60,000	7.4E+6	20,000	27,000
Urea	57136	NA	ID	ID	NA	ID	NLV	NLV	NLV	NLV	ID	ID	NA
Vanadium	7440622	NA	72,000	9.9E+5	4.3E+5	1.0E+9 (D)	NLV	NLV	NLV	NLV	ID	5.5E+6 (DD)	NA
Vinyl acetate (I)	108054	NA	13,000	36,000	NA	2.4E+6 (C)	1.5E+6	2.0E+6	2.7E+6	5.9E+6	5.9E+9	2.4E+6 (C,DD)	2.4E+6
Vinyl chloride	75014	NA	40	40	260 (X)	20,000	2,800	29,000	1.7E+5	4.2E+5	8.9E+8	34,000	4.9E+5
White phosphorus (R)	12185103	NA	2.2	6.0	NA	58,000	NLV	NLV	NLV	NLV	ID	17,000 (DD)	NA
Xylenes (I)	1330207	NA	5,600	5,600	820	1.5E+5 (C)	1.5E+5 (C)	5.4E+7	6.5E+7	1.3E+8	1.3E+11	1.5E+5 (C)	1.5E+5
Zinc (B)	7440666	47,000	2.4E+6	5.0E+6	(G)	1.0E+9 (D)	NLV	NLV	NLV	NLV	ID	6.3E+8	NA

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TABLE 4. TOXICOLOGICAL AND CHEMICAL-PHYSICAL DATA
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DOCUMENT RELEASE DATE: SEPTEMBER 28, 2012

Developed pursuant to R 299.5752 of the Administrative Rules for Part 201 Environmental Remediation of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Scientific notation is represented by E+ or E- a value, for example 200,000 is presented as 2.0E+5. Units are as indicated in each column heading. The dataset for each hazardous substance requires 22 columns. Review all 22 columns across 2 pages when evaluating data for a specific hazardous substance.

Hazardous Substance	Chemical Abstract Service Number	Oral Reference Dose (RFD)	Oral Slope Factor (SF)	Chronic Inhalation Reference Concentration (RfC)	Inhalation Unit Risk Factor (IURF)	Occupational Short Term Exposure Level (STEL)	Relative Source Contribution for Drinking Water (RSC)	Ingestion Absorption Efficiency (AEi)	Dermal Absorption Efficiency (AEd)	Relative Source Contribution for Soil (RSC)	Log Octanol-Water Partition Coefficient (Log Kow)	Soil Organic Carbon-Water Partition Coefficients for Organic Compounds (Koc)
		mg/Kg-day	$(mg/Kg\text{-}day)^{-1}$	ug/m^3	$(ug/m^3)^{-1}$	ug/m^3	unitless	unitless	unitless	unitless	unitless	L/Kg
Acenaphthene	83329	1.8E-1	NA	2.1E+2	NA	NA	0.2	1.0	0.1	1.0	3.92	7,140
Acenaphthylene	208968	7.1E-3	NA	3.5E+1	NA	NA	0.2	1.0	0.1	1.0	3.6	3,460
Acetaldehyde (I)	75070	1.3E-1	NA	9.0E+0	2.2E-6	4.5E+4	0.2	1.0	0.1	1.0	-0.367	0.613
Acetate	71501	5.7E-1	NA	NA	NA	NA	0.2	NA	NA	NA	NA	NA
Acetic acid	64197	5.7E-1	NA	2.5E+2	NA	3.7E+4	0.2	1.0	0.1	1.0	-0.23	0.595
Acetone (I)	67641	1.0E-1	NA	5.9E+3	NA	1.7E+6	0.2	1.0	0.1	1.0	-0.240	0.581
Acetonitrile	75058	1.9E-2	NA	6.0E+1	NA	1.01E+5	0.2	1.0	0.1	1.0	-0.337	0.648
Acetophenone	98862	2.1E-1	NA	4.9E+2	NA	NA	0.2	1.0	0.1	1.0	1.6	37.4
Acrolein (I)	107028	1.6E-2	NA	2.0E-2	NA	6.9E+2	0.2	1.0	0.1	1.0	-0.01	1.18
Acrylamide	79061	2.0E-4	2.8E+0	6	1.3E-3	NA	0.2	1.0	0.1	1.0	-0.96	0.114
Acrylic acid	79107	5.3E-1	NA	1.0E+0	NA	NA	0.2	1.0	0.1	1.0	0.35	2.21
Acrylonitrile (I)	107131	NA	3.3E-1	2.0E+0	6.8E-5	NA	0.2	1.0	0.1	1.0	0.255	1.78
Alachlor	15972608	1.0E-2	9.6E-2	NA	NA	NA	0.2	0.5	0.1	1.0	3.52	734
Aldicarb	116063	1.0E-3	NA	NA	NA	NA	0.2	1.0	0.1	1.0	1.1	12.1
Aldicarb sulfone	1646884	1.1E-3	NA	NA	NA	NA	0.2	1.0	0.1	1.0	-0.57	0.275
Aldicarb sulfoxide	1646873	1.3E-3	NA	NA	NA	NA	0.2	1.0	0.1	1.0	-0.67	0.22
Aldrin	309002	2.5E-5	8.7E+0	NA	4.9E-3	NA	0.2	0.5	0.1	1.0	6.5	2.45E+6
Aluminum (B)	7429905	3.3E-1	NA	NA	NA	NA	0.2	0.5	0.01	1.0	NR	NR
Ammonia	7664417	NA	NA	1.0E+2	NA	2.4E+4	0.2	1.0	0.1	1.0	NA	NA
t-Amyl methyl ether (TAME)	994058	1.3E-1	NA	6.2E+1	NA	NA	0.2	1.0	0.1	1.0	1.73	28.1
Aniline	62533	NA	1.6E-2	1.0E+0	1.6E-6	NA	0.2	1.0	0.1	1.0	0.978	9.15

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Hazardous Substance	Chemical Abstract Service Number	Soil Koc for Ionizing Organic Compounds at pH=6.8	Soil-Water Distribution Coefficients for Inorganic Compounds at pH=6.8 (Kd)	Henry's Law Constant at 25°C (HLC)	Air Diffusivity (D_i or D_a or D^{air})	Water Diffusivity (D_w)	Lower Explosive Limit in Air (LEL)	Flash Point (FP)	Water Solubility (S)	Physical State at Standard Temperature & Pressure	Molecular Weight (MW)
		L/Kg	L/Kg	atm-m^3/mol	cm^2/s	cm^2/s	unitless	°F	ug/L	unitless	g/mol
Acenaphthene	83329	NR	NR	1.55E-4	0.0421	7.69E-6	NA	NA	4,240	Solid	154.2
Acenaphthylene	208968	NR	NR	1.48E-3	0.08	8.0E-6	NA	NA	3,930	Solid	152.271
Acetaldehyde (I)	75070	NR	NR	7.95E-5	0.08	8.0E-6	0.04	-36	1.0E+9	Liquid	44.1
Acetate	71501	NA	NA	NA	NA	NA	NA	NA	ID	NA	NA
Acetic acid	64197	NR	NR	1.00E-7	0.08	8.0E-6	0.04	103	6.0E+9	Liquid	60.05
Acetone (I)	67641	NR	NR	3.88E-5	0.124	1.14E-5	0.025	0.0	1.0E+9	Liquid	58.08
Acetonitrile	75058	NR	NR	2.40E-5	0.13	1.7E-5	0.03	42	2.00E+8	Liquid	41.05
Acetophenone	98862	NR	NR	1.1E-5	0.08	8.0E-6	NA	NA	6.1E+6	Liquid	120.2
Acrolein (I)	107028	NR	NR	9.40E-5	0.11	1.2E-5	0.028	-15	2.10E+8	Liquid	56.06
Acrylamide	79061	NR	NR	3.22E-10	0.097	1.1E-4	NA	280	2.20E+9	Solid	71.08
Acrylic acid	79107	NR	NR	3.20E-7	0.08	8.0E-6	0.024	121	1.0E+9	Liquid	72.06
Acrylonitrile (I)	107131	NR	NR	1.00E-4	0.12	1.3E-5	0.03	30	7.50E+7	Liquid	53.06
Alachlor	15972608	NR	NR	8.32E-9	0.08	8.0E-6	NA	NA	1.83E+5	Solid	269.77
Aldicarb	116063	NR	NR	4.17E-9	0.08	8.0E-6	NA	NA	6.00E+6	Solid	190.25
Aldicarb sulfone	1646884	NR	NR	3.37E-9	0.08	8.0E-6	NA	NA	7.80E+6	Solid	222.27
Aldicarb sulfoxide	1646873	NR	NR	9.69E-10	0.08	8.0E-6	NA	NA	2.80E+7	Solid	206.27
Aldrin	309002	NR	NR	1.70E-4	0.0132	4.86E-6	NA	NA	180	Solid	364.9
Aluminum (B)	7429905	NR	NA	NR	NR	NR	NA	NA	NA	Inorganic	26.982
Ammonia	7664417	NR	NR	3.20E-4	0.08	8.0E-6	0.15	NA	5.30E+8	Liquid	17.04
t-Amyl methyl ether (TAME)	994058	NR	NR	2.68E-3	0.08	8.0E-6	NA	NA	2.64E+6	Liquid	102.18
Aniline	62533	NR	NR	2.30E-6	0.07	8.3E-6	0.013	158	3.60E+7	Liquid	93.13

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PART 213 TIER 1 RISK-BASED SCREENING LEVELS (RBSLs)
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Developed pursuant to R 299.5752 of the Administrative Rules for Part 201 Environmental Remediation of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Scientific notation is represented by E+ or E- a value, for example 200,000 is presented as 2.0E+5. Units are as indicated in each column heading. The dataset for each hazardous substance requires 22 columns. Review all 22 columns across 2 pages when evaluating data for a specific hazardous substance.

Hazardous Substance	Chemical Abstract Service Number	Oral Reference Dose (RFD)	Oral Slope Factor (SF)	Chronic Inhalation Reference Concentration (RfC)	Inhalation Unit Risk Factor (IURF)	Occupational Short Term Exposure Level (STEL)	Relative Source Contribution for Drinking Water (RSC)	Ingestion Absorption Efficiency (AEi)	Dermal Absorption Efficiency (AEd)	Relative Source Contribution for Soil (RSC)	Log Octanol-Water Partition Coefficient (Log Kow)	Soil Organic Carbon-Water Partition Coefficients for Organic Compounds (Koc)
		mg/Kg-day	$(mg/Kg\text{-}day)^{-1}$	ug/m^3	$(ug/m^3)^{-1}$	ug/m^3	unitless	unitless	unitless	unitless	unitless	L/Kg
Anthracene	120127	1.0E+0	NA	1.0E+3	NA	NA	0.2	1.0	0.1	1.0	4.55	29,700
Antimony	7440360	3.5E-4	NA	2.0E-1	NA	NA	0.2	0.5	0.01	1.0	NR	NR
Arsenic	7440382	2.7E-4	1.5E+0	NA	4.3E-3	NA	0.2	0.5	0.03	1.0	NR	NR
Asbestos (BB)	1332214	NA	NA	NA	4.6E-2	NA	1.0	1.0	0	1.0	NR	NR
Atrazine	1912249	3.5E-2	7.4E-2	NA	NA	NA	0.2	1.0	0.1	1.0	2.7	451
Azobenzene	103333	NA	3.7E-2	NA	3.1E-5	NA	0.2	1.0	0.1	1.0	3.82	5,690
Barium (B)	7440393	7.0E-2	NA	5.0E+0	NA	NA	1.0	0.5	0.01	1.0	NR	NR
Benzene (I)	71432	NA	2.9E-2	30	8.3E-6	8.0E+3	0.2	1.0	0.1	1.0	2.13	58.2
Benzidine	92875	2.7E-3	2.3E+2	NA	6.7E-2	NA	0.2	1.0	0.1	1.0	1.66	42.9
Benzo(a)anthracene (Q)	56553	NA	4.1E-1	NA	NA	NA	0.2	0.5	0.13	1.0	5.7	4.01E+5
Benzo(b)fluoranthene (Q)	205992	NA	4.1E-1	NA	NA	NA	0.2	0.5	0.13	1.0	6.2	1.24E+6
Benzo(k)fluoranthene (Q)	207089	NA	4.1E-2	NA	NA	NA	0.2	0.5	0.13	1.0	6.2	1.24E+6
Benzo(g,h,i)perylene	191242	7.1E-3	NA	1.2E+1	NA	NA	0.2	0.5	0.13	1.0	6.7	3.86E+6
Benzo(a)pyrene (Q)	50328	NA	4.1E+0	NA	2.1E-3	NA	0.2	0.5	0.13	1.0	6.11	1.01E+6
Benzoic acid	65850	4.4E+0	NA	NA	NA	NA	0.2	1.0	0.1	1.0	1.86	0.6
Benzyl alcohol	100516	1.4E+0	NA	5.0E+3	NA	NA	0.2	1.0	0.1	1.0	1.11	12.3
Benzyl chloride	100447	NA	1.1E-1	NA	5.0E-5	NA	0.2	1.0	0.1	1.0	2.30	182
Beryllium	7440417	1.5E-3	NA	2.0E-2	2.4E-3	1.0E+1	0.2	1.0	0	1.0	NR	NR
bis(2-Chloroethoxy)ethane	112265	NA	NA	NA	NA	NA	0.2	1.0	0.1	1.0	1.28	18.1
bis(2-Chloroethyl)ether (I)	111444	NA	4.2E-1	NA	3.3E-4	5.8E+4	0.2	1.0	0.1	1.0	1.21	10.9
bis(2-Ethylhexyl)phthalate	117817	1.9E-2	3.2E-3	NA	4.43E-6	1.0E+4	0.2	0.5	0.1	1.0	7.3	1.50E+7

Attachment 1
TABLE 4. TOXICOLOGICAL AND CHEMICAL-PHYSICAL DATA
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Hazardous Substance	Chemical Abstract Service Number	Soil Koc for Ionizing Organic Compounds at pH=6.8	Soil-Water Distribution Coefficients for Inorganic Compounds at pH=6.8 (Kd)	Henry's Law Constant at 25°C (HLC)	Air Diffusivity (D_i or D_a or D^{air})	Water Diffusivity (D_w)	Lower Explosive Limit in Air (LEL)	Flash Point (FP)	Water Solubility (S)	Physical State at Standard Temperature & Pressure	Molecular Weight (MW)
		L/Kg	L/Kg	atm-m^3/mol	cm^2/s	cm^2/s	unitless	°F	ug/L	unitless	g/mol
Anthracene	120127	NR	NR	6.50E-5	0.0324	7.74E-6	NA	NA	43.4	Solid	178.24
Antimony	7440360	NR	45	NR	NR	NR	NA	NA	NA	Inorganic	121.760
Arsenic	7440382	NR	29	NR	NR	NR	NA	NA	NA	Inorganic	74.922
Asbestos (BB)	1332214	NR	NA	NR	NR	NR	NR	NR	NA	Inorganic	NA
Atrazine	1912249	NR	NR	2.63E-9	0.08	8.0E-6	NA	NA	70,000	Solid	215.72
Azobenzene	103333	NR	NR	1.35E-5	0.08	8.0E-6	NA	NA	6,400	Solid	182.23
Barium (B)	7440393	NR	41	NR	NR	NR	NA	NA	NA	Inorganic	137.327
Benzene (I)	71432	NR	NR	5.55E-3	0.088	9.8E-6	0.012	12	1.75E+6	Liquid	78.11
Benzidine	92875	NR	NR	3.90E-11	0.08	1.5E-5	NA	NA	5.20E+5	Solid	184.24
Benzo(a)anthracene (Q)	56553	NR	NR	3.35E-6	0.051	9.0E-6	NA	NA	9.4	Solid	228.3
Benzo(b)fluoranthene (Q)	205992	NR	NR	1.11E-4	0.0226	5.56E-6	NA	NA	1.5	Solid	252.32
Benzo(k)fluoranthene (Q)	207089	NR	NR	8.29E-7	0.0226	5.56E-6	NA	NA	0.8	Solid	252.32
Benzo(g,h,i)perylene	191242	NR	NR	5.34E-8	0.08	8.0E-6	NA	NA	0.26	Solid	276.34
Benzo(a)pyrene (Q)	50328	NR	NR	1.13E-6	0.043	9.0E-6	NA	NA	1.62	Solid	252.32
Benzoic acid	65850	0.6	NR	1.54E-6	0.0536	7.97E-6	NA	NA	3.50E+6	Solid	122.1
Benzyl alcohol	100516	NR	NR	3.90E-7	0.08	8.0E-6	NA	NA	4.40E+7	Liquid	108.13
Benzyl chloride	100447	NR	NR	4.00E-4	0.075	7.8E-6	0.011	153	4.90E+5	Liquid	126.58
Beryllium	7440417	NR	790	NR	NR	NR	NA	NA	NA	Inorganic	9.012
bis(2-Chloroethoxy)ethane	112265	NR	NR	7.81E-7	0.08	8.0E-6	NA	NA	1.89E+7	Liquid	187.07
bis(2-Chloroethyl)ether (I)	111444	NR	NR	1.80E-5	0.0692	7.53E-6	0.027	131	1.72E+7	Liquid	143.01
bis(2-Ethylhexyl)phthalate	117817	NR	NR	1.02E-7	0.0351	3.66E-6	NA	420	340	Liquid	390.57

