BROWNFIELD REDEVELOPMENT ASSESSMENT REPORT

FOR

5250 CONNER DETROIT

5250 CONNER STREET
DETROIT, MICHIGAN 48213

MIB000000184

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REPORT PREPARED BY: _____ DATE: _____

John E. Spielberg, Investigation Team Leader
Site Assessment and Site Management Unit

REVIEWED AND APPROVED BY: _____ DATE: _____

Daria W. Devantier, Chief
Site Assessment and Site Management Unit

Michigan Department of Environmental Quality
Remediation and Redevelopment Division
Superfund Section
P.O. Box 30426
Lansing, Michigan 48909

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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 (U.S. EPA). 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 5250 Conner Detroit property (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 funding for this BFRA project, the 5250 Conner Detroit property, was made available by an amendment to the U.S. EPA's 128(a) grant in the amount of $200,000. The amended grant specifies that the grant must be used to assess brownfields in Detroit, that they must assist in Detroit's green infrastructure (GI) initiatives, and that the grant will be used in fiscal year 2014 ending September 30, 2014. BFRAs utilizing this grant must be a part of redevelopment plans utilizing GI features such as rain gardens, rain barrels, porous pavements, green roofs, and rainwater harvesting. GI practices "mimic natural hydrologic processes to reduce the quantity and/or rate of stormwater runoff through the processes of infiltration, evapotranspiration, and capture and use" of rainwater, which helps reduce the amount of often contaminated runoff entering combined sewer systems, which subsequently reduces the amount of runoff adversely impacting our surface waters (U.S. EPA 2014a). The Property is within a development area known as the Lower Eastside Action Plan or LEAP. This plan includes several GI components in the vicinity of the Property. More specifically, a Blue Ribbon Panel for a

Conservation Campus at Chandler Park within the Governor's office has recommended GI features that include bioswales, pervious paving, and stormwater remediation forests that will allow Chandler Park to manage all its stormwater on-site (Warren/Conner Development Coalition 2014). In addition, a conceptual plan developed for the Property and surrounding Chandler Park also includes GI features such as an orchard, educational gardens, an interpretive marsh, and restored native vegetation.

The BFRA of the Property was requested by the U.S. EPA Region 5 in collaboration with local stakeholders. The Property is owned by the Detroit Housing Commission and is part of its plans for redevelopment of the Property in East Detroit, Michigan. The Commission is working with several local, state, and federal stakeholders in order to implement the conceptual plan. The Property meets the definition of a brownfield based on the presence of contaminants found in shallow and subsurface soil samples collected during the BFRA. Previous known uses of the Property include agricultural activity, followed by a housing development, and finally a vacant, undeveloped lot.

The request by the U.S. EPA resulted in the MDEQ conducting a BFRA of the Property. This BFRA included file and historic information searches, a reconnaissance inspection of the Property, an electromagnetic geophysical survey of subsurface conditions, the collection of surficial soil and subsurface soil samples, Global Positioning System (GPS) data collection of Property features, and the collection of Property feature photographs.

Field activities consisted of several events from April to June 2014. A reconnaissance inspection was conducted on April 17, 2014, by two MDEQ project managers, a representative from the city of Detroit, and an MDEQ environmental conservation officer. The geophysical survey, which entailed electromagnetic and metal detection, was completed on May 20, 2014, by Mr. Jim Ursic of the U.S. EPA to aid in designing the subsurface part of the field sampling plan. The field sampling event was conducted from June 2 to 3, 2014, and included the collection of 7 surficial soil and 13 soil boring samples. Photographs of general property conditions were taken along with GPS data to determine Property feature locations.

Analysis of the soil samples detected the presence of 5 semi-volatile organic and 11 inorganic contaminants at levels greater than the Generic Residential Cleanup Criteria of Part 201. More exceedances of Criteria were present in the shallow soil samples. Only the inorganic contaminants in the deeper soil samples exceeded Criteria. Based on Property characteristics – such as the lack of groundwater found at the Property and regional clay – the drinking water protection exposure pathways may not be relevant. Because of this, fewer Criteria exceedances are applicable to the Property than shown in Tables 2 and 4. Specifically: 1) a direct contact risk was found in the shallow soil due to the presence of benzo(a)pyrene, 2) a slight risk was found from manganese in deeper soils if excavated and left on the ground surface during windy conditions, and 3) a potential risk may be present from hazardous substances leaching into a pond or wetland if constructed on the Property.

Due to the elevated levels of five semi-volatile organic compounds and three inorganic analytes above Part 201 Generic Residential Cleanup Criteria, MDEQ staff has determined that the Property meets the definition of a facility as defined in Part 201. Based on the findings of the BFRA, MDEQ staff recommends that the following issues should be addressed before or during the redevelopment of the Property:

> Consider means to reduce exposure to benzo(a)pyrene in all the decision units where direct contact exceedances were found and consider further horizontal and vertical characterization or delineation; take precautionary measures during and after digging a pond on the Property to evaluate those contaminants shown to exceed Criteria protective of surface waters; gather data to evaluate anthropogenic levels of semi-volatile organic compounds and metals common to Detroit; users of the Property should not use the groundwater for drinking water if found; and meet "due care" obligations specified in Section 7a of Part 201 during redevelopment activities which 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 Remediation and Redevelopment Division, Southeast Michigan District Office at 586-753-3700.

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 task in the Section 128(a) cooperative agreement. The Section 128(a) cooperative agreement 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). A BFRA was requested for the 5250 Conner Detroit property (Property) by the U.S. EPA to assist the Detroit Housing Commission and its stakeholders 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 Site Specific Assessment 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 conduct 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.

A BFRA of the Property was conducted in accordance with the cooperative agreement with the U.S. EPA. The BFRA included file and information searches, a reconnaissance inspection of the Property, a geophysical survey of subsurface conditions, the collection of surficial soil and subsurface soil samples, Global Positioning System (GPS) data collection of sample 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 Property is located on the east side of Detroit between Grosse Point Park and Interstate Highway 94. See Figure 1 for the Property Location map. The Property address is 5250 Conner Street, Detroit. It has a parcel ID of #21046202. Its coordinates to the Property entrance on the south side along Frankfort Street are 42° 23' 27.28" north latitude, 82° 58' 37.50" west longitude. The area is about 18.5 acres, based on a calculated geometry function utilized in the ESRI ArcGIS software used, which was based on georeferencing a 2012 land title survey map (KEM-TECH & Associates 2012).

The hydrogeology of the area consists of end moraines of fine textured till (MDTMB 2014a) with a relatively flat water table (EDR 2014c; MDEQ, USGS, MSU 2005). The Property is located in an area where an earlier epoch stream channel left behind gravel deposits, and former lake deposits left sand and clay, as shown in Figure 2. Soil borings from the Property generally contained silty clay with some sand. Groundwater data for an area within a half mile southeast and southwest of the Property includes depths to groundwater ranging from three to seven feet with variable flow directions (EDR 2014c, see the Lightbox Interactive feature from the pdf document's Bookmarks, or table of contents). An evaluation of ground surface elevation data and water table elevations suggests groundwater, if present at the Property, would be less than five feet deep (MDEQ 2014d; MDEQ, USGS, MSU 2005). No shallow groundwater was found to eight feet deep during the Property BFRA. See Figure 2.

Property History

The Property became a public housing project in 1938, according to Mr. Brian Vosburg of the Detroit Housing Commission. A 1937 aerial photograph from Environmental Data Resources (EDR) shows the Property as vacant, with portions possibly in agricultural use (EDR 2014a). The housing units were demolished sometime between 1999 and 2001 (Google Earth 2014). See Figure 3. Appendix A contains sources of information documenting the historical uses of the Property.

Past known environmental impacts to the Property are limited. Other than possible polychlorinated biphenyl (PCB) releases from two former transformers, a Phase I report states that no known environmental issues of concern could be documented for the Property (Atwell-Hicks, 2006).

Nearby properties, however, were found to contain potential environmental concerns. Three locations are on the west side of Conner Street – at 5415, 5441, and 5650 (Atwell-Hicks 2006). 5415 and 5441 Conner Street are located across Conner Street from the north half of the Property. These locations contained diesel and gasoline underground

storage tanks dating back to 1957 and were historically used for manufacturing and heavy industrial activity. The 5650 Conner Street location was the City of Detroit Parks and Recreation Service building located about 500 feet northeast of the Chandler Park Drive intersection. That location included leaking underground storage tanks, and releases from stored drums and above ground storage tanks. In addition, a 1940 Sanborn map (Capital Area District Libraries 2014) shows a gasoline tank associated with park buildings located about 200 feet north of the Property and 400 feet east of Conner Street, as shown in Figure 3. Of potential concern also is the National Plating Company Inc., located just west of the Property at 5417 Conner Street (U.S. EPA 2014b), but the company has been out of business since 1980 with no active owner/operator and no waste generation according to two database search results (MDEQ 2014e; U.S. EPA 2014c).

The U.S. EPA, in collaboration with local stakeholders, identified the Property as a possible candidate for a BFRA, and subsequently requested the MDEQ to conduct a BFRA. This request resulted in the investigation of this Property under the BFRA program. Access to the Property was provided by the Detroit Housing Commission, and the City of Detroit's Buildings, Safety Engineering and Environmental Department supported the BFRA, as documented in Appendix A.

PROCEDURES AND RESULTS

Reconnaissance Inspection Observations

BFRA property reconnaissances were conducted at the Property on April 17 and May 20, 2014. Their purpose was to gather information to be used in development of the BFRA sampling plan, to determine appropriate health and safety requirements, and to determine potential sampling locations. The team documented the features, known and potential source areas, and debris types located throughout the Property and identified the environmental concerns associated with each area of concern. See Appendix B for photographs taken during these reconnaissances.

Suspected areas of potential concern included the following based on the field observations from the property reconnaissance:

- Potential PCBs from utility pole transformers possibly located on the east side of the access drive into the Property and along the fence near the city's maintenance facility as seen in Figure 4 and page 5 of the photo log in Appendix B; and
- Mounded soil piles with unknown contents in the northeast part of the Property (also noted in Phase I report, Atwell-Hicks 2006) as seen on pages 7 and 8 in Appendix B.

On June 2, 2014, a sampling inspection reconnaissance was conducted at the Property for the purpose of locating the actual sample locations prior to collection of the samples. This reconnaissance was also conducted to determine whether there were any changes in the conditions or features of the Property. The Property did not contain any buildings, but other features were observed. An entrance gate with a chain and padlock was found on the south side of the Property. After entering the Property at the gate, an asphalt access road was present about two-thirds distance into the Property. Two power lines were present: one along the access road and continuing to the north Property line, and another connecting to electric panels in the south part of the Property. A cyclone fence surrounded the Property, but was damaged or missing in a few locations. Another fence could be seen across the Property in the north half, which also had parts damaged or missing. A soil berm was seen along the south side of the Property with the high point about five feet above the surrounding grade. At least a dozen or more storm sewers could be observed around the Property, some with broken or missing covers. No standpipes were found. The entire Property was mostly grass-covered, and contained also 20 to 30 trees up to 25 or 30 feet tall. See Figure 4 for the Current Property Features map. Photographs of the Property were taken during the BFRA and are provided in Appendix B.

Geophysical Survey Results

A U.S. EPA geologist conducted an electromagnetic survey of the Property on May 20, 2014. This subsurface investigation was completed prior to BFRA field sampling to aid in the determination of sampling locations, and to suggest other subsurface features of potential concern. Past uses of the Property suggested the possibility of subsurface structures remaining in the ground. These could include building foundations left in the ground after demolition of former housing units, utility lines such as water supply piping, and buried debris of unknown content. The geophysical survey report is provided in Appendix C. A photograph of the U.S. EPA geologist conducting the survey is found in Appendix B, page 13.

The survey results found areas of high conductivity, as seen in Figures 3 and 5 of the survey report in Appendix C. Areas labeled A and B in Figures 3 and 5 match the locations of two former buildings seen in a 1999 aerial photograph, in which only the buildings in this location appear black. Sanborn maps from 1996 and 2002 show two buildings in the same location. The conductivity readings in areas A and B suggest something remaining from a former building. What it is cannot be ascertained. Other areas surveyed do not seem to have the same association between ground conductivity and former building locations.

The survey results also indicate probable linear features, as seen in Figures 2 and 4 of the survey report in Appendix C. These linear features suggest utility lines, because these are located along former streets present in the former housing complex. The long linear feature labelled D in metal detection Figure 2 is also parallel to and near where six sanitary or storm drain manholes are located (as shown in the south part of the 2005 land survey in Appendix A). The shorter linear features labeled F and H are also located parallel to former roads present when the housing units were still in use, and could, therefore, be remaining utility lines or what remains of them. The linear feature labelled G is located in an area that was between two housing units and not in a roadway. Because of this location, it is less certain what is located there.

Sampling Procedures

The field sampling event was conducted from June 2 to 3, 2014 and included the collection of 7 surficial soil samples and 13 soil boring samples. Surficial sample locations were determined by five decision unit boundaries as seen in Figure 5. Soil boring sample locations were pre-determined to avoid former building footprints, based on historical building locations. A GPS was used to navigate to the soil boring locations as indicated in the work plan, with the exception of two locations that were moved during the BFRA, as see in Figure 6. No groundwater was encountered during the BFRA.

The samples were collected in order to:

- Determine basic soil and subsurface characteristics for the purpose of future GI planning or implementation.
- 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 shallow and 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 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, Sampling and Analysis Guidance, 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. Water samples analyzed for VOCs were field preserved with hydrochloric acid.

The MDEQ quality assurance/quality control procedures as outlined in the Michigan Department of Environmental Quality Brownfield Redevelopment Assessment Quality Assurance Project Plan (September 30, 2013) were followed. Upon collection of the samples, all samples were labeled and placed in insulated sample shipment coolers. The interior of the shipment coolers were kept at a temperature of approximately 4° Celsius with ice, and delivered to the MDEQ Environmental Laboratory or the TestAmerica Laboratory by the Team Leader for analysis.

Sample Analysis

Soil samples were analyzed for organic compounds and inorganic analytes, consistent with the MDEQ RRD Operational Memorandum 2, Attachment 1, by two laboratories.

TestAmerica Laboratories Inc. in Canton, Ohio analyzed the surficial soil samples utilizing the following methods:

Compound/Analyte	Soil
Volatile Organics	Not analyzed
Semi-volatile Organics (GC/MS)	8270C
Pesticides	8081A
PCBs (GC)	8082
Metals (ICP/MS): Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, total Chromium, Cobalt, Copper, Iron, Magnesium, Lead, Manganese, Molybdenum, Nickel, Selenium, Silver, Sodium, Strontium, Thallium, Titanium, Vanadium, Zinc	6020
Cyanide, total	9012A
Mercury (CVAA)	7471A

Prior to analyzing the surficial soil samples, TestAmerica prepared samples to comply with the Incremental Sampling Method. These methods are described on pages 5 to 7 of the TestAmerica Analytical Report in Appendix D.