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Hazardous Substance	Chemical Abstract Service Number	Oral Reference Dose (RFD)	Oral Slope Factor (SF)	Chronic Inhalation Reference Concentration (RfC)	Inhalation Unit Risk Factor (IURF)	Occupational Short Term Exposure Level (STEL)	Relative Source Contribution for Drinking Water (RSC)	Ingestion Absorption Efficiency (AEi)	Dermal Absorption Efficiency (AEd)	Relative Source Contribution for Soil (RSC)	Log Octanol-Water Partition Coefficient (Log Kow)	Soil Organic Carbon-Water Partition Coefficients for Organic Compounds (Koc)
		mg/Kg-day	$(mg/Kg\text{-}day)^{-1}$	ug/m^3	$(ug/m^3)^{-1}$	ug/m^3	unitless	unitless	unitless	unitless	unitless	L/Kg
Boron (B)	7440428	3.2E-1	NA	NA	NA	NA	0.2	0.5	0.01	1.0	NR	NR
Bromate	15541454	4.0E-3	7.0E-1	NA	NA	NA	0.2	0.5	0.01	1.0	0.63	NR
Bromobenzene (I)	108861	2.4E-3	NA	8.0E+0	NA	NA	0.2	1.0	0.1	1.0	2.99	870
Bromodichloromethane	75274	1.8E-2	5.0E-2	NA	3.7E-5	NA	0.2	1.0	0.1	1.0	2.1	55.1
Bromoform	75252	1.8E-2	6.4E-3	NA	1.1E-6	NA	0.2	1.0	0.1	1.0	2.35	87.0
Bromomethane	74839	1.4E-3	NA	5.0E+0	NA	NA	0.2	1.0	0.1	1.0	1.18	14.5
n-Butanol (I)	71363	1.3E-1	NA	3.5E+2	NA	1.52E+5	0.2	1.0	0.1	1.0	0.851	5.65
2-Butanone (MEK) (I)	78933	1.8E+0	NA	1.0E+3	NA	8.85E+5	0.2	1.0	0.1	1.0	0.279	1.99
n-Butyl acetate	123864	7.6E-2	NA	7.1E+3	NA	9.5E+5	0.2	1.0	0.1	1.0	1.78	30.8
t-Butyl alcohol	75650	5.4E-1	NA	1.89E+3	NA	NA	0.2	1.0	0.1	1.0	0.35	2.27
Butyl benzyl phthalate	85687	1.6E-1	NA	7.0E+2	NA	NA	0.2	1.0	0.1	1.0	4.84	57,300
n-Butylbenzene	104518	1.1E-2	NA	30	NA	NA	0.2	1.0	0.1	1.0	4.38	20,200
sec-Butylbenzene	135988	1.1E-2	NA	6E+0	NA	NA	0.2	1.0	0.1	1.0	4.57	31,100
t-Butylbenzene (I)	98066	1.1E-2	NA	10	NA	NA	0.2	1.0	0.1	1.0	4.11	11,000
Cadmium (B)	7440439	1.0E-3	NA	NA	1.8E-3	NA	0.2	0.5	0.001	1.0	NR	NR
Camphene (I)	79925	NA	NA	80	NA	NA	0.2	1.0	0.1	1.0	3.53	2,950
Caprolactam	105602	8.0E-1	NA	1.0E+1	NA	4.6E+4	0.2	1.0	0.1	1.0	-0.19	0.65
Carbaryl	63252	9.6E-2	NA	NA	NA	NA	0.2	1.0	0.1	1.0	2.4	229
Carbazole	86748	NA	1.0E-2	NA	5.0E-5	NA	0.2	1.0	0.1	1.0	3.59	3,380
Carbofuran	1563662	5.0E-3	NA	NA	NA	NA	0.2	1.0	0.1	1.0	1.6	37.4
Carbon disulfide (I,R)	75150	1.1E-1	NA	7.0E+2	NA	NA	0.2	1.0	0.1	1.0	2	45.9

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		L/Kg	L/Kg	atm-m^3/mol	cm^2/s	cm^2/s	unitless	°F	ug/L	unitless	g/mol
Boron (B)	7440428	NR	NA	NR	NR	NR	NA	NA	NA	Inorganic	10.811
Bromate	15541454	NR	NA	1.00E+0	NR	NR	NA	NA	38,000	Solid	79.9
Bromobenzene (I)	108861	NR	NR	4.74E-4	0.08	8.0E-6	NA	NA	4.13E+5	Liquid	157.015
Bromodichloromethane	75274	NR	NR	1.60E-3	0.0298	1.06E-5	NA	NA	6.74E+6	Liquid	163.8
Bromoform	75252	NR	NR	5.35E-4	0.0149	1.03E-5	NA	NA	3.10E+6	Liquid	252.8
Bromomethane	74839	NR	NR	1.42E-2	0.08	8.0E-6	0.1	NA	1.45E+7	Liquid	94.94
n-Butanol (I)	71363	NR	NR	8.81E-6	0.08	9.6E-6	0.014	84	7.40E+7	Liquid	74.14
2-Butanone (MEK) (I)	78933	NR	NR	3.60E-5	0.081	9.8E-6	NA	16	2.40E+8	Liquid	72.1
n-Butyl acetate	123864	NR	NR	3.20E-4	0.08	8.0E-6	0.017	72	6.70E+6	Liquid	116.16
t-Butyl alcohol	75650	NR	NR	1.17E-5	0.08	8.0E-6	0.024	52	1.0E+9	Liquid	74.12
Butyl benzyl phthalate	85687	NR	NR	1.26E-6	0.0174	4.83E-6	NA	NA	2,690	Liquid	312.37
n-Butylbenzene	104518	NR	NR	NA	0.08	8.0E-6	NA	NA	NA	Liquid	134.22
sec-Butylbenzene	135988	NR	NR	NA	0.08	8.0E-6	NA	NA	NA	Liquid	134.22
t-Butylbenzene (I)	98066	NR	NR	NA	0.08	8.0E-6	NA	NA	NA	Liquid	134.22
Cadmium (B)	7440439	NR	75	NR	NR	NR	NA	NA	NA	Inorganic	112.411
Camphene (I)	79925	NR	NR	2.05E+0	0.08	8.0E-6	NA	NA	33,400	Solid	136.26
Caprolactam	105602	NR	NR	2.53E-8	0.08	8.0E-6	0.014	282	5.25E+9	Solid	113.2
Carbaryl	63252	NR	NR	6.80E-4	0.08	8.0E-6	NA	NA	1.26E+5	Solid	201.24
Carbazole	86748	NR	NR	1.53E-8	0.039	7.03E-6	NA	NA	7,480	Solid	167.21
Carbofuran	1563662	NR	NR	3.90E-10	0.08	8.0E-6	NA	NA	7.00E+5	Solid	221.3
Carbon disulfide (I,R)	75150	NR	NR	3.03E-2	0.104	1.0E-5	0.013	-22	1.19E+6	Liquid	76.14

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		mg/Kg-day	$(mg/Kg\text{-}day)^{-1}$	ug/m^3	$(ug/m^3)^{-1}$	ug/m^3	unitless	unitless	unitless	unitless	unitless	L/Kg
Carbon tetrachloride	56235	7.1E-4	5.5E-2	100	2.36E-5	6.3E+4	0.2	1.0	0.1	1.0	2.73	174
Chlordane (J)	57749	1.5E-3	3.5E-1	7.0E-1	1.0E-4	NA	0.2	0.5	0.04	1.0	6.32	1.21E+5
Chloride	16887006	NA	NA	NA	NA	NA	0.2	0.5	0.01	1.0	NR	NR
Chlorobenzene (I)	108907	1.9E-2	NA	7.0E+1	NA	NA	0.2	1.0	0.1	1.0	2.86	220
p-Chlorobenzene sulfonic acid	98668	1.0E+0	NA	NA	NA	NA	0.2	1.0	0.1	1.0	-0.52	4.64E-1
1-Chloro-1,1-difluoroethane	75683	2.1E+0	NA	5.0E+4	NA	NA	0.2	1.0	0.1	1.0	1.81	32.5
Chloroethane	75003	1.8E+1	2.0E-3	1.0E+4	NA	NA	0.2	1.0	0.1	1.0	1.4	23.8
2-Chloroethyl vinyl ether	110758	NA	NA	NA	NA	NA	0.2	1.0	0.1	1.0	1.07	8.43
Chloroform	67663	1.3E-2	4.4E-3	NA	2.4E-6	NA	0.2	1.0	0.1	1.0	1.92	39.7
Chloromethane (I)	74873	NA	3.3E-3	9.0E+1	6.39E-7	2.07E+5	0.2	1.0	0.1	1.0	0.91	6.30
4-Chloro-3-methylphenol	59507	2.0E-2	NA	NA	NA	NA	0.2	1.0	0.1	1.0	3.1	1,120
beta-Chloronaphthalene	91587	2.5E-1	NA	NA	NA	NA	0.2	1.0	0.1	1.0	4.1	10,700
2-Chlorophenol	95578	6.2E-3	NA	1.8E+1	NA	NA	0.2	1.0	0.1	1.0	2.15	388
o-Chlorotoluene (I)	95498	2.0E-2	NA	7.0E+1	NA	NA	0.2	1.0	0.1	1.0	3.42	612
Chlorpyrifos	2921882	3.0E-2	NA	2.0E+0	NA	NA	0.2	0.5	0.1	1.0	5.3	18,900
Chromium (III) (B,H)	16065831	1.5E+0	NA	5.0E+0	NA	NA	0.7	0.5	0.01	1.0	NR	NR
Chromium (VI)	18540299	4.8E-3	NA	8.0E-3	1.2E-2	NA	0.7	0.5	0.01	1.0	NR	NR
Chrysene (Q)	218019	NA	4.1E-3	NA	NA	NA	0.2	0.5	0.13	1.0	5.7	4.01E+5
Cobalt	7440484	5.0E-3	NA	2.0E-1	NA	NA	0.2	0.5	0.01	1.0	NR	NR
Copper (B)	7440508	3.8E-2	NA	2.0E+0	NA	NA	1.0	0.5	0.01	1.0	NR	NR
Cyanazine	21725462	3.0E-3	3.7E-1	NA	NA	NA	0.2	1.0	0.1	1.0	2.2	146

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		L/Kg	L/Kg	atm-m^3/mol	cm^2/s	cm^2/s	unitless	°F	ug/L	unitless	g/mol
Carbon tetrachloride	56235	NR	NR	3.04E-2	0.078	8.8E-6	NA	NA	7.93E+5	Liquid	153.92
Chlordane (J)	57749	NR	NR	4.86E-5	0.0118	4.37E-6	NA	NA	56	Solid	409.8
Chloride	16887006	NR	NA	NR	NR	NR	NA	NA	NA	Inorganic	35.453
Chlorobenzene (I)	108907	NR	NR	3.70E-3	0.073	8.7E-6	0.013	82	4.72E+5	Liquid	112.56
p-Chlorobenzene sulfonic acid	98668	NR	NR	NA	NA	NA	NA	226	NA	Solid	192.62
1-Chloro-1,1-difluoroethane	75683	NR	NR	6.16E-2	0.08	8.0E-6	0.06	NA	3.9E+06	Gas	100.5
Chloroethane	75003	NR	NR	8.80E-3	0.08	8.0E-6	0.038	-58	5.74E+6	Liquid	64.52
2-Chloroethyl vinyl ether	110758	NR	NR	6.25E-4	0.08	8.0E-6	NA	NA	1.50E+7	Liquid	106.55
Chloroform	67663	NR	NR	3.67E-3	0.104	1.0E-5	NA	NA	7.92E+6	Liquid	119.38
Chloromethane (I)	74873	NR	NR	4.52E-2	0.13	6.5E-6	0.081	-60.8	6.34E+6	Liquid	50.49
4-Chloro-3-methylphenol	59507	NR	NR	4.00E-7	0.08	8.0E-6	NA	NA	3.90E+6	Solid	142.6
beta-Chloronaphthalene	91587	NR	NR	3.10E-4	0.08	8.0E-6	NA	NA	6,740	Solid	162.62
2-Chlorophenol	95578	388	NR	3.91E-4	0.0501	9.46E-6	NA	NA	2.20E+7	Liquid	128.56
o-Chlorotoluene (I)	95498	NR	NR	3.57E-3	0.08	8.0E-6	NA	96	3.73E+5	Liquid	126.58
Chlorpyrifos	2921882	NR	NR	7.80E+0	0.08	8.0E-6	NA	NA	1,120	Solid	350.59
Chromium (III) (B,H)	16065831	NR	1.8E+6	NR	NR	NR	NA	NA	NA	Inorganic	51.996
Chromium (VI)	18540299	NR	19	NR	NR	NR	NA	NA	NA	Inorganic	51.996
Chrysene (Q)	218019	NR	NR	9.46E-5	0.0248	6.21E-6	NA	NA	1.6	Solid	228.3
Cobalt	7440484	NR	NA	NR	NR	NR	NA	NA	NA	Inorganic	58.933
Copper (B)	7440508	NR	360	NR	NR	NR	NA	NA	NA	Inorganic	63.546
Cyanazine	21725462	NR	NR	1.00E-10	0.08	8.0E-6	NA	NA	1.70E+5	Solid	241

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DOCUMENT RELEASE DATE: SEPTEMBER 28, 2012