The MDEQ Environmental Laboratory in Lansing, Michigan analyzed the soil boring samples utilizing the following methods:

Compound/Analyte	Soil
Volatile Organics	8260
Semi-volatile Organics	8270
Pesticides, PCBs	8081/8082
Iron	6010/200.7
Antimony, Arsenic, Barium, Beryllium, Cadmium, total Chromium, Cobalt, Copper, Magnesium, Lead, Manganese, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc	6020/200.8
Cyanide, total	ASTM D 7511-09
Mercury	7471/245.5

Upon analysis, laboratory results were sent to the Team Leader and processed for this report. Laboratory analytical data for all sample analyses are provided in Appendix D.

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 2 and 4, and will be described in the following subsections. The summary tables present Criteria exceedances for inorganic constituents using default soil background values applicable to all soil types statewide. Detected levels of organic compounds are not considered background, although some compounds can come from regional anthropogenic sources and may not be attributable to prior activities at the Property. The current Part 201 Criteria are provided in Appendix E, and include values to be used for certain groundwater surface water interface Criteria to be calculated, as well as an evaluation of soil background. Contaminants exceeding Criteria will be formatted in **bold** in this section. Prior to making conclusions about Criteria exceedances, two considerations need to be evaluated.

The first evaluation relates to which exposure pathways will be relevant for the Property, and, thus, which Criteria will be applicable. Some pathways are not relevant under certain property-specific conditions. An applicable criterion is a cleanup criterion for a relevant pathway. A pathway that is not relevant will not have applicable Criteria. Since no shallow groundwater was found on the Property, only soil pathways are considered:

- The residential and nonresidential drinking water protection pathways for soils are considered relevant because of the possibility of an aquifer being present in the ancient, gravelly stream channel near the Property, as shown in Figure 2.

- The groundwater surface water interface protection pathway is less relevant, but will be considered relevant for this Property. If contaminants were to leach out of Property soils into groundwater located in the ancient stream channel, there is a very remote possibility of such contaminants to migrate to the Detroit River about 2.5 miles to the south. However, if one or more ponds or other surface water features will be constructed on the Property, then protection of such surface waters may need to be considered.

- Direct contact pathways are relevant since the surface of the Property is planned for educational and recreational uses, which entail students and others moving about the Property and coming in contact with soils near the ground surface. Students attending the planned school may be present at the Property five days a week for an entire school year or more.

If an exposure pathway is not listed below, it means that no exceedances of Criteria in that pathway were found.

The second evaluation is soil background for inorganic analytes, which can be naturally occurring at certain concentrations. Such an evaluation will determine whether the

concentrations of inorganic analytes found in soil samples are within background concentrations or not. To conduct this evaluation, sample concentrations of inorganic analytes were compared to soil background data provided in the Michigan Background Soil Survey 2005 (MDEQ 2005), or MBSS. While a designated background sample was collected for soil boring samples at sample location C-SB-01 in the north corner of the Property, soil background was not collected in a statistical manner to determine a Property-specific background. In lieu of using the designated background sample values or the default background values, a soil background evaluation was conducted using the MBSS. Any sample concentrations of naturally occurring inorganic analytes above Criteria but equal to or below MBSS background levels are not considered exceedances of Part 201 Criteria in this report.

Another consideration is chromium. As noted above regarding the chromium analyses, only total chromium was analyzed. Part 201 rules require total chromium concentrations to be compared to hexavalent chromium criteria. Chromium III is naturally occurring and chromium VI is not naturally occurring. The total chromium analysis included both chromium III and VI, but based on past Property uses without chromium VI sources, an assumption is made that the total chromium analysis includes only chromium III. Therefore, the 18 milligrams per kilogram (mg/kg) default background is also applied here to total chromium, as shown in the summary tables.

It should be noted that the MDEQ Environmental Laboratory analyzes for both naphthalene and 2-methylnaphthalene using methods 8260 for VOCs and 8270 for semi-volatile organic compounds (SVOCs). These analyses are responsive to guidance in the DEQ's RRD Operational Memorandum No. 2. The laboratory qualifies method 8260 results for these two compounds stating that since these compounds have boiling points greater than 200° Celsius, these compounds are better analyzed by method 8270. However, the extraction method used for method 8270 has the potential to affect the concentration due to low extraction recovery thereby giving a lower reported concentration for these compounds. To comprehensively reflect laboratory data that has been generated for this Property, both 8260 and 8270 results are listed in the sample data summary tables under their respective analysis - volatiles and/or semi-volatiles. For purposes of this report, the unqualified data represented by method 8270 for these compounds were selected for comparison to Part 201 Criteria. However, given the conundrum between these two analytical methods for these two chemicals, without a more comprehensive data set from this Property, this data selection approach included in this report may not accurately represent the risks posed by these compounds. This need for more robust characterization for these two compounds between these two methods has been included in this report's overall recommendations for future due care consideration.

Surficial Soil Samples

The intent of the surficial soil sampling was: 1) to identify potentially contaminated surficial soil or source areas, 2) to determine the potential for possible contaminant migration, 3) to determine health and safety concerns, including threats posed to nearby residential populations, future workers or occupants, and resources associated with the surficial soils at the Property, and 4) and to obtain basic soil characteristics for use in planning future GI elements.

To accomplish this sampling purpose, 5 surficial soil samples were collected during the BFRA, along with a duplicate and a triplicate of sample 2. All samples were collected using an Incremental Sampling Method. The Property was divided into five decision units (DUs) based on planned future use, as indicated in the approved work plan. A shapefile of the DUs was uploaded into a GPS and used to mark the DU boundaries in the field. See Appendix B, pages 13 to 15, for photographs illustrating elements of collecting these samples. Field staff utilized stainless steel probes to manually collect enough increments at each DU for a 2-plus-kilogram sample, which required at least 22 increments per sample. Increments were collected in a systematic random fashion from each DU. Field staff attempted to collect increments from depths of 0 to 12 inches below the ground surface according to the procedures outlined in the work plan. However, some increments could not be collected to 12-inch depths due to refusal conditions (rocks, roots, etc.). See Figure 5 for a map showing surficial soil sample locations within their respective DUs. For a description of the surficial soil sample characteristics, refer to Table 1.

Analysis of the surficial soil samples collected during the BFRA detected the presence of SVOCs and inorganic analytes at concentrations above Part 201 Criteria. The following subsections list Criteria exceedances for surficial soil samples and the compounds/analytes and samples with concentrations in excess of Criteria. For inorganic analytes, all surficial soil samples were within MBSS soil background concentrations; therefore, inorganic analytes are not shown in this subsection. Table 2 provides a summary of the surficial soil sample analytical results that exceed Part 201 Criteria before soil background evaluation using MBSS.

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. Only inorganic analytes initially exceeded Criteria as seen in Table 2. However, all surficial soil sample inorganics were within MBSS background concentrations.

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. Only inorganic analytes initially exceeded Criteria as seen in Table 2. However, all surficial soil sample inorganics were within MBSS background concentrations.

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 in the groundwater exceeding generic Groundwater Surface Water Interface Criteria.