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Hazardous Substance	Chemical Abstract Service Number	Oral Reference Dose (RFD)	Oral Slope Factor (SF)	Chronic Inhalation Reference Concentration (RfC)	Inhalation Unit Risk Factor (IURF)	Occupational Short Term Exposure Level (STEL)	Relative Source Contribution for Drinking Water (RSC)	Ingestion Absorption Efficiency (AEi)	Dermal Absorption Efficiency (AEd)	Relative Source Contribution for Soil (RSC)	Log Octanol-Water Partition Coefficient (Log Kow)	Soil Organic Carbon-Water Partition Coefficients for Organic Compounds (Koc)
		mg/Kg-day	$(mg/Kg\text{-}day)^{-1}$	ug/m^3	$(ug/m^3)^{-1}$	ug/m^3	unitless	unitless	unitless	unitless	unitless	L/Kg
Cyanide (P,R)	57125	5.4E-3	NA	5.0E+1	NA	NA	0.2	1.0	0	1.0	NA	NA
Cyclohexanone	108941	4.5E+0	NA	1.0E+3	NA	NA	0.2	1.0	0.1	1.0	0.81	6.26
Dacthal	1861321	1.0E-2	NA	NA	NA	NA	0.2	1.0	0.1	1.0	4.4	21,200
Dalapon	75990	8.5E-2	NA	NA	NA	NA	0.2	1.0	0.1	1.0	0.77	5.72
4-4'-DDD	72548	3.0E-3	9.4E-2	NA	7.0E-5	NA	0.2	0.5	0.1	1.0	6.1	81,100
4-4'-DDE	72559	7.0E-4	2.0E-1	NA	9.7E-5	NA	0.2	0.5	0.1	1.0	6.76	2.70E+5
4-4'-DDT	50293	5.0E-4	2.0E-1	NA	9.7E-5	NA	0.2	0.5	0.03	1.0	6.53	1.78E+5
Decabromodiphenyl ether	1163195	1.0E-2	NA	3.5E+1	4.0E-7	NA	0.2	0.5	0.1	1.0	5.24	1.42E+5
Di-n-butyl phthalate	84742	1.2E-1	NA	5.0E+1	NA	NA	0.2	1.0	0.1	1.0	4.61	34,000
Di(2-ethylhexyl) adipate	103231	1.7E+0	5.9E-4	NA	3.4E-7	NA	0.2	0.5	0.1	1.0	6.11	1.01E+6
Di-n-octyl phthalate	117840	1.8E-2	NA	4.7E+2	NA	NA	0.2	0.5	0.1	1.0	7.51	2.41E+7
Diacetone alcohol (I)	123422	NA	NA	2.4E+3	NA	NA	0.2	1.0	0.1	1.0	-0.34	0.464
Diazinon	333415	1.8E-4	NA	NA	NA	NA	0.2	1.0	0.1	1.0	3.4	2,200
Dibenzo(a,h)anthracene (Q)	53703	NA	4.1E+0	NA	NA	NA	0.2	0.5	0.13	1.0	6.69	3.77E+6
Dibenzofuran	132649	NA	NA	1E-1	NA	NA	0.2	1.0	0.1	1.0	4.2	13,500
Dibromochloromethane	124481	2.1E-2	4.9E-2	NA	2.45E-5	NA	0.2	1.0	0.1	1.0	2.17	62.6
Dibromochloropropane	96128	NA	1.2E+0	2.0E-1	5.6E-3	NA	0.2	1.0	0.1	1.0	2.68	431
Dibromomethane	74953	1.1E-2	NA	NA	NA	NA	0.2	1.0	0.1	1.0	1.62	39.2
Dicamba	1918009	3.0E-2	NA	NA	NA	NA	0.2	0.5	0.1	1.0	2.4	95.3
1,2-Dichlorobenzene	95501	8.6E-2	NA	1.5E+3	NA	3.01E+5	0.2	1.0	0.1	1.0	3.43	623
1,3-Dichlorobenzene	541731	9.0E-4	NA	3E+0	NA	NA	0.2	1.0	0.1	1.0	3.5	708

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Hazardous Substance	Chemical Abstract Service Number	Soil Koc for Ionizing Organic Compounds at pH=6.8	Soil-Water Distribution Coefficients for Inorganic Compounds at pH=6.8 (Kd)	Henry's Law Constant at 25°C (HLC)	Air Diffusivity (D_i or D_a or D^{air})	Water Diffusivity (D_w)	Lower Explosive Limit in Air (LEL)	Flash Point (FP)	Water Solubility (S)	Physical State at Standard Temperature & Pressure	Molecular Weight (MW)
		L/Kg	L/Kg	atm-m^3/mol	cm^2/s	cm^2/s	unitless	°F	ug/L	unitless	g/mol
Cyanide (P,R)	57125	NR	NR	NR	0.08	8.0E-6	NA	NA	NA	Inorganic	26.02
Cyclohexanone	108941	NR	NR	7.80E+0	0.08	8.0E-6	NA	146	2.30E+7	Liquid	98.14
Dacthal	1861321	NR	NR	2.18E-6	0.08	8.0E-6	NA	NA	500	Solid	331
Dalapon	75990	NR	NR	6.43E-8	0.08	8.0E-6	NA	NA	5.02E+8	Liquid	142.97
4-4'-DDD	72548	NR	NR	4.00E-6	0.0169	4.76E-6	NA	NA	90	Solid	320.05
4-4'-DDE	72559	NR	NR	2.10E-5	0.0144	5.87E-6	NA	NA	120	Solid	518.03
4-4'-DDT	50293	NR	NR	8.10E-6	0.0137	4.95E-6	NA	162	25	Solid	354.49
Decabromodiphenyl ether	1163195	NR	NR	4.02E-5	0.08	8.0E-6	NA	NA	30	Solid	959.22
Di-n-butyl phthalate	84742	NR	NR	9.38E-10	0.0438	7.86E-6	NA	315	11,200	Liquid	278.34
Di(2-ethylhexyl) adipate	103231	NR	NR	4.34E-7	0.08	8.0E-6	NA	NA	471	Liquid	370
Di-n-octyl phthalate	117840	NR	NR	7.66E-7	0.0151	3.58E-6	NA	NA	3,000	Liquid	390.62
Diacetone alcohol (I)	123422	NR	NR	2.61E-7	0.08	8.0E-6	0.018	125	1.0E+9	Liquid	116.2
Diazinon	333415	NR	NR	1.13E-7	0.08	8.0E-6	NA	180	68,800	Liquid	304.3
Dibenzo(a,h)anthracene (Q)	53703	NR	NR	1.47E-8	0.0202	5.18E-6	NA	NA	2.49	Solid	278.36
Dibenzofuran	132649	NR	NR	1.30E-5	0.08	8.0E-6	NA	NA	10,000	Solid	168.21
Dibromochloromethane	124481	NR	NR	7.83E-4	0.0229	1.05E-5	NA	NA	2.60E+6	Liquid	208.29
Dibromochloropropane	96128	NR	NR	1.90E-4	0.08	8.0E-6	NA	170	1,230	Liquid	236.34
Dibromomethane	74953	NR	NR	9.00E-4	0.08	8.6E-6	NA	NA	1.10E+7	Liquid	173.85
Dicamba	1918009	NR	NR	7.90E-9	0.08	8.0E-6	NA	NA	4.5E+6	Solid	221.04
1,2-Dichlorobenzene	95501	NR	NR	1.90E-3	0.069	7.9E-6	0.022	151	1.56E+5	Liquid	147.01
1,3-Dichlorobenzene	541731	NR	NR	1.80E-3	0.08	8.0E-6	NA	NA	1.11E+5	Liquid	147.01

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Hazardous Substance	Chemical Abstract Service Number	Oral Reference Dose (RFD)	Oral Slope Factor (SF)	Chronic Inhalation Reference Concentration (RfC)	Inhalation Unit Risk Factor (IURF)	Occupational Short Term Exposure Level (STEL)	Relative Source Contribution for Drinking Water (RSC)	Ingestion Absorption Efficiency (AEi)	Dermal Absorption Efficiency (AEd)	Relative Source Contribution for Soil (RSC)	Log Octanol-Water Partition Coefficient (Log Kow)	Soil Organic Carbon-Water Partition Coefficients for Organic Compounds (Koc)
		mg/Kg-day	$(mg/Kg\text{-}day)^{-1}$	ug/m^3	$(ug/m^3)^{-1}$	ug/m^3	unitless	unitless	unitless	unitless	unitless	L/Kg
1,4-Dichlorobenzene	106467	NA	1.3E-2	8E+2	6.9E-6	NA	0.2	1.0	0.1	1.0	3.42	612
3,3'-Dichlorobenzidine	91941	NA	8.0E-1	NA	4.8E-4	NA	0.2	1.0	0.1	1.0	3.51	721
Dichlorodifluoromethane	75718	2.3E-1	NA	4.95E+4	NA	NA	0.2	1.0	0.1	1.0	2.15	60.4
1,1-Dichloroethane	75343	1.2E-1	NA	5.0E+2	NA	NA	0.2	1.0	0.1	1.0	1.79	31.3
1,2-Dichloroethane (I)	107062	NA	5.8E-2	NA	2.6E-5	NA	0.2	1.0	0.1	1.0	1.47	17.5
1,1-Dichloroethylene (I)	75354	9.0E-4	NA	2E+2	5.0E-5	7.9E+4	0.2	1.0	0.1	1.0	2.13	58.2
cis-1,2-Dichloroethylene	156592	1.1E-2	NA	3.4E+1	NA	NA	0.2	1.0	0.1	1.0	1.86	35.6
trans-1,2-Dichloroethylene	156605	1.7E-2	NA	7.0E+1	NA	NA	0.2	1.0	0.1	1.0	2.07	52.2
2,6-Dichloro-4-nitroaniline	99309	3.0E-1	NA	NA	NA	NA	0.2	1.0	0.1	1.0	2.76	517
2,4-Dichlorophenol	120832	1.0E-2	NA	7.7E+1	NA	NA	0.2	1.0	0.1	1.0	3.08	147
2,4-Dichlorophenoxyacetic acid	94757	1.0E-2	NA	1.0E+2	NA	NA	0.2	1.0	0.05	1.0	2.7	451
1,2-Dichloropropane (I)	78875	4.4E-1	3.7E-2	4.0E+0	NA	5.08E+5	0.2	1.0	0.1	1.0	1.97	43.5
1,3-Dichloropropene	542756	3.4E-2	1.0E-1	2.0E+1	4.0E-6	NA	0.2	1.0	0.1	1.0	2.0	45.9
Dichlorovos	62737	4.0E-4	5.2E-1	5.0E-1	NA	NA	0.2	1.0	0.1	1.0	1.4	15.4
Dicyclohexyl phthalate	84617	NA	NA	NA	NA	NA	0.2	0.5	0.1	1.0	6.2	1.24E+6
Dieldrin	60571	7.6E-5	8.0E+0	NA	4.6E-3	NA	0.2	0.5	0.1	1.0	5.37	21,400
Diethyl ether	60297	5.0E-1	NA	1.2E+4	NA	1.52E+6	0.2	1.0	0.1	1.0	0.83	6.55
Diethyl phthalate	84662	7.5E-1	NA	5.0E+1	NA	NA	0.2	1.0	0.1	1.0	2.5	287
Diethylene glycol monobutyl ether	112345	1.2E-2	NA	2.0E+1	NA	NA	0.2	1.0	0.1	1.0	0.32	2.06
Diisopropyl ether	108203	4.1E-3	NA	3.58E+2	NA	NA	0.2	1.0	0.1	1.0	1.67	25.2
Diisopropylamine (I)	108189	7.7E-4	NA	2E+2	NA	NA	0.2	1.0	0.1	1.0	1.6	37.4

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		L/Kg	L/Kg	atm-m^3/mol	cm^2/s	cm^2/s	unitless	°F	ug/L	unitless	g/mol
1,4-Dichlorobenzene	106467	NR	NR	2.43E-3	0.069	7.9E-6	0.025	150	73,800	Solid	147
3,3'-Dichlorobenzidine	91941	NR	NR	4.00E-9	0.0194	6.74E-6	NA	NA	3,110	Solid	253.1
Dichlorodifluoromethane	75718	NR	NR	2.60E+0	0.08	8.0E-6	NA	NA	3.00E+5	Liquid	120.91
1,1-Dichloroethane	75343	NR	NR	5.62E-3	0.0742	1.05E-5	0.054	2.0	5.06E+6	Liquid	98.96
1,2-Dichloroethane (I)	107062	NR	NR	9.79E-4	0.104	9.9E-6	0.062	56	8.52E+6	Liquid	98.97
1,1-Dichloroethylene (I)	75354	NR	NR	2.61E-2	0.09	1.04E-5	0.065	-2	2.25E+6	Liquid	96.94
cis-1,2-Dichloroethylene	156592	NR	NR	4.08E-3	0.0736	1.13E-5	0.056	36	3.50E+6	Liquid	96.94
trans-1,2-Dichloroethylene	156605	NR	NR	9.38E-3	0.0707	1.19E-5	0.056	36	6.30E+6	Liquid	96.94
2,6-Dichloro-4-nitroaniline	99309	NR	NR	4.67E-8	0.08	8.0E-6	NA	NA	7,000	Solid	207.02
2,4-Dichlorophenol	120832	147	NR	3.16E-6	0.0346	8.77E-6	NA	NA	4.50E+6	Liquid	163
2,4-Dichlorophenoxyacetic acid	94757	NR	NR	4.50E-6	0.059	6.5E-6	NA	NA	6.80E+5	Solid	221.04
1,2-Dichloropropane (I)	78875	NR	NR	2.80E-3	0.0782	8.73E-6	0.034	60	2.80E+6	Liquid	112.99
1,3-Dichloropropene	542756	NR	NR	1.77E-2	0.0626	1.0E-5	0.053	77	2.80E+6	Liquid	110.97
Dichlorovos	62737	NR	NR	9.58E-7	0.08	8.0E-6	NA	175	1.60E+7	Liquid	220.98
Dicyclohexyl phthalate	84617	NR	NR	7.61E-5	0.08	8.0E-6	NA	NA	4,000	Solid	330.43
Dieldrin	60571	NR	NR	1.51E-5	0.0125	4.74E-6	NA	NA	195	Solid	380.9
Diethyl ether	60297	NR	NR	8.70E-4	0.074	9.3E-6	0.019	-49	6.10E+7	Liquid	74.12
Diethyl phthalate	84662	NR	NR	4.50E-7	0.0256	6.35E-6	NA	322	1.08E+6	Liquid	222.23
Diethylene glycol monobutyl ether	112345	NR	NR	1.52E-9	0.08	8.0E-6	NA	NA	1.0E+9	Liquid	162.23
Diisopropyl ether	108203	NR	NR	1.3E-3	0.08	8.0E-6	0.014	-18	8,041	Liquid	102.18
Diisopropylamine (I)	108189	NR	NR	9.60E-5	0.08	8.0E-6	0.011	20	3.69E+7	Liquid	101.22

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Hazardous Substance	Chemical Abstract Service Number	Oral Reference Dose (RFD)	Oral Slope Factor (SF)	Chronic Inhalation Reference Concentration (RfC)	Inhalation Unit Risk Factor (IURF)	Occupational Short Term Exposure Level (STEL)	Relative Source Contribution for Drinking Water (RSC)	Ingestion Absorption Efficiency (AEi)	Dermal Absorption Efficiency (AEd)	Relative Source Contribution for Soil (RSC)	Log Octanol-Water Partition Coefficient (Log Kow)	Soil Organic Carbon-Water Partition Coefficients for Organic Compounds (Koc)
		mg/Kg-day	$(mg/Kg\text{-}day)^{-1}$	ug/m^3	$(ug/m^3)^{-1}$	ug/m^3	unitless	unitless	unitless	unitless	unitless	L/Kg
Dimethyl phthalate	131113	1.0E+1	NA	5.0E+1	NA	NA	0.2	1.0	0.1	1.0	1.64	41.0
N,N-Dimethylacetamide	127195	2.5E-2	NA	NA	NA	NA	0.2	1.0	0.1	1.0	-0.77	0.175
N,N-Dimethylaniline	121697	2.2E-3	NA	NA	1.18E-5	5.0E+4	0.2	1.0	0.1	1.0	2.46	262
Dimethylformamide (I)	68122	9.6E-2	NA	3.0E+1	NA	NA	0.2	1.0	0.1	1.0	-1.01	0.102
2,4-Dimethylphenol	105679	5.0E-2	NA	7.0E+1	NA	NA	0.2	1.0	0.1	1.0	2.36	209
2,6-Dimethylphenol	576261	6.0E-4	NA	2E+0	NA	NA	0.2	1.0	0.1	1.0	2.36	209
3,4-Dimethylphenol	95658	1.4E-3	NA	3.5E+0	NA	NA	0.2	1.0	0.1	1.0	2.23	156
Dimethylsulfoxide	67685	3.0E+1	NA	2E+1	NA	NA	0.2	1.0	0.1	1.0	-1.66	0.0234
2,4-Dinitrotoluene	121142	2.0E-3	1.1E-1	2.0E+0	2.0E-4	NA	0.2	1.0	0.1	1.0	2.01	94.6
Dinoseb	88857	1.0E-3	NA	4E+0	NA	NA	0.2	1.0	0.1	1.0	3.15	1,250
1,4-Dioxane (I)	123911	NA	1.0E-2	100	5.5E-6	NA	0.2	1.0	0.1	1.0	-0.39	0.588
Diquat	85007	2.2E-3	NA	NA	NA	NA	0.2	1.0	0.1	1.0	-2.82	0.00169
Dissolved oxygen (DO)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diuron	330541	4.3E-3	NA	7.0E+0	NA	NA	0.2	1.0	0.1	1.0	2.77	187
Endosulfan (J)	115297	6.0E-3	NA	NA	NA	NA	0.2	1.0	0.1	1.0	4.1	2,110
Endothall	145733	1.7E-2	NA	3.5E+1	NA	NA	0.2	1.0	0.1	1.0	-0.55	0.288
Endrin	72208	1.7E-4	NA	NA	NA	NA	0.2	0.5	0.1	1.0	5.06	12,200
Epichlorohydrin (I)	106898	1.0E-3	5.9E-1	1.0E+0	1.2E-6	NA	0.2	1.0	0.1	1.0	0.26	1.92
Ethanol (I)	64175	6.2E+1	NA	1.9E+4	NA	NA	1.0	1.0	0.1	1.0	-0.31	0.496
Ethyl acetate (I)	141786	9.0E-1	NA	3.2E+3	NA	NA	0.2	1.0	0.1	1.0	0.69	4.77
Ethyl-tert-butyl ether (ETBE)	637923	NA	NA	3.73E+2	NA	NA	NA	1.0	0.1	1.0	1.92	3.97