Four SVOCs exceeded their generic Criteria as follows:

- **Carbazole** exceeded its criterion of 1100 micrograms per kilogram (ug/kg) in sample 4 at a concentration of 1400 ug/kg.
- **Fluoranthene** exceeded its criterion of 5500 ug/kg in all five samples and the triplicate at concentrations ranging from 5800 to 15,000 ug/kg.
- **Naphthalene** exceeded its criterion of 730 ug/kg in samples 3 and 4 at concentrations of 750 and 1100 ug/kg, respectively.
- **Phenanthrene** exceeded its criterion of 2100 ug/kg in in all five samples and the triplicate at concentrations ranging from 2600 to 11,000 ug/kg.

Four inorganic analytes initially exceeded their Criteria as shown in Table 2. However, all surficial soil samples were within MBSS background concentrations.

Exceedances above the Soil Residential Direct Contact Criteria:

These Criteria represent concentrations of hazardous substances in soils at residential locations considered to be hazardous through dermal contact and ingestion of the soil.

One SVOC exceeded its generic Criteria as follows:

- **Benzo(a)pyrene** exceeded its 2000 ug/kg criterion in samples 2, 2T, 3, 4, and 5 at concentrations ranging from 2100 to 5100 ug/kg.

Soil Boring Samples

The intent of the soil boring sampling was: 1) to identify potential contamination in the deep soils; 2) to determine if any downward migration of contamination has occurred from probable source areas; 3) 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; and 4) and to obtain basic soil characteristics for use in planning future GI elements.

To accomplish this sampling purpose, 13 soil boring samples were collected from 12 separate boring locations during the BFRA. All samples were collected utilizing a Geoprobe® rig with a high density polyethylene lined Macro-Core® sampler from depths ranging between 5 and 7 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. Soil samples were not collected deeper than 7 feet below ground surface due to the native regional moist, silty clay being encountered at approximately that depth. All soil boring 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. See Figure 6 for a map showing soil boring sample locations. A description of the soil boring locations, lithology, and sample characteristics can be found in Table 3.

Analysis of the soil boring samples collected during the BFRA detected the presence of only inorganic analytes at concentrations above Part 201 Criteria. The following lists the Criteria exceedances for soil boring samples and the 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 Property. Table 4 provides a summary of the soil boring sample analytical results that exceed Part 201 Criteria and lists the Criteria exceedances.

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.

Three inorganic analytes exceeded their Criteria as follows:

- **Cobalt** exceeded its 13 mg/kg criterion (MBSS statewide maximum background) in samples 4, 5, 10, and 12 at concentrations ranging between 14 and 15 mg/kg;

- **Iron** exceeded its 26,000 mg/kg criterion (MBSS statewide maximum background) in samples 1, 4-7, and 10-12 at concentrations ranging between 27,000 and 37,000 mg/kg; and

- **Manganese** exceeded its 730 mg/kg criterion (MBSS lobe-specific mean to 2 standard deviations background value) in samples 6 and 10 at concentrations of 1900 and 970 mg/kg, respectively.

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.

Three inorganic analytes exceeded their Criteria as follows:

- **Cobalt** exceeded its 13 mg/kg criterion (MBSS statewide maximum background) in samples 4, 5, 10, and 12 at concentrations ranging between 14 and 15 mg/kg;

- **Iron** exceeded its 26,000 mg/kg criterion (MBSS statewide maximum background) in samples 1, 4-7, and 10-12 at concentrations ranging between 27,000 and 37,000 mg/kg; and

- **Manganese** exceeded its 730 mg/kg criterion (MBSS lobe-specific mean to 2 standard deviations background value) in samples 6 and 10 at concentrations of 1900 and 970 mg/kg, respectively.

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 in the groundwater exceeding generic Groundwater Surface Water Interface Criteria.

Two inorganic analytes exceeded their Criteria as follows:

- **Cobalt** exceeded its 13 mg/kg criterion (MBSS statewide maximum background) in samples 4, 5, 10, and 12 at concentrations ranging between 14 and 15 mg/kg; and

- **Manganese** exceeded its 730 mg/kg criterion (MBSS lobe-specific mean to 2 standard deviations background value) in samples 6 and 10 at concentrations of 1900 and 970 mg/kg, respectively.

Exceedances above the Nonresidential Particulate Soil Inhalation Criteria:

These Criteria represent concentrations of hazardous substances in soils at Nonresidential locations considered to be hazardous through particulate inhalation of the soil.

One inorganic analyte exceeded its criterion as follows:

- **Manganese** exceeded its 1500 mg/kg criterion in sample 6 at a concentration of 1900 mg/kg.

Exceedances above the Soil Residential Direct Contact Criteria:

These Criteria represent concentrations of hazardous substances in soils at Residential locations considered to be hazardous through dermal contact and ingestion of the soil. Only arsenic initially exceeded this Criteria, as seen in Table 4. However, arsenic was found to be within MBSS background.

DISCUSSION

MDEQ staff conducted a BFRA of the 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 geophysical survey of subsurface conditions in the southern part of the Property, the collection and analyses of surficial soil and subsurface soil samples, GPS data collection of sample locations and Property features, and the collection of Property feature photographs, data evaluation, and the compilation of all this data into this report.

Initial evaluation of the soil samples collected and analyzed during the BFRA of the Property, using default soil background levels for inorganics, detected the presence of hazardous substances at concentrations greater than the Generic Residential Cleanup Criteria, as shown in Tables 2 and 4. These contaminants included:

- Five semi-volatile compounds in the shallow soil samples to 12 inches deep (**benzo(a)pyrene**, **carbazole**, **fluoranthene**, **naphthalene**, and **phenanthrene**); and

- Eleven inorganic analytes in the deeper soil boring samples at depths of five to seven feet (aluminum, arsenic, total chromium, cobalt, cyanide, iron, magnesium, manganese, molybdenum, selenium, and strontium). After evaluating soil background levels for inorganics using data from the MBSS, the following inorganics still exceeded Criteria in the soil boring samples: **cobalt**, **iron**, and **manganese**.

Because these eight contaminants were detected at concentrations in excess of Generic Residential Cleanup Criteria, the Property meets the definition of a facility under Part 201.

Of the three groundwater protection exposure pathways, the two drinking water protection pathways are probably relevant pathways and their criteria applicable. This is due to the presence of a gravelly, former stream channel near the west side of the Property, which may contain an aquifer. No groundwater was found during the BFRA within eight feet of the ground surface.

The remaining groundwater protection exposure pathway, the groundwater surface water interface protection pathway, may be relevant, especially if the Pleistocene stream gravel is present as shown in Figure 2, as such a gravel deposit could be a conduit for contaminated groundwater flowing into the Detroit River. However, the distance to the Detroit River is almost 3 miles, and would probably allow for sufficient attenuation or dilution to reduce contaminant concentrations below the groundwater surface water interface criteria, thus limiting the risk to existing surface waters. If a pond or other surface water features such as a wetland is created in the future, as

suggested by a Chandler Park conceptual plan (HamiltonAnderson 2013), then this pathway would also be relevant.

The contaminants exceeding Criteria in the shallow upper foot of soils on the Property were limited to five semi-volatile compounds, as noted above. Four (**carbazole**, **fluoranthene**, **naphthalene**, and **phenanthrene**) exceeded only the Criteria protective of surface waters, exceeding their Criteria in one, two or all samples, depending on which compound. **Benzo(a)pyrene** exceeded its residential direct contact criterion in samples 2 to 5, with sample 1 in the decision unit where the school is planned being found below Criteria. However, sample 2 with its duplicate and triplicate samples had results both above and below their 2000 ug/kg criterion. Sample 2 and its triplicate were above the criterion (2100 and 3400 ug/kg, respectively), while the duplicate was below (1300 ug/kg). This variation suggests a heterogeneous soil matrix. The concentrations of the five compounds found to be above Criteria in the shallow soils could be within regional anthropogenic levels due to past industrial activity in the area and higher vehicular traffic in the past. All inorganic analytes in the shallow soils of the Property were found to be within background levels.

The contaminants exceeding Criteria in the subsurface soils on the Property between five and seven feet deep were limited to the three inorganics noted above. This suggests that the SVOCs exceeding Criteria in the shallow soil are not leaching into the deeper soil. **Iron** exceeded only drinking water protection Criteria in 8 of the 12 soil boring samples. **Cobalt** and **manganese** exceeded Criteria protective of drinking water use as well as Criteria protective of surface waters. In addition, **manganese** also exceeded Criteria protective of soil particulate inhalation risks in sample 6 only. Sample 6 was located in DU 1 where the school is planned. As such, that area will be excavated if the school is constructed, and soils brought to the surface will need to be controlled to reduce becoming airborne. Although the three inorganics exceeded Criteria and MBSS background levels in some samples, their concentrations could reflect anthropogenic levels common in the Detroit area.

Based on the findings of the BFRA investigation, the following issues are recommended to be addressed before or during the redevelopment of the Property:

- As the owner of the Property and operator of the 5250 Conner Detroit facility, the Detroit Housing Commission has responsibility for environmental concerns potentially caused by past or present activities at the Property. These concerns include:
    - Potential risks from direct contact with **benzo(a)pyrene** in shallow soil;

- Potential impact to surface water quality in a future pond from four semi-volatile compounds and two inorganic analytes (**cobalt** and **manganese**) is a possibility that should be further evaluated if a pond is constructed;

- Users of the Property should not drink the groundwater due to a limited risk from drinking groundwater; and

- Very limited risk from wind-blown soils containing **manganese** if excavated from deeper soils and left at the ground surface.

- The distribution of **benzo(a)pyrene** and the other four SVOCs in shallow soils of the Property may be limited to certain areas and depths; further delineation of their occurrence may help determine more specifically where remedial activity may be needed; an examination of anthropogenic concentrations common to Detroit would also be warranted;

- 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. Due care obligations would include the appropriate use of laboratory methods in analyzing 2-methylnaphthalene and naphthalene as noted on page 10 above.

- Further information concerning Part 201 cleanup criteria, due care provisions, and remedial and/or removal activities may be obtained from the MDEQ RRD, Southeast Michigan District Office at 586-753-3700.

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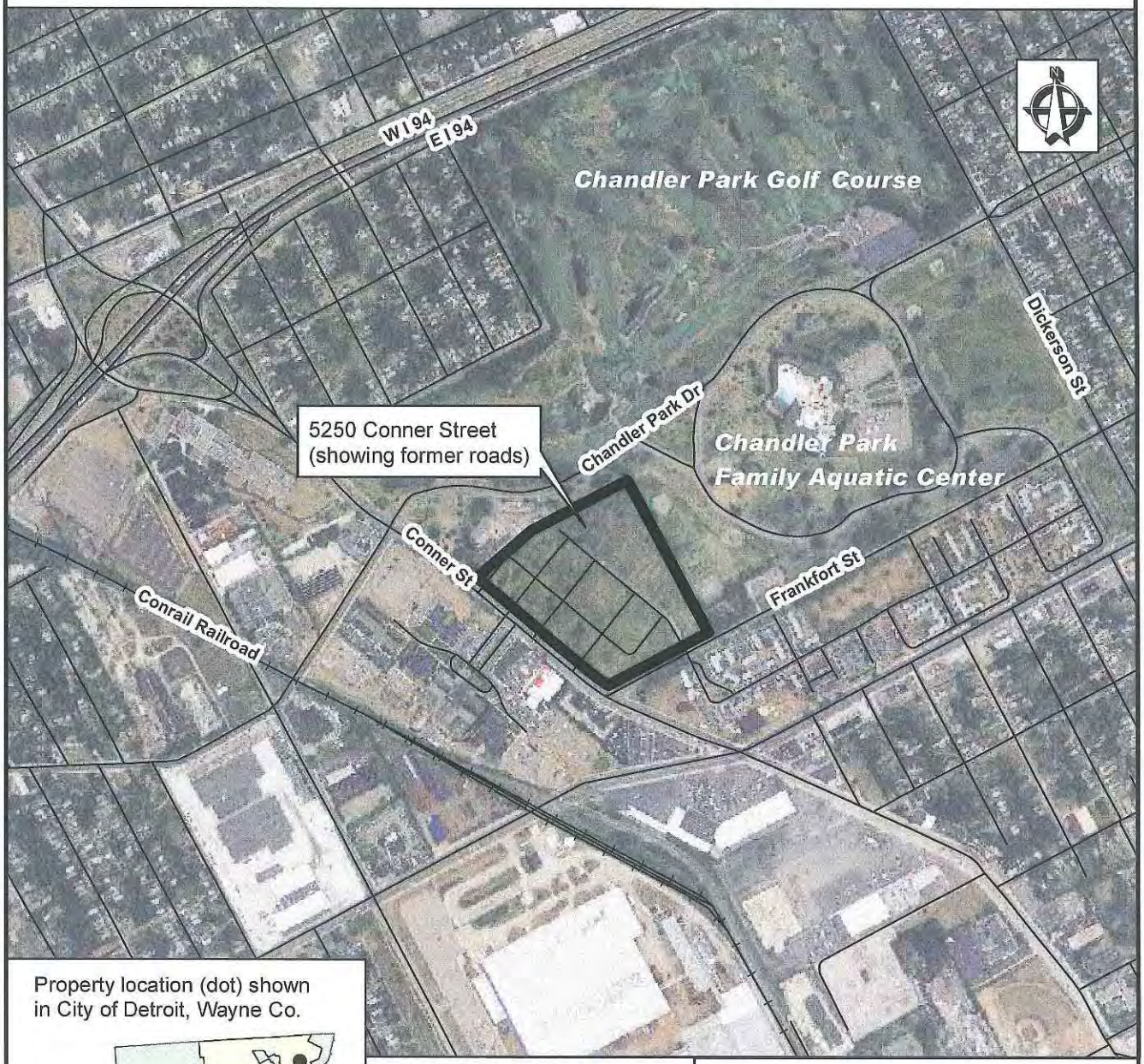
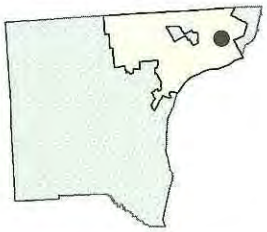
FIGURES

FIGURE 1
PROPERTY LOCATION



Property location (dot) shown in City of Detroit, Wayne Co.