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TABLE 4. TOXICOLOGICAL AND CHEMICAL-PHYSICAL DATA
PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS;
PART 213 TIER 1 RISK-BASED SCREENING LEVELS (RBSLs)
DOCUMENT RELEASE DATE: SEPTEMBER 28, 2012

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Hazardous Substance	Chemical Abstract Service Number	Soil Koc for Ionizing Organic Compounds at pH=6.8	Soil-Water Distribution Coefficients for Inorganic Compounds at pH=6.8 (Kd)	Henry's Law Constant at 25°C (HLC)	Air Diffusivity (D_i or D_a or D^{air})	Water Diffusivity (D_w)	Lower Explosive Limit in Air (LEL)	Flash Point (FP)	Water Solubility (S)	Physical State at Standard Temperature & Pressure	Molecular Weight (MW)
		L/Kg	L/Kg	atm-m^3/mol	cm^2/s	cm^2/s	unitless	°F	ug/L	unitless	g/mol
Dimethyl phthalate	131113	NR	NR	5.78E-7	0.067	6.3E-6	NA	295	4.19E+6	Liquid	194.19
N,N-Dimethylacetamide	127195	NR	NR	1.31E-8	0.08	8.0E-6	NA	158	1.0E+9	Liquid	87.14
N,N-Dimethylaniline	121697	NR	NR	8.12E-5	0.08	8.0E-6	NA	142	1.27E+6	Liquid	121.18
Dimethylformamide (I)	68122	NR	NR	7.39E-8	0.08	8.0E-6	NA	136	1.0E+9	Liquid	73.1
2,4-Dimethylphenol	105679	NR	NR	2.0E-6	0.0584	8.69E-6	NA	NA	7.87E+6	Solid	122.16
2,6-Dimethylphenol	576261	NR	NR	5.02E-6	0.08	8.0E-6	NA	NA	6.14E+6	Solid	122.16
3,4-Dimethylphenol	95658	NR	NR	3.78E-7	0.08	8.0E-6	NA	NA	4.93E+6	Solid	122.16
Dimethylsulfoxide	67685	NR	NR	5.80E-8	0.08	8.0E-6	NA	NA	1.66E+8	Liquid	78.14
2,4-Dinitrotoluene	121142	NR	NR	9.26E-8	0.203	7.06E-6	NA	NA	2.70E+5	Solid	183.15
Dinoseb	88857	NR	NR	4.60E-7	0.08	8.0E-6	NA	NA	52,000	Liquid	240.2
1,4-Dioxane (I)	123911	NR	NR	4.90E-6	0.23	1.0E-5	0.02	55	9.00E+8	Liquid	88.11
Diquat	85007	NR	NR	1.42E-13	0.08	8.0E-6	NA	NA	7.00E+5	Solid	344.08
Dissolved oxygen (DO)	NA	NR	NA	NR	NA	NA	NA	NA	NA	NA	NA
Diuron	330541	NR	NR	2.70E-6	0.08	8.0E-6	NA	NA	37,300	Solid	233.1
Endosulfan (J)	115297	NR	NR	1.12E-5	0.0115	4.55E-6	NA	NA	510	Solid	406.9
Endothall	145733	NR	NR	2.60E-10	0.08	8.0E-6	NA	NA	1.00E+8	Solid	186.18
Endrin	72208	NR	NR	7.52E-6	0.0125	4.74E-6	NA	NA	250	Solid	380.9
Epichlorohydrin (I)	106898	NR	NR	3.00E-5	0.086	9.8E-6	0.038	93	6.60E+7	Liquid	92.53
Ethanol (I)	64175	NR	NR	6.29E-6	0.08	8.0E-6	0.033	55	1.0E+9	Liquid	46.07
Ethyl acetate (I)	141786	NR	NR	1.70E-4	0.073	9.7E-6	0.02	24	6.40E+7	Liquid	88.12
Ethyl-tert-butyl ether (ETBE)	637923	NR	NR	1.389E-3	0.08	8.0E-6	NA	NA	5.63E+6	Liquid	102.18

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PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS;
PART 213 TIER 1 RISK-BASED SCREENING LEVELS (RBSLs)
DOCUMENT RELEASE DATE: SEPTEMBER 28, 2012

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Hazardous Substance	Chemical Abstract Service Number	Oral Reference Dose (RFD)	Oral Slope Factor (SF)	Chronic Inhalation Reference Concentration (RfC)	Inhalation Unit Risk Factor (IURF)	Occupational Short Term Exposure Level (STEL)	Relative Source Contribution for Drinking Water (RSC)	Ingestion Absorption Efficiency (AEi)	Dermal Absorption Efficiency (AEd)	Relative Source Contribution for Soil (RSC)	Log Octanol-Water Partition Coefficient (Log Kow)	Soil Organic Carbon-Water Partition Coefficients for Organic Compounds (Koc)
		mg/Kg-day	$(mg/Kg\text{-}day)^{-1}$	ug/m^3	$(ug/m^3)^{-1}$	ug/m^3	unitless	unitless	unitless	unitless	unitless	L/Kg
Ethylbenzene (I)	100414	9.7E-2	NA	1.0E+3	3.1E-7	5.43E+5	0.2	1.0	0.1	1.0	3.14	367
Ethylene dibromide	106934	NA	5.7E+1	9E+0	2.2E-4	NA	0.2	1.0	0.1	1.0	1.75	52.5
Ethylene glycol	107211	2.0E+0	NA	1.0E+3	NA	1.0E+5	0.2	1.0	0.1	1.0	-1.4	0.0421
Ethylene glycol monobutyl ether	111762	5.0E-1	NA	1.3E+4	NA	NA	0.2	1.0	0.1	1.0	0.83	6.55
Fluoranthene	206440	1.2E-1	NA	1.4E+2	NA	NA	0.2	0.5	0.1	1.0	5.12	1.08E+05
Fluorene	86737	1.2E-1	NA	1.4E+2	NA	NA	0.2	1.0	0.1	1.0	4.21	13,800
Fluorine (soluble fluoride) (B)	7782414	6.0E-2	NA	NA	NA	3.1E+3	1.0	0.5	0.01	1.0	NR	NR
Formaldehyde	50000	1.8E-1	NA	9.0E+0	1.3E-5	3.7E+2	0.2	1.0	0.1	1.0	-0.051	1.09
Formic acid (I,U)	64186	1.4E+0	NA	2.0E+0	NA	1.9E+4	0.2	1.0	0.1	1.0	-0.538	0.449
1-Formylpiperidine	2591868	1.1E-2	NA	NA	NA	NA	0.2	1.0	0.1	1.0	NA	NA
Gentian violet	548629	1.4E-1	5.5E-2	NA	NA	NA	0.2	1.0	0.1	1.0	0.51	3.17
Glyphosate	1071836	1.0E-1	NA	NA	NA	NA	0.2	0.5	0.1	1.0	-4.47	4.04E-5
Heptachlor	76448	2.3E-3	1.6E+0	NA	1.3E-3	NA	0.2	0.5	0.1	1.0	6.26	1.43E+6
Heptachlor epoxide	1024573	8.5E-6	2.9E+0	NA	2.6E-3	NA	0.2	0.5	0.1	1.0	5.0	82,300
n-Heptane	142825	4.4E+0	NA	3.5E+3	NA	2.05E+6	0.2	1.0	0.1	1.0	4.72	43,700
Hexabromobenzene	87821	2.8E-3	NA	NA	NA	NA	0.2	0.5	0.1	1.0	6.1	9.92E+5
Hexachlorobenzene (C-66)	118741	8.0E-4	1.0E+0	NA	4.6E-4	NA	0.2	0.5	0.1	1.0	5.89	55,300
Hexachlorobutadiene (C-46)	87683	2.0E-3	5.2E-2	NA	2.2E-5	NA	0.2	1.0	0.1	1.0	4.81	53,500
alpha-Hexachlorocyclohexane	319846	NA	2.0E+0	NA	1.83E-3	NA	0.2	1.0	0.1	1.0	3.8	1,220
beta-Hexachlorocyclohexane	319857	NA	9.7E-1	NA	5.3E-4	NA	0.2	1.0	0.1	1.0	3.81	1,250
Hexachlorocyclopentadiene (C-56)	77474	6.0E-3	NA	2.0E-1	NA	NA	0.2	0.5	0.1	1.0	5.39	1.99E+05

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Hazardous Substance	Chemical Abstract Service Number	Soil Koc for Ionizing Organic Compounds at pH=6.8	Soil-Water Distribution Coefficients for Inorganic Compounds at pH=6.8 (Kd)	Henry's Law Constant at 25°C (HLC)	Air Diffusivity (D_i or D_a or D^{air})	Water Diffusivity (D_w)	Lower Explosive Limit in Air (LEL)	Flash Point (FP)	Water Solubility (S)	Physical State at Standard Temperature & Pressure	Molecular Weight (MW)
		L/Kg	L/Kg	atm-m^3/mol	cm^2/s	cm^2/s	unitless	°F	ug/L	unitless	g/mol
Ethylbenzene (I)	100414	NR	NR	7.88E-3	0.075	7.8E-6	0.008	55	1.69E+5	Liquid	106.17
Ethylene dibromide	106934	NR	NR	4.60E-4	0.08	8.0E-6	NA	NA	4.20E+6	Liquid	187.9
Ethylene glycol	107211	NR	NR	6.00E-8	0.08	8.0E-6	0.032	232	1.0E+9	Liquid	62.07
Ethylene glycol monobutyl ether	111762	NR	NR	5.13E-2	0.08	8.0E-6	NA	143	2.24E+8	Liquid	118.2
Fluoranthene	206440	NR	NR	1.61E-5	0.0302	6.35E-6	NA	NA	206	Solid	202.24
Fluorene	86737	NR	NR	6.36E-5	0.0363	7.88E-6	NA	NA	1,980	Solid	166.23
Fluorine (soluble fluoride) (B)	7782414	NR	NA	NR	NR	NR	NA	NA	NA	Inorganic	38
Formaldehyde	50000	NR	NR	2.80E-4	0.18	2.0E-5	0.07	NA	5.50E+8	Liquid	30.03
Formic acid (I,U)	64186	NR	NR	2.50E-6	0.079	1.4E-6	0.18	122	1.0E+9	Liquid	46.03
1-Formylpiperidine	2591868	NR	NR	NA	0.08	8.0E-6	NA	NA	NA	Liquid	113.2
Gentian violet	548629	NR	NR	3.06E-16	0.08	8.0E-6	NA	NA	1.00E+6	Solid	408
Glyphosate	1071836	NR	NR	1.50E-9	0.08	8.0E-6	NA	NA	1.16E+7	Solid	169.09
Heptachlor	76448	NR	NR	1.48E-3	0.0112	5.69E-6	NA	NA	180	Solid	373.4
Heptachlor epoxide	1024573	NR	NR	9.50E-6	0.0132	4.23E-6	NA	NA	200	Solid	389.32
n-Heptane	142825	NR	NR	2.11E+0	0.08	8.0E-6	0.0105	25	2,690	Liquid	100.2
Hexabromobenzene	87821	NR	NR	1.30E-5	0.08	8.0E-6	NA	NA	0.17	Solid	551
Hexachlorobenzene (C-66)	118741	NR	NR	1.32E-3	0.0542	5.91E-6	NA	NA	6,200	Solid	284.78
Hexachlorobutadiene (C-46)	87683	NR	NR	8.15E-3	0.0561	6.16E-6	NA	NA	3,230	Liquid	260.76
alpha-Hexachlorocyclohexane	319846	NR	NR	1.06E-5	0.0142	7.34E-6	NA	NA	2,000	Solid	290.82
beta-Hexachlorocyclohexane	319857	NR	NR	7.43E-7	0.0142	7.34E-6	NA	NA	240	Solid	290.82
Hexachlorocyclopentadiene (C-56)	77474	NR	NR	2.70E-2	0.0161	7.21E-6	NA	NA	1,800	Liquid	272.77

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Hazardous Substance	Chemical Abstract Service Number	Oral Reference Dose (RFD)	Oral Slope Factor (SF)	Chronic Inhalation Reference Concentration (RfC)	Inhalation Unit Risk Factor (IURF)	Occupational Short Term Exposure Level (STEL)	Relative Source Contribution for Drinking Water (RSC)	Ingestion Absorption Efficiency (AEi)	Dermal Absorption Efficiency (AEd)	Relative Source Contribution for Soil (RSC)	Log Octanol-Water Partition Coefficient (Log Kow)	Soil Organic Carbon-Water Partition Coefficients for Organic Compounds (Koc)
		mg/Kg-day	$(mg/Kg\text{-}day)^{-1}$	ug/m^3	$(ug/m^3)^{-1}$	ug/m^3	unitless	unitless	unitless	unitless	unitless	L/Kg
Hexachloroethane	67721	1.0E-3	8.5E-3	3.5E+0	4.0E-6	NA	0.2	1.0	0.1	1.0	4.0	1,760
n-Hexane	110543	4.1E-1	NA	2.0E+2	NA	NA	0.2	1.0	0.1	1.0	4.0	1,760
2-Hexanone	591786	1.4E-1	NA	4.0E+1	NA	NA	0.2	1.0	0.1	1.0	1.4	23.8
Indeno(1,2,3-cd)pyrene (Q)	193395	NA	4.1E-1	NA	NA	NA	0.2	0.5	0.13	1.0	6.65	3.45E+6
Iron (B)	7439896	3.0E-1	NA	NA	NA	NA	0.2	0.5	0.01	1.0	NR	NR
Isobutyl alcohol (I)	78831	3.2E-1	NA	1.5E+3	NA	NA	0.2	1.0	0.1	1.0	0.75	5.46
Isophorone	78591	1.5E-1	1.1E-3	2.8E+2	2.7E-7	2.8E+4	0.2	1.0	0.1	1.0	1.699	46.8
Isopropyl alcohol (I)	67630	6.4E-2	NA	2.2E+2	NA	1.23E+6	0.2	1.0	0.1	1.0	0.05	1.31
Isopropyl benzene	98828	1.1E-1	NA	8.7E+1	NA	NA	0.2	1.0	0.1	1.0	3.6	3,460
Lead (B)	7439921	NA	NA	1.5E+0	NA	NA	0.2	0.5	0.01	1.0	NR	NR
Lindane	58899	3.3E-4	7.1E-1	NA	NA	NA	0.2	1.0	0.04	1.0	3.73	1,080
Lithium (B)	7439932	2.8E-2	NA	3.5E+1	NA	NA	0.2	0.5	0.01	1.0	NR	NR
Magnesium (B)	7439954	1.1E+1	NA	1.0E+2	NA	NA	1.0	0.5	0.01	1.0	NR	NR
Manganese (B)	7439965	4.7E-2	NA	5.0E-2	NA	NA	0.5	0.5	0.01	1.0	NR	NR
Mercury (Total) (B,Z)	Varies	3.0E-4	NA	3.0E-1	NA	NA	0.2	0.5	0.01	1.0	5.95	NR
Methane	74828	NA	NA	NA	NA	NA	0.2	1.0	0.1	1.0	1.09	11.8
Methanol	67561	5.0E-1	NA	3.25E+3	NA	3.28E+6	0.2	1.0	0.1	1.0	-0.72	0.196
Methoxychlor	72435	5.0E-3	NA	NA	NA	NA	0.2	0.5	0.1	1.0	5.08	12,600
2-Methoxyethanol (I)	109864	1.0E-3	NA	2.0E+1	NA	NA	0.2	1.0	0.1	1.0	-0.77	0.175
2-Methyl-4-chlorophenoxyacetic acid	94746	1.0E-3	NA	NA	NA	NA	0.2	1.0	0.1	1.0	3.25	1,570
2-Methyl-4,6-dinitrophenol	534521	3.5E-4	NA	2.0E+0	NA	NA	0.2	1.0	0.1	1.0	2.1	116