0 250 500 1,000 Feet

Compiled by: Leni Steiner-Zehender, 3/2014
(Revised 7/3/2014, JES)
Projected Coordinate System:
Michigan GeoRef, NAD-83, meters
Sources: Michigan Geographic
Data Llibrary and MSU 2010 Aerial

BROWNFIELD REDEVOLOPMENT ASSESSMENT REPORT
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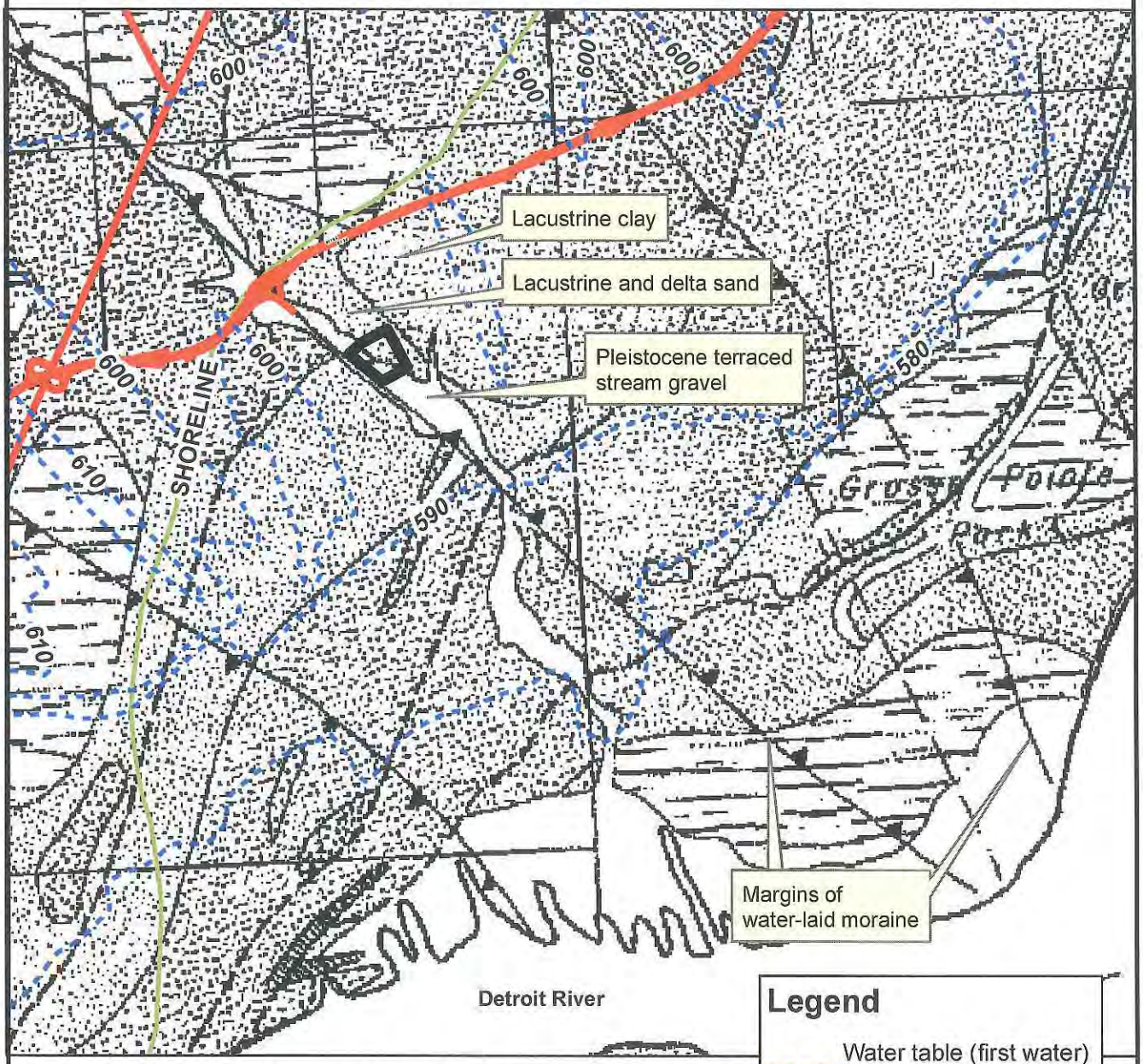
FIGURE 2
HYDROGEOLOGICAL FEATURES



Sources: Mozola, 1969 (geological features map); MDTMB, 2014 (state highway layer, former shoreline); and MDEQ, USGS, and MSU, 2005 (water table elevations)

0 0.275 0.55 1.1 Miles

Legend

- Water table (first water) contour elevation, ft
- I-94 and Gratiot Ave
- FORMER SHORELINE
- Conner Property

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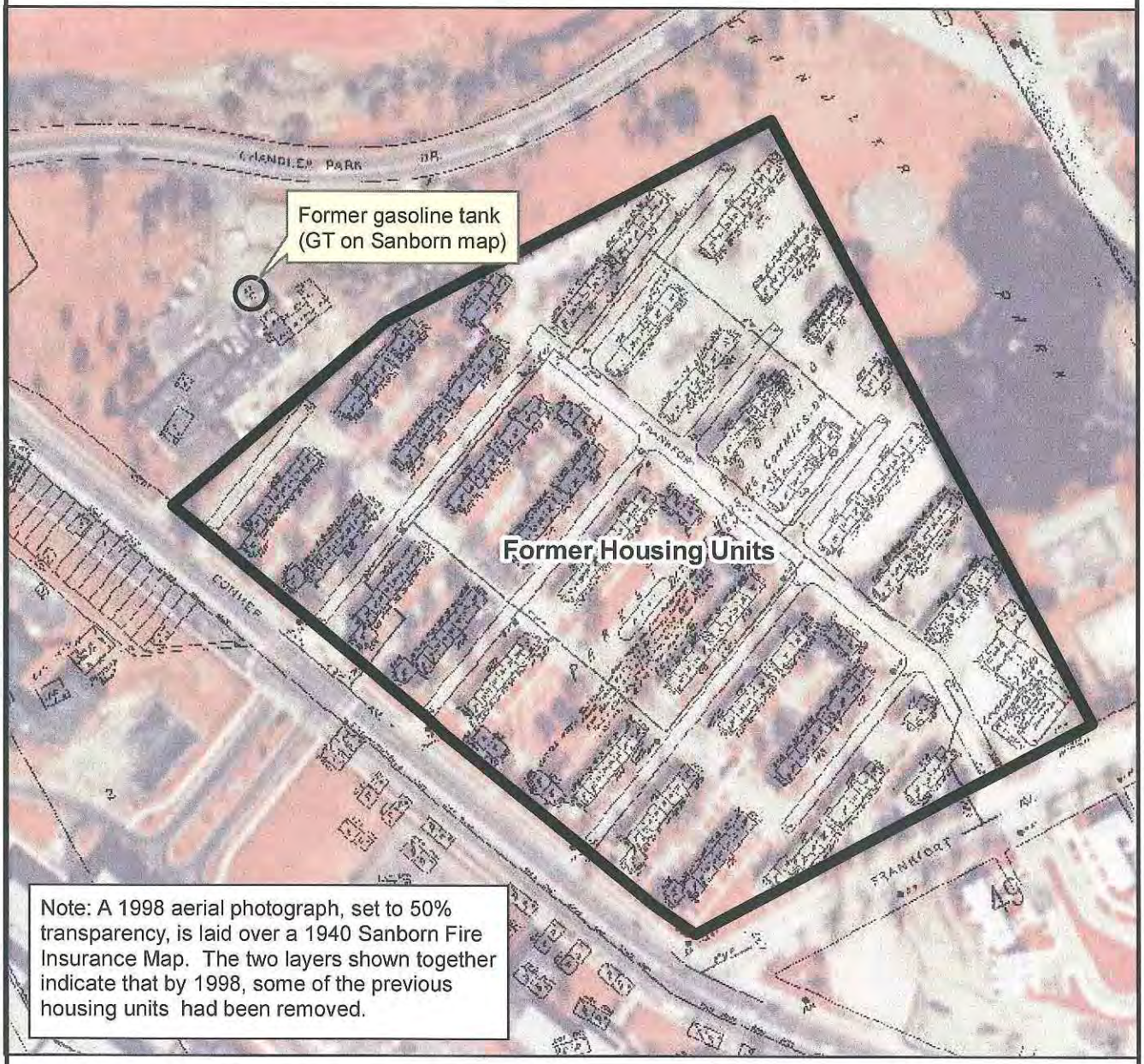
Compiled by: JE Spielberg, 7/11/14
Projected Coordinate System:
Michigan GeoRef, NAD-83, meters
Done in ESRI ArcMap10.1

FIGURE 3
HISTORICAL PROPERTY FEATURES



Sources: EDR, 2014d (Sanborn map); MIS - Michigan Imagery Solution WMS Services (1998 aerial image); Detroit Housing Commission (Property boundary)

0 150 300 600 Feet

Legend

Conner Property

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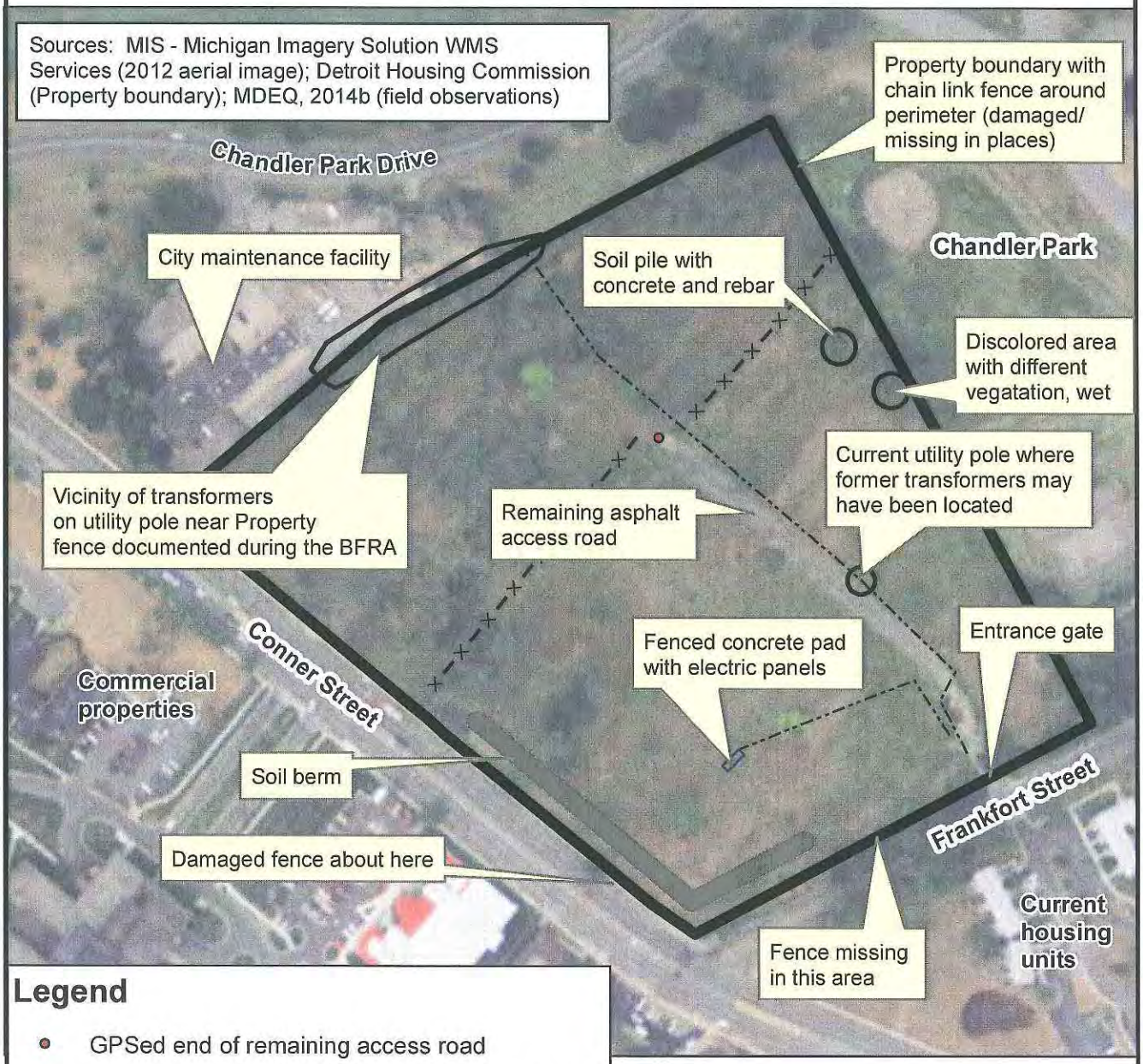
Done in ESRI ArcMap10.1

FIGURE 4
CURRENT PROPERTY FEATURES



Legend

- GPSed end of remaining access road
- Chain link fence (incomplete/damaged in places)
- Overhead utility line
- Soil berm about 5 ft above grade
- Conner Property