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		L/Kg	L/Kg	atm-m^3/mol	cm^2/s	cm^2/s	unitless	°F	ug/L	unitless	g/mol
Hexachloroethane	67721	NR	NR	3.89E-3	0.0025	6.8E-6	NA	NA	50,000	Solid	236.74
n-Hexane	110543	NR	NR	1.40E-2	0.08	8.0E-6	0.011	-7	12,000	Liquid	86.18
2-Hexanone	591786	NR	NR	9.57E-5	0.08	8.0E-6	NA	77	1.60E+7	Liquid	100.16
Indeno(1,2,3-cd)pyrene (Q)	193395	NR	NR	1.60E-6	0.019	5.66E-6	NA	NA	0.022	Solid	276.34
Iron (B)	7439896	NR	NA	NR	NR	NR	NA	NA	NA	Inorganic	55.845
Isobutyl alcohol (I)	78831	NR	NR	1.30E-5	0.08	8.0E-6	NA	82	7.60E+7	Liquid	74.14
Isophorone	78591	NR	NR	6.20E-6	0.0623	6.76E-6	0.008	184	1.20E+7	Liquid	138.23
Isopropyl alcohol (I)	67630	NR	NR	8.07E-6	0.08	8.0E-6	0.02	53	1.0E+9	Liquid	60.09
Isopropyl benzene	98828	NR	NR	1.50E-2	0.086	7.1E-6	0.009	96	56,000	Liquid	122.16
Lead (B)	7439921	NR	11,000	NR	NR	NR	NA	NA	NA	Inorganic	207.2
Lindane	58899	NR	NR	1.40E-5	0.0176	7.34E-6	NA	NA	6,800	Solid	290.9
Lithium (B)	7439932	NR	NA	NR	NR	NR	NA	NA	NA	Inorganic	6.941
Magnesium (B)	7439954	NR	NA	NR	NR	NR	NA	NA	NA	Inorganic	24.305
Manganese (B)	7439965	NR	NA	NR	NR	NR	NA	NA	NA	Inorganic	54.938
Mercury (Total) (B,Z)	Varies	NR	52	7.10E-10	0.037	6.3E-6	NA	NA	56	Inorganic	200.59
Methane	74828	NR	NR	6.58E-1	0.08	8.0E-6	0.053	-306	NA	Gas	16.04
Methanol	67561	NR	NR	1.70E-4	0.15	1.3E-5	0.06	52	2.90E+7	Liquid	32.05
Methoxychlor	72435	NR	NR	1.58E-5	0.0156	4.46E-6	NA	NA	45	Solid	345.7
2-Methoxyethanol (I)	109864	NR	NR	9.51E-7	0.08	8.0E-6	NA	NA	1.0E+9	Liquid	76.1
2-Methyl-4-chlorophenoxyacetic acid	94746	NR	NR	1.33E-9	0.08	8.0E-6	NA	NA	9.24E+5	Solid	305.79
2-Methyl-4,6-dinitrophenol	534521	NR	NR	4.30E-7	0.08	8.0E-6	NA	NA	2.00E+5	Solid	198.13

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		mg/Kg-day	$(mg/Kg\text{-}day)^{-1}$	ug/m^3	$(ug/m^3)^{-1}$	ug/m^3	unitless	unitless	unitless	unitless	unitless	L/Kg
N-Methyl-morpholine (I)	109024	2.7E-3	NA	NA	NA	NA	0.2	1.0	0.1	1.0	-0.33	0.474
Methyl parathion	298000	2.5E-4	NA	NA	NA	NA	0.2	1.0	0.1	1.0	2.9	710
4-Methyl-2-pentanone (MIBK) (I)	108101	2.5E-1	NA	2.05E+3	NA	3.07E+6	0.2	1.0	0.1	1.0	1.18	14.5
Methyl-tert-butyl ether (MTBE)	1634044	3.3E-2	3.4E-3	3.0E+3	NA	NA	0.2	1.0	0.1	1.0	0.99	9.41
Methylcyclopentane (I)	96377	NA	NA	700	NA	NA	0.2	1.0	0.1	1.0	3.37	2,060
4,4'-Methylene-bis-2-chloroaniline (MBOCA)	101144	7.3E-4	7.7E-1	NA	3.7E-5	NA	0.2	1.0	0.1	1.0	3.92	7,140
Methylene chloride	75092	5.8E-2	4.2E-3	2.0E+3	4.7E-7	NA	0.2	1.0	0.1	1.0	1.26	11.9
2-Methylnaphthalene	91576	3.6E-2	NA	1E+1	NA	NA	0.2	1.0	0.1	1.0	3.9	6,820
Methylphenols (J)	1319773	5.0E-2	NA	1.0E+2	NA	NA	0.2	1.0	0.1	1.0	1.99	45.1
Metolachlor	51218452	2.3E-1	3.5E-3	NA	NA	NA	0.2	1.0	0.1	1.0	3.13	361
Metribuzin	21087649	2.5E-2	NA	NA	NA	NA	0.2	0.5	0.1	1.0	1.7	46.9
Mirex	2385855	2.3E-4	9.3E-1	NA	NA	NA	0.2	0.5	0.1	1.0	6.70	3.86E+6
Molybdenum (B)	7439987	5.0E-3	NA	NA	NA	NA	0.4	0.5	0.01	1.0	NR	NR
Naphthalene	91203	7.1E-2	NA	3.0E+0	3.1E-6	7.9E+4	0.2	1.0	0.1	1.0	3.36	2,010
Nickel (B)	7440020	7.6E-2	NA	NA	2.4E-4	NA	0.2	0.5	0.01	1.0	NR	NR
Nitrate (B,N)	14797558	1.6E+0	NA	NA	NA	NA	1.0	0.5	0.01	1.0	NR	NR
Nitrite (B,N)	14797650	1.0E-1	NA	NA	NA	NA	1.0	0.5	0.01	1.0	NR	NR
Nitrobenzene (I)	98953	4.6E-4	NA	7.0E-1	2.0E-5	NA	0.2	1.0	0.1	1.0	1.84	64.4
2-Nitrophenol	88755	2.8E-3	NA	NA	NA	NA	0.2	1.0	0.1	1.0	1.8	58.8
n-Nitroso-di-n-propylamine	621647	2.5E-1	4.5E+0	NA	2.0E-3	NA	0.2	1.0	0.1	1.0	1.4	23.8
N-Nitrosodiphenylamine	86306	2.5E-1	3.1E-3	NA	1.4E-6	NA	0.2	1.0	0.1	1.0	3.16	381

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TABLE 4. TOXICOLOGICAL AND CHEMICAL-PHYSICAL DATA
PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS;
PART 213 TIER 1 RISK-BASED SCREENING LEVELS (RBSLs)
DOCUMENT RELEASE DATE: SEPTEMBER 28, 2012

Developed pursuant to R 299.5752 of the Administrative Rules for Part 201 Environmental Remediation of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Scientific notation is represented by E+ or E- a value, for example 200,000 is presented as 2.0E+5. Units are as indicated in each column heading. The dataset for each hazardous substance requires 22 columns. Review all 22 columns across 2 pages when evaluating data for a specific hazardous substance.

Hazardous Substance	Chemical Abstract Service Number	Soil Koc for Ionizing Organic Compounds at pH=6.8	Soil-Water Distribution Coefficients for Inorganic Compounds at pH=6.8 (Kd)	Henry's Law Constant at 25°C (HLC)	Air Diffusivity (D_i or D_a or D^{air})	Water Diffusivity (D_w)	Lower Explosive Limit in Air (LEL)	Flash Point (FP)	Water Solubility (S)	Physical State at Standard Temperature & Pressure	Molecular Weight (MW)
		L/Kg	L/Kg	atm-m^3/mol	cm^2/s	cm^2/s	unitless	°F	ug/L	unitless	g/mol
N-Methyl-morpholine (I)	109024	NR	NR	2.50E-7	0.08	8.0E-6	NA	NA	1.0E+9	Liquid	101.17
Methyl parathion	298000	NR	NR	1.10E-7	0.08	8.0E-6	NA	NA	50,000	Solid	263.23
4-Methyl-2-pentanone (MIBK) (I)	108101	NR	NR	1.20E-4	0.075	7.8E-6	NA	64	2.00E+7	Liquid	100.2
Methyl-tert-butyl ether (MTBE)	1634044	NR	NR	6.39E-4	0.08	8.0E-6	NA	NA	4.68E+7	Liquid	88.15
Methylcyclopentane (I)	96377	NR	NR	3.63E-1	0.08	8.0E-6	NA	NA	73,890	Liquid	84.16
4,4'-Methylene-bis-2-chloroaniline (MBOCA)	101144	NR	NR	4.10E-11	0.08	8.0E-6	NA	NA	14,000	Solid	267.17
Methylene chloride	75092	NR	NR	2.40E-3	0.101	1.17E-5	0.13	NA	1.70E+7	Liquid	50.5
2-Methylnaphthalene	91576	NR	NR	4.99E-4	0.08	8.0E-6	NA	NA	24,600	Solid	142.2
Methylphenols (J)	1319773	NR	NR	1.60E-6	0.074	8.3E-6	NA	178	2.80E+7	Solid	108.13
Metolachlor	51218452	NR	NR	9.90E-9	0.08	8.0E-6	NA	NA	5.30E+5	Liquid	283.83
Metribuzin	21087649	NR	NR	8.80E-2	0.08	8.0E-6	NA	NA	1.2E+6	Solid	214.29
Mirex	2385855	NR	NR	5.16E-4	0.08	8.0E-6	NA	NA	6.8E-6	Solid	545.54
Molybdenum (B)	7439987	NR	NA	NR	NR	NR	NA	NA	NA	Inorganic	95.94
Naphthalene	91203	NR	NR	4.83E-4	0.059	7.5E-6	0.009	174	31,000	Solid	128.17
Nickel (B)	7440020	NR	65	NR	NR	NR	NA	NA	NA	Inorganic	58.7
Nitrate (B,N)	14797558	NR	NA	NR	NR	NR	NA	NA	NA	Inorganic	62
Nitrite (B,N)	14797650	NR	NA	NR	NR	NR	NA	NA	NA	Inorganic	46
Nitrobenzene (I)	98953	NR	NR	2.40E-5	0.076	8.6E-6	NA	190	2.09E+6	Liquid	123.11
2-Nitrophenol	88755	NR	NR	3.50E-6	0.08	8.0E-6	NA	NA	2.50E+6	Solid	139.11
n-Nitroso-di-n-propylamine	621647	NR	NR	2.25E-6	0.0545	8.17E-6	NA	NA	9.89E+6	Liquid	130.22
N-Nitrosodiphenylamine	86306	NR	NR	5.00E-6	0.0312	6.35E-6	NA	NA	35,100	Solid	198.22

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Hazardous Substance	Chemical Abstract Service Number	Oral Reference Dose (RFD)	Oral Slope Factor (SF)	Chronic Inhalation Reference Concentration (RfC)	Inhalation Unit Risk Factor (IURF)	Occupational Short Term Exposure Level (STEL)	Relative Source Contribution for Drinking Water (RSC)	Ingestion Absorption Efficiency (AEi)	Dermal Absorption Efficiency (AEd)	Relative Source Contribution for Soil (RSC)	Log Octanol-Water Partition Coefficient (Log Kow)	Soil Organic Carbon-Water Partition Coefficients for Organic Compounds (Koc)
		mg/Kg-day	$(mg/Kg\text{-}day)^{-1}$	ug/m^3	$(ug/m^3)^{-1}$	ug/m^3	unitless	unitless	unitless	unitless	unitless	L/Kg
Oxamyl	23135220	3.8E-2	NA	NA	NA	NA	0.2	1.0	0.1	1.0	-0.47	0.508
Oxo-hexyl acetate	88230357	1.0E-2	NA	3.1E+1	NA	NA	0.2	1.0	0.1	1.0	NA	NA
Pendimethalin	40487421	1.2E-1	NA	NA	NA	NA	0.2	0.5	0.1	1.0	5.18	1.24E+5
Pentachlorobenzene	608935	8.3E-4	NA	NA	NA	NA	0.2	0.5	0.1	1.0	5.26	1.48E+5
Pentachloronitrobenzene	82688	7.5E-3	NA	5.0E+0	NA	NA	0.2	1.0	0.1	1.0	4.64	36,400
Pentachlorophenol	87865	3.0E-2	6.8E-2	1.0E+2	3.0E-5	NA	0.2	0.5	0.25	1.0	5.09	592
Pentane	109660	NA	NA	1.8E+4	NA	2.21E+6	0.2	1.0	0.1	1.0	3.42	2,300
2-Pentene (I)	109682	NA	NA	NA	NA	NA	0.2	1.0	0.1	1.0	2.58	344
pH	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR
Phenanthrene	85018	7.1E-3	NA	1.0E-1	NA	NA	0.2	1.0	0.1	1.0	4.6	33,300
Phenol	108952	6.0E-1	NA	6.0E+2	NA	NA	0.2	1.0	0.1	1.0	1.48	17.8
Phenytoin	57410	3.0E-2	5.1E-2	NA	1.4E-5	NA	0.2	1.0	0.1	1.0	2.47	1473
Phosphorus (Total)	7723140	1.1E+1	NA	1E+0	NA	NA	0.2	0.5	0.1	1.0	NR	NA
Phthalic acid	88993	1.9E+0	NA	NA	NA	NA	0.2	1.0	0.1	1.0	0.73	5.22
Phthalic anhydride	85449	2.1E+0	NA	NA	NA	NA	0.2	1.0	0.1	1.0	1.6	37.4
Picloram	1918021	7.0E-2	NA	NA	NA	NA	0.2	1.0	0.1	1.0	0.3	1.97
Piperidine	110894	4.4E-4	NA	1.4E+2	NA	NA	0.2	1.0	0.1	1.0	0.84	6.7
Polybrominated biphenyls (J)	67774327	4.3E-6	7.2E+0	NA	NA	NA	0.2	0.5	0.1	1.0	7.07	8.91E+6
Polychlorinated biphenyls (PCBs) (J,T)	1336363	2.0E-5	2.0E+0	NA	6.0E-4	NA	0.2	0.5	0.14	1.0	5.58	3.06E+5
Prometon	1610180	2.2E-2	NA	NA	NA	NA	0.2	1.0	0.1	1.0	2.99	870
Propachlor	1918167	1.3E-2	NA	NA	NA	NA	0.2	1.0	0.1	1.0	2.01	94.6

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Hazardous Substance	Chemical Abstract Service Number	Soil Koc for Ionizing Organic Compounds at pH=6.8	Soil-Water Distribution Coefficients for Inorganic Compounds at pH=6.8 (Kd)	Henry's Law Constant at 25°C (HLC)	Air Diffusivity (D_i or D_a or D^{air})	Water Diffusivity (D_w)	Lower Explosive Limit in Air (LEL)	Flash Point (FP)	Water Solubility (S)	Physical State at Standard Temperature & Pressure	Molecular Weight (MW)
		L/Kg	L/Kg	atm-m^3/mol	cm^2/s	cm^2/s	unitless	°F	ug/L	unitless	g/mol
Oxamyl	23135220	NR	NR	2.37E-10	0.08	8.0E-6	NA	NA	2.80E+8	Solid	219.29
Oxo-hexyl acetate	88230357	NR	NR	NA	0.08	8.0E-6	NA	NA	NA	Liquid	144.2
Pendimethalin	40487421	NR	NR	8.56E-7	0.08	8.0E-6	NA	NA	275	Solid	281.31
Pentachlorobenzene	608935	NR	NR	8.40E-4	0.067	6.3E-6	NA	NA	650	Liquid	250.3
Pentachloronitrobenzene	82688	NR	NR	2.90E-2	0.08	8.0E-6	NA	NA	32	Solid	295.32
Pentachlorophenol	87865	592	NR	2.44E-8	0.056	6.1E-6	NA	NA	1.85E+6	Solid	266.32
Pentane	109660	NR	NR	1.26E+0	0.08	8.0E-6	0.015	-57	38,200	Liquid	72.15
2-Pentene (I)	109682	NR	NR	2.3E-1	0.08	8.0E-6	NA	NA	2.03E+5	Liquid	70.13
pH	NA	NR	NA	NR	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	85018	NR	NR	2.3E-5	0.08	8.0E-6	NA	NA	1,000	Solid	178.24
Phenol	108952	NR	NR	3.97E-7	0.082	9.1E-6	0.018	175	8.28E+7	Liquid	147.01
Phenytoin	57410	NA	NR	1.02E-11	0.08	8.0E-6	NA	NA	3.2E+4	Solid	252.2718
Phosphorus (Total)	7723140	NR	NR	NR	0.08	8.0E-6	NA	NA	NA	Solid	30.974
Phthalic acid	88993	NR	NR	2.18E-12	0.08	8.0E-6	NA	NA	1.42E+7	Liquid	166.13
Phthalic anhydride	85449	NR	NR	1.63E-8	0.08	8.0E-6	1.7E+7	305	6.2E+6	Liquid	148.1
Picloram	1918021	NR	NR	4.05E-11	0.08	8.0E-6	NA	NA	4.30E+5	Solid	241.48
Piperidine	110894	NR	NR	4.45E-6	0.08	8.0E-6	NA	NA	1.0E+9	Liquid	85.15
Polybrominated biphenyls (J)	67774327	NR	NR	3.90E-6	0.08	8.0E-6	NA	NA	1.66E+7	Solid	NA
Polychlorinated biphenyls (PCBs) (J,T)	1336363	NR	NR	4.20E-4	0.08	8.0E-6	NA	NA	44.7	Solid	268.4
Prometon	1610180	NR	NR	1.98E-9	0.08	8.0E-6	NA	NA	7.50E+5	Solid	225.29
Propachlor	1918167	NR	NR	1.09E-7	0.08	8.0E-6	NA	NA	6.55E+5	Solid	211.69

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Hazardous Substance	Chemical Abstract Service Number	Oral Reference Dose (RFD)	Oral Slope Factor (SF)	Chronic Inhalation Reference Concentration (RfC)	Inhalation Unit Risk Factor (IURF)	Occupational Short Term Exposure Level (STEL)	Relative Source Contribution for Drinking Water (RSC)	Ingestion Absorption Efficiency (AEi)	Dermal Absorption Efficiency (AEd)	Relative Source Contribution for Soil (RSC)	Log Octanol-Water Partition Coefficient (Log Kow)	Soil Organic Carbon-Water Partition Coefficients for Organic Compounds (Koc)
		mg/Kg-day	$(mg/Kg\text{-}day)^{-1}$	ug/m^3	$(ug/m^3)^{-1}$	ug/m^3	unitless	unitless	unitless	unitless	unitless	L/Kg
Propazine	139402	2.7E-2	NA	NA	NA	NA	0.2	1.0	0.1	1.0	2.75	505
Propionic acid	79094	1.7E+0	NA	3.0E+2	NA	NA	0.2	1.0	0.1	1.0	0.28	1.89
Propyl alcohol (I)	71238	1.9E-1	NA	7.3E+2	NA	6.14E+5	0.2	1.0	0.1	1.0	0.25	1.89
n-Propylbenzene (I)	103651	1.1E-2	NA	2.0E+1	NA	NA	0.2	1.0	0.1	1.0	3.69	4,240
Propylene glycol	57556	2.0E+1	NA	6.0E+3	NA	NA	0.2	1.0	0.1	1.0	-0.92	0.125
Pyrene	129000	7.5E-2	NA	1.0E+2	NA	NA	0.2	0.5	0.1	1.0	5.11	1.06E+5
Pyridine (I)	110861	1.0E-3	NA	3.5E+0	NA	NA	0.2	1.0	0.1	1.0	0.67	4.56
Selenium (B)	7782492	5.0E-3	NA	2.0E+0	NA	NA	0.2	0.5	0.01	1.0	NR	NR
Silver (B)	7440224	4.7E-3	NA	1.0E-1	NA	NA	0.2	0.5	0.01	1.0	NR	NR
Silvex (2,4,5-TP)	93721	7.5E-3	NA	NA	NA	NA	0.2	1.0	0.1	1.0	3.4	2,200
Simazine	122349	5.2E-3	NA	NA	NA	NA	0.2	1.0	0.1	1.0	1.93	79.0
Sodium	17341252	3.4E+1	NA	NA	NA	NA	0.1	0.5	0.01	1.0	NR	NR
Sodium azide	26628228	1.2E-2	NA	NA	NA	NA	0.2	1.0	0.1	1.0	NA	NA
Strontium (B)	7440246	6.3E-1	NA	NA	NA	NA	0.2	0.5	0.01	1.0	NR	NR
Styrene	100425	2.0E-1	1.3E-2	1.0E+3	5.7E-7	1.7E+5	0.2	1.0	0.1	1.0	2.94	777
Sulfate	14808798	NA	NA	NA	NA	NA	NA	0.5	0.1	1.0	NR	NR
Tebuthiuron	34014181	7.0E-2	NA	NA	NA	NA	0.2	1.0	0.1	1.0	1.78	56.2
2,3,7,8-Tetrabromodibenzo-p-dio (O)	50585416	NA	7.5E+4	NA	NA	NA	0.2	0.5	0.03	1.0	7.24	1.31E+7
1,2,4,5-Tetrachlorobenzene	95943	3.4E-1	NA	1E+0	NA	NA	0.2	1.0	0.1	1.0	4.64	36,400
2,3,7,8-Tetrachlorodibenzo-p-dio: (O)	1746016	NA	7.5E+4	2.0E-6	4.4E+1	NA	0.2	0.5	0.03	1.0	7.04	8.33E+6
1,1,1,2-Tetrachloroethane	630206	8.9E-2	1.1E-2	NA	7.4E-6	NA	0.2	1.0	0.1	1.0	2.63	145

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Hazardous Substance	Chemical Abstract Service Number	Soil Koc for Ionizing Organic Compounds at pH=6.8	Soil-Water Distribution Coefficients for Inorganic Compounds at pH=6.8 (Kd)	Henry's Law Constant at 25°C (HLC)	Air Diffusivity (D_i or D_a or D^{air})	Water Diffusivity (D_w)	Lower Explosive Limit in Air (LEL)	Flash Point (FP)	Water Solubility (S)	Physical State at Standard Temperature & Pressure	Molecular Weight (MW)
		L/Kg	L/Kg	atm-m^3/mol	cm^2/s	cm^2/s	unitless	°F	ug/L	unitless	g/mol
Propazine	139402	NR	NR	4.60E-9	0.08	8.0E-6	NA	NA	8,600	Solid	229.75
Propionic acid	79094	NR	NR	4.45E-7	0.08	8.0E-6	0.029	126	1.0E+9	Liquid	74.09
Propyl alcohol (I)	71238	NR	NR	7.41E-6	0.08	8.0E-6	0.022	72	1.0E+9	Liquid	60.11
n-Propylbenzene (I)	103651	NR	NR	NA	0.08	8.0E-6	NA	NA	NA	Liquid	120.19
Propylene glycol	57556	NR	NR	1.24E-8	0.08	8.0E-6	NA	NA	1.0E+9	Liquid	76.1
Pyrene	129000	NR	NR	1.10E-5	0.0272	7.24E-6	NA	NA	135	Solid	202.26
Pyridine (I)	110861	NR	NR	7.00E-3	0.091	7.6E-6	0.018	68	3.00E+5	Liquid	79.11
Selenium (B)	7782492	NR	5	NR	NR	NR	NA	NA	NA	Inorganic	78.96
Silver (B)	7440224	NR	8.3	NR	NR	NR	NA	NA	NA	Inorganic	107.868
Silvex (2,4,5-TP)	93721	NR	NR	1.30E-8	0.08	8.0E-6	NA	NA	1.40E+5	Solid	269.51
Simazine	122349	NR	NR	3.37E-9	0.08	8.0E-6	NA	NA	4,470	Solid	201.67
Sodium	17341252	NR	NA	NR	NR	NR	NA	NA	NA	Inorganic	23
Sodium azide	26628228	NR	NA	NA	0.08	8.0E-6	NA	NA	NA	Solid	65.01
Strontium (B)	7440246	NR	NA	NR	NA	NA	NA	NA	NA	Inorganic	87.62
Styrene	100425	NR	NR	2.75E-3	0.071	8.0E-6	0.009	88	3.10E+5	Liquid	104.15
Sulfate	14808798	NR	NA	NR	0.08	8.0E-6	NA	NA	NA	Inorganic	96.066
Tebuthiuron	34014181	NR	NR	2.40E-10	0.08	8.0E-6	NA	NA	2.50E+6	Solid	228.31
2,3,7,8-Tetrabromodibenzo-p-dio (O)	50585416	NR	NR	2.95E-7	0.08	8.0E-6	NA	NA	0.00996	Solid	499.6
1,2,4,5-Tetrachlorobenzene	95943	NR	NR	1.20E-3	0.08	8.0E-6	NA	NA	1,300	Solid	215.28
2,3,7,8-Tetrachlorodibenzo-p-dio (O)	1746016	NR	NR	9.20E-6	0.047	8.0E-6	NA	NA	0.019	Solid	322
1,1,1,2-Tetrachloroethane	630206	NR	NR	2.40E-3	0.071	7.9E-6	NA	NA	1.10E+6	Liquid	167.85

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PART 213 TIER 1 RISK-BASED SCREENING LEVELS (RBSLs)
DOCUMENT RELEASE DATE: SEPTEMBER 28, 2012

Developed pursuant to R 299.5752 of the Administrative Rules for Part 201 Environmental Remediation of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Scientific notation is represented by E+ or E- a value, for example 200,000 is presented as 2.0E+5. Units are as indicated in each column heading. The dataset for each hazardous substance requires 22 columns. Review all 22 columns across 2 pages when evaluating data for a specific hazardous substance.

Hazardous Substance	Chemical Abstract Service Number	Oral Reference Dose (RFD)	Oral Slope Factor (SF)	Chronic Inhalation Reference Concentration (RfC)	Inhalation Unit Risk Factor (IURF)	Occupational Short Term Exposure Level (STEL)	Relative Source Contribution for Drinking Water (RSC)	Ingestion Absorption Efficiency (AEi)	Dermal Absorption Efficiency (AEd)	Relative Source Contribution for Soil (RSC)	Log Octanol-Water Partition Coefficient (Log Kow)	Soil Organic Carbon-Water Partition Coefficients for Organic Compounds (Koc)
		mg/Kg-day	$(mg/Kg\text{-}day)^{-1}$	ug/m^3	$(ug/m^3)^{-1}$	ug/m^3	unitless	unitless	unitless	unitless	unitless	L/Kg
1,1,2,2-Tetrachloroethane	79345	NA	1.0E-1	NA	5.8E-5	NA	0.2	1.0	0.1	1.0	2.39	93.5
Tetrachloroethylene	127184	1.0E-2	2.6E-2	4.0E+1	5.8E-7	6.85E+5	0.2	1.0	0.1	1.0	2.67	156
Tetrahydrofuran	109999	1.3E-2	NA	5.9E+3	2.0E-6	7.37E+5	0.2	1.0	0.1	1.0	0.46	2.83
Tetranitromethane	509148	NA	NA	4E-1	1.5E-2	NA	0.2	NA	NA	1.0	-2.05	9.66E-3
Thallium (B)	7440280	6.7E-5	NA	0.2	NA	NA	0.2	0.5	0.01	1.0	NR	NR
Toluene (I)	108883	2.2E-1	NA	4.0E+2	NA	NA	0.2	1.0	0.1	1.0	2.75	180
p-Toluidine	106490	NA	5.6E-2	NA	3.1E-5	NA	0.2	1.0	0.1	1.0	1.39	23.3
Total dissolved solids (TDS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR
Toxaphene	8001352	NA	4.4E-1	NA	3.2E-4	1.0E+3	0.2	0.5	0.1	1.0	5.5	2.55E+5
Triallate	2303175	1.3E-2	NA	NA	NA	NA	0.2	1.0	0.1	1.0	4.57	31,100
Tributylamine	102829	3.5E-3	NA	7.0E+0	NA	NA	0.2	1.0	0.1	1.0	4.46	24,200
1,2,4-Trichlorobenzene	120821	1.5E-2	NA	3.7E+2	NA	3.7E+4	0.2	1.0	0.1	1.0	4.01	1,790
1,1,1-Trichloroethane	71556	2.2E+0	NA	1.0E+3	NA	2.46E+6	0.2	1.0	0.1	1.0	2.48	110
1,1,2-Trichloroethane	79005	3.9E-3	2.9E-2	NA	1.6E-5	NA	0.2	1.0	0.1	1.0	2.05	50.3
Trichloroethylene	79016	1.7E-3	1.0E-2	2.0E+0	1.7E-6	5.37E+5	0.2	1.0	0.1	1.0	2.71	168
Trichlorofluoromethane	75694	3.5E-1	NA	5.62E+4	NA	5.62E+6	0.2	1.0	0.1	1.0	2.53	121
2,4,5-Trichlorophenol	95954	1.0E-1	NA	3.5E+2	NA	NA	0.2	1.0	0.1	1.0	3.9	1,597
2,4,6-Trichlorophenol	88062	NA	7.4E-3	NA	3.1E-6	NA	0.2	1.0	0.1	1.0	3.7	381
1,2,3-Trichloropropane	96184	5.7E-3	NA	0.3	NA	NA	0.2	1.0	0.1	1.0	2.26	167
1,1,2-Trichloro-1,2,2-trifluoroetha	76131	2.7E+1	NA	7.67E+4	NA	9.59E+6	0.2	1.0	0.1	1.0	3.15	1,250
Triethanolamine	102716	5.0E-1	NA	5.0E+1	NA	NA	0.2	1.0	0.1	1.0	-1.38	0.044

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Hazardous Substance	Chemical Abstract Service Number	Soil Koc for Ionizing Organic Compounds at pH=6.8	Soil-Water Distribution Coefficients for Inorganic Compounds at pH=6.8 (Kd)	Henry's Law Constant at 25°C (HLC)	Air Diffusivity (D_i or D_a or D^{air})	Water Diffusivity (D_w)	Lower Explosive Limit in Air (LEL)	Flash Point (FP)	Water Solubility (S)	Physical State at Standard Temperature & Pressure	Molecular Weight (MW)
		L/Kg	L/Kg	atm-m^3/mol	cm^2/s	cm^2/s	unitless	°F	ug/L	unitless	g/mol
1,1,2,2-Tetrachloroethane	79345	NR	NR	3.45E-4	0.071	7.9E-6	NA	NA	2.97E+6	Liquid	167.85
Tetrachloroethylene	127184	NR	NR	1.84E-2	0.072	8.2E-6	NA	NA	2.0E+5	Liquid	165.83
Tetrahydrofuran	109999	NR	NR	9.63E-3	0.08	8.0E-6	0.02	6.0	1.0E+9	Liquid	72.12
Tetranitromethane	509148	NR	NR	2.60E-5	0.08	8.0E-6	NA	NA	85,000	Liquid	196.03
Thallium (B)	7440280	NR	71	NR	NR	NR	NA	NA	NA	Inorganic	204.383
Toluene (I)	108883	NR	NR	6.64E-3	0.087	8.6E-6	0.011	40	5.26E+5	Liquid	92.14
p-Toluidine	106490	NR	NR	6.10E-6	0.08	8.0E-6	NA	188	7.60E+6	Liquid	107.17
Total dissolved solids (TDS)	NA	NR	NA	NR	NA	NA	NA	NA	NA	NA	NA
Toxaphene	8001352	NR	NR	6.00E-6	0.0116	4.34E-6	NA	NA	740	Solid	414
Triallate	2303175	NR	NR	1.93E-5	0.08	8.0E-6	NA	NA	4,000	Liquid	304.66
Tributylamine	102829	NR	NR	5.60E-3	0.08	8.0E-6	NA	NA	75,400	Liquid	185.4
1,2,4-Trichlorobenzene	120821	NR	NR	1.42E-3	0.03	8.23E-6	NA	222	3.00E+5	Liquid	181.45
1,1,1-Trichloroethane	71556	NR	NR	1.72E-2	0.078	8.8E-6	0.075	NA	1.33E+6	Liquid	133.4
1,1,2-Trichloroethane	79005	NR	NR	9.13E-4	0.078	8.8E-6	0.06	NA	4.42E+6	Liquid	133.4
Trichloroethylene	79016	NR	NR	1.03E-2	0.079	9.1E-6	0.08	NA	1.10E+6	Liquid	131.39
Trichlorofluoromethane	75694	NR	NR	1.3E-1	0.087	9.7E-6	NA	NA	1.10E+6	Liquid	137.38
2,4,5-Trichlorophenol	95954	1,597	NR	4.33E-6	0.0291	7.03E-6	NA	NA	1.20E+6	Solid	197.5
2,4,6-Trichlorophenol	88062	381	NR	7.79E-6	0.0318	6.25E-6	NA	NA	8.00E+5	Solid	197.5
1,2,3-Trichloropropane	96184	NR	NR	3.80E-4	0.071	7.9E-6	NA	160	1.90E+6	Liquid	147.43
1,1,2-Trichloro-1,2,2-trifluoroetha	76131	NR	NR	5.30E-1	0.078	8.2E-6	NA	NA	1.70E+5	Liquid	187.38
Triethanolamine	102716	NR	NR	3.38E-19	0.08	8.0E-6	NA	NA	1.0E+9	Liquid	149.19

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Hazardous Substance	Chemical Abstract Service Number	Oral Reference Dose (RFD)	Oral Slope Factor (SF)	Chronic Inhalation Reference Concentration (RfC)	Inhalation Unit Risk Factor (IURF)	Occupational Short Term Exposure Level (STEL)	Relative Source Contribution for Drinking Water (RSC)	Ingestion Absorption Efficiency (AEi)	Dermal Absorption Efficiency (AEd)	Relative Source Contribution for Soil (RSC)	Log Octanol-Water Partition Coefficient (Log Kow)	Soil Organic Carbon-Water Partition Coefficients for Organic Compounds (Koc)
		mg/Kg-day	$(mg/Kg\text{-}day)^{-1}$	ug/m^3	$(ug/m^3)^{-1}$	ug/m^3	unitless	unitless	unitless	unitless	unitless	L/Kg
Triethylene glycol	112276	5.9E-1	NA	NA	NA	NA	0.2	1.0	0.1	1.0	-1.69	0.0218
3-Trifluoromethyl-4-nitrophenol	88302	6.2E-1	NA	NA	NA	NA	0.2	1.0	0.1	1.0	2.87	663
Trifluralin	1582098	5.1E-3	4.5E-3	NA	NA	NA	0.2	0.5	0.1	1.0	5.3	1.62E+5
2,2,4-Trimethyl pentane	540841	NA	NA	3.5E+3	NA	NA	0.2	1.0	0.1	1.0	4.09	2,080
2,4,4-Trimethyl-2-pentene (I)	107404	NA	NA	NA	NA	NA	0.2	1.0	0.1	1.0	4.0	1,760
1,2,4-Trimethylbenzene (I)	95636	1.4E-1	NA	1.23E+3	NA	NA	0.2	1.0	0.1	1.0	3.67	965
1,3,5-Trimethylbenzene (I)	108678	1.4E-1	NA	1.23E+3	NA	NA	0.2	1.0	0.1	1.0	3.5	708
Triphenyl phosphate	115866	1.6E-1	NA	NA	NA	NA	0.2	1.0	0.1	1.0	4.67	39,000
tris(2,3-Dibromopropyl)phosphate	126727	NA	1.2E+0	NA	5.3E-4	NA	0.2	1.0	0.1	1.0	3.51	2,820
Urea	57136	NA	NA	NA	NA	NA	0.2	1.0	0.1	1.0	-2.11	0.0256
Vanadium	7440622	5.0E-3	NA	NA	NA	NA	0.2	0.5	0.01	1.0	NR	NR
Vinyl acetate (I)	108054	8.8E-2	NA	2.0E+2	NA	5.3E+4	0.2	1.0	0.1	1.0	0.73	5.22
Vinyl chloride	75014	3.0E-3	1.4E+0	1.0E+2	8.8E-6	NA	0.2	1.0	0.1	1.0	1.5	18.5
White phosphorus (R)	12185103	1.5E-5	NA	NA	NA	NA	0.2	0.5	0.01	1.0	NR	NR
Xylenes (I)	1330207	1.8E+0	NA	4.4E+3	NA	6.51E+5	0.2	1.0	0.1	1.0	3.11	348
Zinc (B)	7440666	3.3E-1	NA	NA	NA	NA	0.2	0.5	0.01	1.0	NR	NR

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Hazardous Substance	Chemical Abstract Service Number	Soil Koc for Ionizing Organic Compounds at pH=6.8	Soil-Water Distribution Coefficients for Inorganic Compounds at pH=6.8 (Kd)	Henry's Law Constant at 25°C (HLC)	Air Diffusivity (D_i or D_a or D^{air})	Water Diffusivity (D_w)	Lower Explosive Limit in Air (LEL)	Flash Point (FP)	Water Solubility (S)	Physical State at Standard Temperature & Pressure	Molecular Weight (MW)
		L/Kg	L/Kg	atm-m^3/mol	cm^2/s	cm^2/s	unitless	°F	ug/L	unitless	g/mol
Triethylene glycol	112276	NR	NR	2.61E-10	0.0427	8.06E-6	NA	NA	1.00E+6	Liquid	150.17
3-Trifluoromethyl-4-nitrophenol	88302	NR	NR	1.92E-8	0.08	8.0E-6	NA	NA	5.00E+6	Solid	207
Trifluralin	1582098	NR	NR	2.60E-5	0.08	8.0E-6	NA	NA	8,100	Solid	335.29
2,2,4-Trimethyl pentane	540841	NR	NR	3.13E+0	0.08	8.0E-6	0.011	10	2,330	Liquid	114.23
2,4,4-Trimethyl-2-pentene (I)	107404	NR	NR	8.81E-1	0.08	8.0E-6	NA	NA	11,900	Liquid	112.2
1,2,4-Trimethylbenzene (I)	95636	NR	NR	5.87E-3	0.08	8.0E-6	0.009	112	55,890	Liquid	120.2
1,3,5-Trimethylbenzene (I)	108678	NR	NR	7.38E-3	0.08	8.0E-6	NA	122	61,150	Liquid	120.2
Triphenyl phosphate	115866	NR	NR	3.60E-7	0.08	8.0E-6	NA	NA	1,430	Liquid	326.3
tris(2,3-Dibromopropyl)phosphate	126727	NR	NR	3.00E-5	0.08	8.0E-6	NA	NA	4,700	Liquid	697.67
Urea	57136	NR	NR	NR	0.08	8.0E-6	NA	NA	NA	Solid	60.07
Vanadium	7440622	NR	1,000	NR	NR	NR	NA	NA	NA	Inorganic	50.942
Vinyl acetate (I)	108054	NR	NR	5.11E-4	0.085	9.2E-6	0.026	18	2.00E+7	Liquid	86.09
Vinyl chloride	75014	NR	NR	2.70E-2	0.106	1.23E-5	0.036	NA	2.76E+6	Liquid	62.5
White phosphorus (R)	12185103	NR	NA	NR	NR	NR	NA	NA	NA	Inorganic	123.9
Xylenes (I)	1330207	NR	NR	6.04E-3	0.078	3.21E-5	NA	NA	1.86E+5	Liquid	106.17
Zinc (B)	7440666	NR	62	NR	NR	NR	NA	NA	NA	Inorganic	65.39

FOOTNOTES
for
Part 201 Criteria and Part 213 Risk-Based Screening Levels
Document Release Date: September 28, 2012

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

(B) Background, as defined in R 299.5701(b), may be substituted if higher than the calculated cleanup criterion. Background levels may be less than criteria for some inorganic compounds.

(C) Value presented is a screening level based on the chemical-specific generic soil saturation concentration (C_{sat}) since the calculated risk-based criterion is greater than C_{sat}. Concentrations greater than C_{sat} are acceptable cleanup criteria for this pathway where a site-specific demonstration indicates that free-phase material containing a hazardous substance is not present.

(D) Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0E+9 parts per billion (ppb).

(E) Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). A notice of aesthetic impact may be employed as an institutional control mechanism if groundwater concentrations exceed the aesthetic drinking water criterion, but do not exceed the applicable health-based drinking water value provided in the following table:

Hazardous Substance	Chemical Abstract Service Number	Residential Health-Based Drinking Water Value	Non-Residential Health-Based Drinking Water Value
Aluminum	7429905	300	4,100
tertiary Amyl methyl ether	994058	910	2,600
Copper	7440508	1,400	4,000
Diethyl ether	60297	3,700	10,000
Ethylbenzene	100414	700	700
Iron	7439896	2,000	5,600
Manganese	7439965	860	2,500
Methyl-tert-butyl ether (MTBE)	1634044	240	690
Toluene	108883	1,000	1,000
1,2,4-Trimethylbenzene	95636	1,000	2,900
1,3,5-Trimethylbenzene	108678	1,000	2,900
Xylenes	1330207	10,000	10,000

(F) Criterion is based on adverse impacts to plant life and phytotoxicity.

(G) Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water. The final chronic value (FCV) for the protection of aquatic life shall be calculated based on the pH or hardness of the receiving surface water. Where water hardness exceeds 400 mg $CaCO_3$/L, use 400 mg $CaCO_3$/L for the FCV calculation. The FCV formula provides values in units of ug/L or ppb. The generic GSI criterion is the lesser of

the calculated FCV, the wildlife value (WV), and the surface water human non-drinking water value (HNDV). The soil GSI protection criteria for these hazardous substances are the greater of the 20 times the GSI criterion or the GSI soil-water partition values using the GSI criteria developed with the procedure described in this footnote.

Hazardous Substance	FCV Formula ug/L	FCV Conversion Factor (CF)	WV ug/L	HNDV ug/L
Acetate	EXP(0.2732*(pH) + 7.0362)	NA	NA	1.3E+6
Acetic Acid	EXP(0.2732*(pH) + 7.0362)	NA	NA	1.3E+6
Barium	EXP(1.0629*(LnH)+1.1869)	NA	NA	1.6E+5
Beryllium	EXP(2.5279*(LnH)-10.7689)	NA	NA	1,200
Cadmium⊗	(EXP(0.7852*(LnH)-2.715))*CF	1.101672-((LnH)*(0.041838))	NA	130
Chromium (III) ⊗	(EXP(0.819*(LnH)+0.6848))*CF	0.86	NA	9,400
Copper	(EXP(0.8545*(LnH)-1.702)) *CF	0.96	NA	38,000
Lead⊗	(EXP(0.9859*(LnH)-1.270))*CF	1.46203-((LnH)*(0.14571))	NA	190
Manganese⊗	EXP(0.8784*(LnH)+3.5385)	NA	NA	59,000
Nickel	(EXP(0.846*(LnH)+0.0584))*CF	0.997	NA	2.1E+5
Pentachlorophenol⊗	EXP(1.005*(pH)-5.134)	NA	NA	2.8
Zinc	(EXP(0.8473*(LnH)+0.884))*CF	0.986	NA	16,000

where,

EXP(x) = The base of the natural logarithm raised to power x (e^x).
LnH = The natural logarithm of water hardness in mg $CaCO_3$/L.
* = The multiplication symbol.
⊗ = The GSI criterion developed here may not be protective for surface water that is used as a drinking water source. Refer to footnote (X) for further guidance.

A spreadsheet that may be used to calculate GSI and GSI protection criteria for (G)-footnoted hazardous substances is available on the Department of Environmental Quality (DEQ) internet web site.

(H) Valence-specific chromium data (Cr III and Cr VI) shall be compared to the corresponding valence-specific cleanup criteria. If both Cr III and Cr VI are present in groundwater, the total concentration of both cannot exceed the drinking water criterion of 100 ug/L. If analytical data are provided for total chromium only, they shall be compared to the cleanup criteria for Cr VI. Cr III soil cleanup criterion for protection of drinking water can only be used at sites where groundwater is prevented from being used as a public water supply, currently and in the future, through an approved land or resource use restriction.

(I) Hazardous substance may exhibit the characteristic of ignitability as defined in 40 C.F.R. §261.21 (revised as of July 1, 2001), which is adopted by reference in these rules and is available for inspection at the DEQ, 525 West Allegan Street, Lansing, Michigan. Copies of the regulation may be purchased, at a cost as of the time of adoption of these rules of $45, from the Superintendent of Documents, Government Printing Office, Washington, DC 20401 (stock number 869-044-00155-1), or from the DEQ, Remediation and Redevelopment Division (RRD), 525 West Allegan Street, Lansing, Michigan 48933, at cost.

(J) Hazardous substance may be present in several isomer forms. Isomer-specific concentrations shall be added together for comparison to criteria.

(K) Hazardous substance may be flammable or explosive, or both.

(L) Criteria for lead are derived using a biologically based model, as allowed for under Section 20120a(10) of the NREPA, and are not calculated using the algorithms and assumptions specified in pathway-specific rules. The generic residential drinking water criterion of 4 ug/L is linked to the generic residential soil direct contact criterion of 400 mg/kg. A higher concentration in the drinking water, up to the state action level of 15 ug/L, may be allowed as a site-specific remedy and still allow for drinking water use, under Section 20120a(2) of the NREPA if soil concentrations are appropriately lower than 400 mg/kg. If a site-specific criterion is approved based on this subdivision, a notice shall be filed on the deed for all property where the groundwater concentrations will exceed 4 ug/L to provide notice of the potential for unacceptable risk if soil or groundwater concentrations increase. Acceptable combinations of site-specific soil and drinking water concentrations are presented in the following table:

Acceptable Combinations of Lead in Drinking Water and Soil

Drinking Water Concentration (ug/L)	Soil Concentration (mg/kg)
5	386-395
6	376-385
7	376-385
8	366-375
9	356-365
10	346-355
11	336-345
12	336-345
13	326-335
14	316-325
15	306-315

(M) Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.

(N) The concentrations of all potential sources of nitrate-nitrogen (e.g., ammonia-N, nitrite-N, nitrate-N) in groundwater that is used as a source of drinking water shall not, when added together, exceed the nitrate drinking water criterion of 10,000 ug/L. Where leaching to groundwater is a relevant pathway, soil concentrations of all potential sources of nitrate-nitrogen shall not, when added together, exceed the nitrate drinking water protection criterion of 2.0E+5 ug/kg.

(O) The concentration of all polychlorinated and polybrominated dibenzodioxin and dibenzofuran isomers present at a facility, expressed as an equivalent concentration of 2,3,7,8-tetrachlorodibenzo-p-dioxin based upon their relative potency, shall be added together and compared to the criteria for 2,3,7,8-tetrachlorodibenzo-p-dioxin. The generic cleanup criteria for 2,3,7,8-tetrachlorodibenzo-p-dioxin are not calculated according to the algorithms presented in R 299.5714 to R 299.5726. The generic cleanup criteria are being held at the values that the DEQ has used since August 1998, in recognition of

the fact that national efforts to reassess risks posed by dioxin are not yet complete. Until these studies are complete, it is premature to select a revised slope factor and/or reference dose for calculation of generic cleanup criteria.

(P) Amenable cyanide methods or method OIA-1677 shall be used to quantify cyanide concentrations for compliance with all groundwater criteria. Total cyanide methods or method OIA-1677 shall be used to quantify cyanide concentrations for compliance with soil criteria. Nonresidential direct contact criteria may not be protective of the potential for release of hydrogen cyanide gas. Additional land or resource use restrictions may be necessary to protect for the acute inhalation concerns associated with hydrogen cyanide gas.

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

(R) Hazardous substance may exhibit the characteristic of reactivity as defined in 40 C.F.R. §261.23 (revised as of July 1, 2001), which is adopted by reference in these rules and is available for inspection at the DEQ, 525 West Allegan Street, Lansing, Michigan. Copies of the regulation may be purchased, at a cost as of the time of adoption of these rules of $45, from the Superintendent of Documents, Government Printing Office, Washington, DC 20401 (stock number 869-044-00155-1), or from the DEQ, RRD, 525 West Allegan Street, Lansing, Michigan 48933, at cost.

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

(T) Refer to the federal Toxic Substances Control Act (TSCA), 40 C.F.R. §761, Subpart D and 40 C.F.R. §761, Subpart G, to determine the applicability of TSCA cleanup standards. Subpart D and Subpart G of 40 C.F.R. §761 (July 1, 2001) are adopted by reference in these rules and are available for inspection at the DEQ, 525 West Allegan Street, Lansing, Michigan. Copies of the regulations may be purchased, at a cost as of the time of adoption of these rules of $55, from the Superintendent of Documents, Government Printing Office, Washington, DC 20401, or from the DEQ, RRD, 525 West Allegan Street, Lansing, Michigan 48933, at cost. Alternatives to compliance with the TSCA standards listed below are possible under 40 C.F.R. §761 Subpart D. New releases may be subject to the standards identified in 40 C.F.R. §761, Subpart G. Use Part 201 soil direct contact cleanup criteria in the following table if TSCA standards are not applicable.

Land Use Category	TSCA, Subpart D Cleanup Standards	Part 201 Soil Direct Contact Cleanup Criteria
Residential	1,000 ppb, or 10,000 ppb if capped	4,000 ppb
Nonresidential	1,000 ppb, or 10,000 ppb if capped	16,000 ppb

(U) Hazardous substance may exhibit the characteristic of corrosivity as defined in 40 C.F.R. §261.22 (revised as of July 1, 2001), which is adopted by reference in

these rules and is available for inspection at the DEQ, 525 West Allegan Street, Lansing, Michigan. Copies of the regulation may be purchased, at a cost as of the time of adoption of these rules of $45, from the Superintendent of Documents, Government Printing Office, Washington, DC 20401 (stock number 869-044-00155-1), or from the DEQ, RRD, 525 West Allegan Street, Lansing, Michigan 48933, at cost.

(V) Criterion is the aesthetic drinking water value as required by Section 20120(a)(5) of the NREPA. Concentrations up to 200 ug/L may be acceptable, and still allow for drinking water use, as part of a site-specific cleanup under Section 20120a(2) of the NREPA.

(W) Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan drinking water standard of 80 ug/L. Concentrations of trihalomethanes in soil shall be added together to determine compliance with the drinking water protection criterion of 1,600 ug/kg.

(X) The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source. For a groundwater discharge to the Great Lakes and their connecting waters or discharge in close proximity to a water supply intake in inland surface waters, the generic GSI criterion shall be the surface water human drinking water value (HDV) listed in the table in this footnote, except for those HDV indicated with an asterisk. For HDV with an asterisk, the generic GSI criterion shall be the lowest of the HDV, the WV, and the calculated FCV. See formulas in footnote (G). Soil protection criteria based on the HDV shall be as listed in the table in this footnote, except for those values with an asterisk. Soil GSI protection criteria based on the HDV shall be as listed in the table in this footnote, except for those values with an asterisk. Soil GSI protection criteria for compounds with an asterisk shall be the greater of 20 times the GSI criterion or the GSI soil-water partition values using the GSI criteria developed with the procedure described in this footnote.

Hazardous Substance	Chemical Abstract Service Number	Surface Water Human Drinking Water Values (HDV) (ug/L)	Soil GSI Protection Criteria for HDV (ug/kg)
Acrylamide	79061	0.5 (M); 0.12	10
Alachlor	15972608	3.5	88
Antimony	7440360	2.0 (M); 1.7	1,200
Benzene	71432	12	240
Boron	7440428	4,000	80,000
Bromate	15541454	10 (M); 0.5	200
n-Butanol	71363	3,500	70,000
Butyl benzyl phthalate	85687	6.9	13,000
Cadmium	7440439	2.5*	*
Carbon tetrachloride	56235	5.6	110
Chloride	16887006	50,000	1.0E+6
Chloroethane	75003	170	3,400
Chromium (III)	16065831	120*	*
Cyanazine	21725462	2.0 (M); 0.93	200 (M); 40
1,2-Dichloroethane	107062	6.0	120
trans-1,2-Dichloroethylene	156605	470	9,400
1,2-Dichloropropane	78875	9.1	180
1,3-Dichloropropene	542756	3.3	100 (M); 66
N,N-Dimethylacetamide	127195	700	14,000
1,4-Dioxane	123911	34	680
Ethylene dibromide	106934	0.17	20 (M); 3.4
Ethylene glycol	107211	56,000	1.1E+6
Hexachloroethane	67721	5.3	310
Isophorone	78591	310	6,200
Isopropyl alcohol	67630	28,000	5.6E+5
Lead	7439921	14*	*
Manganese	7439965	1,300*	*
Methanol	67561	14,000	2.8E+5
Methyl-tert-butyl ether (MTBE)	1634044	100	2,000
Methylene chloride	75092	47	940
Molybdenum	7439987	120	2,400
Nitrobenzene	98953	4.7	330 (M); 94
Pentachlorophenol	87865	1.8*	*
Styrene	100425	20	530
1,2,4,5-Tetrachlorobenzene	95943	2.8	3,300
1,1,2,2-Tetrachloroethane	79345	3.2	64
Tetrachloroethylene	127184	11	220
Tetrahydrofuran	109999	350	7,000
Thallium	7440280	2.0 (M); 1.2	1,400
1,2,4-Trichlorobenzene	120821	80	4,700
1,1,2-Trichloroethane	79005	12	240
Trichloroethylene	79016	29	580
Vinyl chloride	75014	1.0 (M); 0.25	40 (M); 20

(Y) Source size modifiers shown in the following table shall be used to determine soil inhalation criteria for ambient air when the source size is not one-half acre. The modifier shall be multiplied by the generic soil inhalation criteria shown in the

table of generic cleanup criteria to determine the applicable criterion.

Source Size sq. feet or acres	Modifier
400 sq feet	3.17
1000 sq feet	2.2
2000 sq feet	1.76
1/4 acre	1.15
1/2 acre	1
1 acre	0.87
2 acre	0.77
5 acre	0.66
10 acre	0.6
32 acre	0.5
100 acre	0.43

(Z) Mercury is typically measured as total mercury. The generic cleanup criteria, however, are based on data for different species of mercury. Specifically, data for elemental mercury, chemical abstract service (CAS) number 7439976, serve as the basis for the soil volatilization to indoor air criteria, groundwater volatilization to indoor air, and soil inhalation criteria. Data for methyl mercury, CAS number 22967926, serve as the basis for the GSI criterion; and data for mercuric chloride, CAS number 7487947, serve as the basis for the drinking water, groundwater contact, soil direct contact, and the groundwater protection criteria. Comparison to criteria shall be based on species-specific analytical data only if sufficient facility characterization has been conducted to rule out the presence of other species of mercury.

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

(BB) The state drinking water standard for asbestos is in units of fibers per milliliter of water (f/mL) longer than 10 millimicrons. Soil concentrations of asbestos are determined by polarized light microscopy.

(CC) Groundwater: The generic GSI criteria are based on the toxicity of unionized ammonia (NH_3); the criteria are 29 ug/L and 53 ug/L for cold water and warm water surface water, respectively. As a result, the GSI criterion shall be compared to the percent of the total ammonia concentration in the groundwater that will become NH_3 in the surface water. This percent NH_3 is a function of the pH and temperature of the receiving surface water and can be estimated using the following table, taken from Emerson, et al., (Journal of the Fisheries Research Board of Canada, Volume 32(12):2382, 1975).

Percent NH_3 in Aqueous Ammonia Solutions for 0-30 ^oC and pH 6-10

		pH								
Temp (^oF)	Temp (^oC)	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
32.0	0	0.00827	0.0261	0.0826	0.261	0.820	2.55	7.64	20.7	45.3
33.8	1	0.00899	0.0284	0.0898	0.284	0.891	2.77	8.25	22.1	47.3
35.6	2	0.00977	0.0309	0.0977	0.308	0.968	3.00	8.90	23.6	49.4
37.4	3	0.0106	0.0336	0.106	0.335	1.05	3.25	9.60	25.1	51.5
39.2	4	0.0115	0.0364	0.115	0.363	1.14	3.52	10.3	26.7	53.5
41.0	5	0.0125	0.0395	0.125	0.394	1.23	3.80	11.1	28.3	55.6
42.8	6	0.0136	0.0429	0.135	0.427	1.34	4.11	11.9	30.0	57.6
44.6	7	0.0147	0.0464	0.147	0.462	1.45	4.44	12.8	31.7	59.5
46.4	8	0.0159	0.0503	0.159	0.501	1.57	4.79	13.7	33.5	61.4
48.2	9	0.0172	0.0544	0.172	0.542	1.69	5.16	14.7	35.3	63.3
50.0	10	0.0186	0.0589	0.186	0.586	1.83	5.56	15.7	37.1	65.1
51.8	11	0.0201	0.0637	0.201	0.633	1.97	5.99	16.8	38.9	66.8
53.6	12	0.0218	0.0688	0.217	0.684	2.13	6.44	17.9	40.8	68.5
55.4	13	0.0235	0.0743	0.235	0.738	2.30	6.92	19.0	42.6	70.2
57.2	14	0.0254	0.0802	0.253	0.796	2.48	7.43	20.2	44.5	71.7
59.0	15	0.0274	0.0865	0.273	0.859	2.67	7.97	21.5	46.4	73.3
60.8	16	0.0295	0.0933	0.294	0.925	2.87	8.54	22.8	48.3	74.7
62.6	17	0.0318	0.101	0.317	0.996	3.08	9.14	24.1	50.2	76.1
64.4	18	0.0343	0.108	0.342	1.07	3.31	9.78	25.5	52.0	77.4
66.2	19	0.0369	0.117	0.368	1.15	3.56	10.5	27.0	53.9	78.7
68.0	20	0.0397	0.125	0.396	1.24	3.82	11.2	28.4	55.7	79.9
69.8	21	0.0427	0.135	0.425	1.33	4.10	11.9	29.9	57.5	81.0
71.6	22	0.0459	0.145	0.457	1.43	4.39	12.7	31.5	59.2	82.1
73.4	23	0.0493	0.156	0.491	1.54	4.70	13.5	33.0	60.9	83.2
75.2	24	0.0530	0.167	0.527	1.65	5.03	14.4	34.6	62.6	84.1
77.0	25	0.0569	0.180	0.566	1.77	5.38	15.3	36.3	64.3	85.1
78.8	26	0.0610	0.193	0.607	1.89	5.75	16.2	37.9	65.9	85.9
80.6	27	0.0654	0.207	0.651	2.03	6.15	17.2	39.6	67.4	86.8
82.4	28	0.0701	0.221	0.697	2.17	6.56	18.2	41.2	68.9	87.3
84.2	29	0.0752	0.237	0.747	2.32	7.00	19.2	42.9	70.4	88.3
86.0	30	0.0805	0.254	0.799	2.48	7.46	20.3	44.6	71.8	89.0

The generic approach for estimating NH_3 assumes a default pH of 8 and default temperatures of 68°F and 85°F for cold water and warm water surface water, respectively. The resulting percent NH_3 is 3.8 percent and 7.2 percent for cold water and warm water, respectively. This default percentage shall be multiplied by the total ammonia-nitrogen (NH_3-N) concentration in the groundwater and the resulting NH_3 concentration compared to the applicable GSI criterion. As an

alternative, the maximum pH and temperature data from the specific receiving surface water can be used to estimate, from the table in this footnote, a lower percent unionized ammonia concentration for comparison to the generic GSI.

Soil: The generic soil GSI protection criteria for unionized ammonia are 580 ug/kg and 1,100 ug/kg for cold water and warm water surface water, respectively.

(DD) Hazardous substance causes developmental effects. Residential direct contact criteria are protective of both prenatal and postnatal exposure. Nonresidential direct contact criteria are protective for a pregnant adult receptor.

(EE) The following are applicable generic GSI criteria as required by Section 20120a(15) of the NREPA.

Hazardous Substance	GSI (ug/L)	Notes
Phosphorus	1,000	Criteria applicable unless receiving water is a surface water that has a phosphorus waste load allocation or is an inland lake. In those cases, contact the department for applicable values.
Total dissolved solids (TDS)	5.0E+5	If TDS data are not available, the TDS criterion may be used a screening level for the sum of the concentrations of the following substances: Calcium, Chlorides, Iron, Magnesium, Potassium, Sodium, Sulfate.
Dissolved Oxygen (DO): Cold receiving waters Warm receiving waters	 ≥ 7,000 ≥ 5,000	Since a low level of DO can be harmful to aquatic life, the criterion represents a minimum level that on-site samples must exceed. This is in contrast to other criteria which represent "not to exceed" concentrations. DO criteria are not applicable if groundwater Carbonaceous Biochemical Oxygen Demand (CBOD) is less than 10,000 ug/L and groundwater ammonia concentration is less than 2,000 ug/L.

(FF) The chloride GSI criterion shall be 125 mg/l when the discharge is to surface waters of the state designated as public water supply sources or 50 mg/l when the discharge is to the Great Lakes or connecting waters. Chloride GSI criteria shall not apply for surface waters of the state that are not designated as a public water supply source, however, the total dissolved solids criterion is applicable.

(GG) Risk-based criteria are not available for methane due to insufficient toxicity data. An acceptable soil gas concentration (presented for both residential and nonresidential land uses) was derived utilizing 25 percent of the lower explosive level for methane. This equates to 1.25 percent or 8.4E+6 ug/m^3.

"ID" means insufficient data to develop criterion.
"NA" means a criterion or value is not available or, in the case of background and CAS numbers, not applicable.
"NLL" means hazardous substance is not likely to leach under most soil conditions.
"NLV" means hazardous substance is not likely to volatilize under most conditions.