0 100 200 400 Feet

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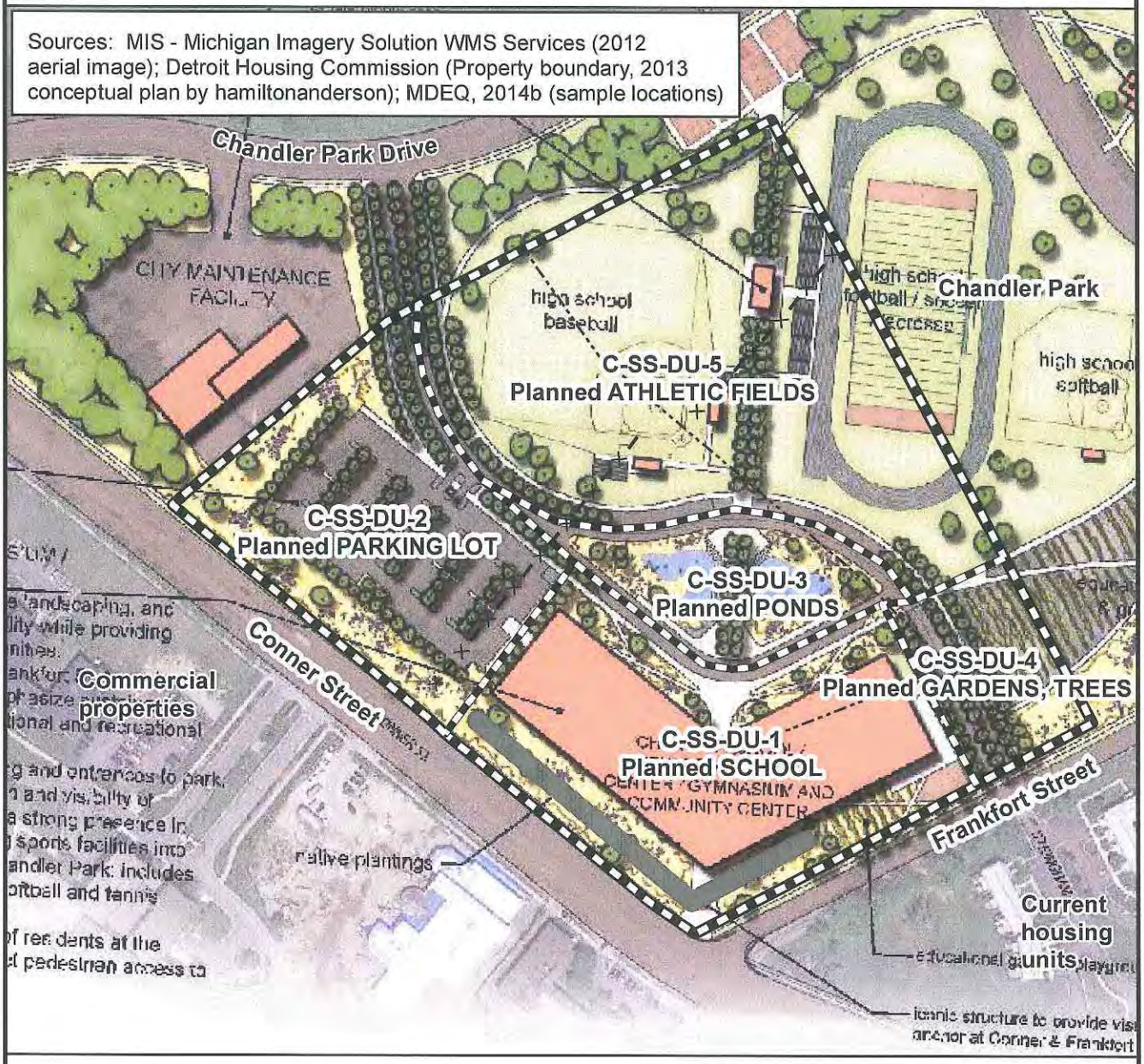
Compiled by: JE Spielberg, 7/11/14
Projected Coordinate System:
Michigan GeoRef, NAD-83, meters
Done in ESRI ArcMap10.1

FIGURE 5
SURFICIAL SOIL SAMPLE LOCATIONS



Legend

Decision Unit (DU) with sample name and planned use based on conceptual plan shown above

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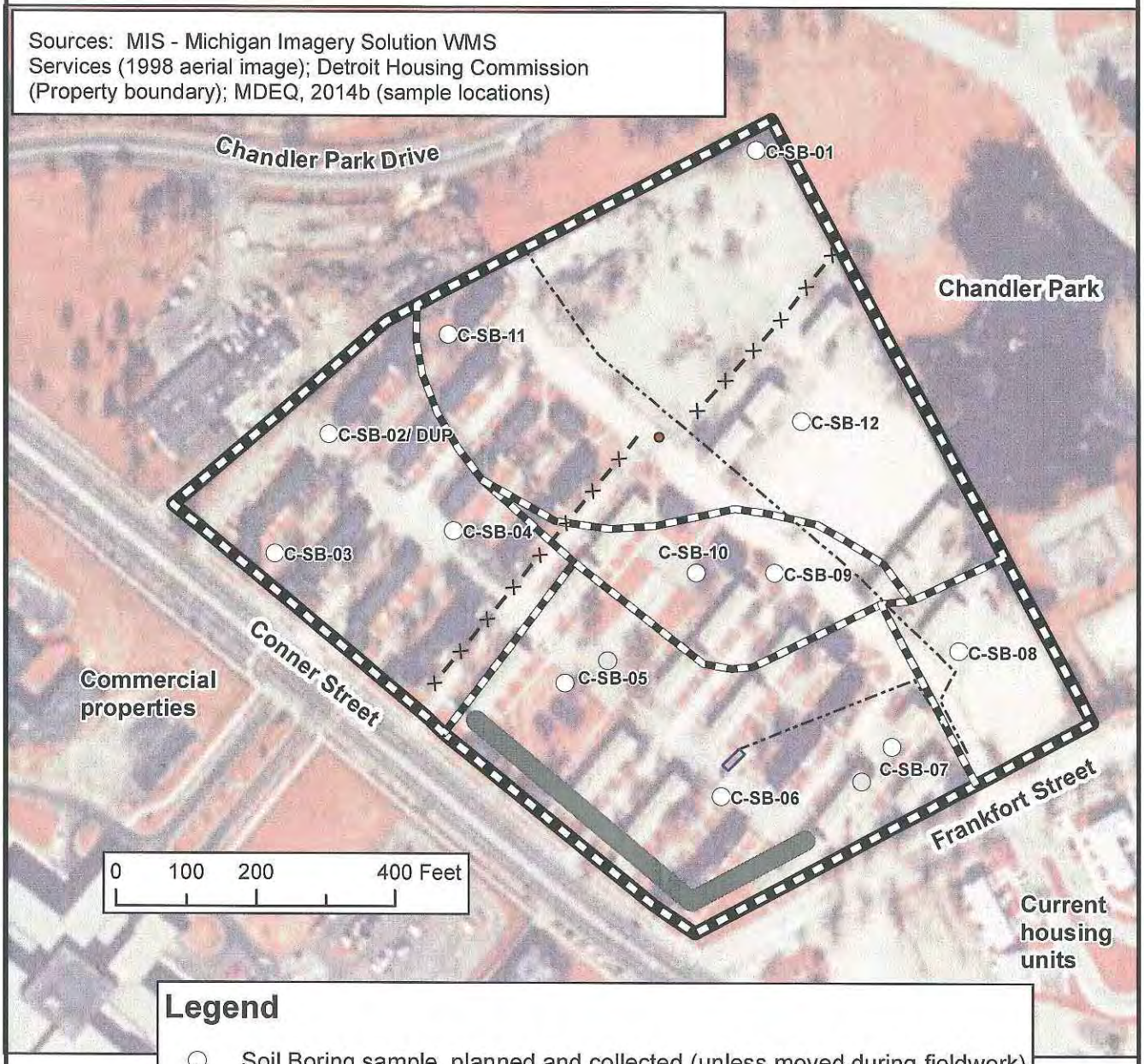
Compiled by: JE Spielberg, 7/11/14
Projected Coordinate System:
Michigan GeoRef, NAD-83, meters
Done in ESRI ArcMap10.1

FIGURE 6
SOIL BORING SAMPLE LOCATIONS

Sources: MIS - Michigan Imagery Solution WMS Services (1998 aerial image); Detroit Housing Commission (Property boundary); MDEQ, 2014b (sample locations)



Legend

- Soil Boring sample, planned and collected (unless moved during fieldwork)
- Soil Boring sample, after moving its location during fieldwork
- Decision Unit boundaries
- Conner Property boundary

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Michigan Department of Environmental Quality
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Superfund Section
Site Management and Site Assessment Unit

Compiled by: JE Spielberg, 7/16/14
Projected Coordinate System:
Michigan GeoRef, NAD-83, meters
Done in ESRI ArcMap10.1

TABLES

TABLE 1

SURFICIAL SOIL SAMPLE DESCRIPTIONS

SAMPLE NUMBER	DECISION UNIT ACRES	START CORNER/ DIRECTION	INTERVAL BETWEEN INCREMENTS (FEET)	NUMBER OF INCREMENTS	SAMPLE MASS (KILOGRAMS)	SAMPLE DESCRIPTION
C-SS-DU-1	5.0	E/WSW	70	41	4.4	Dry-moist, silty, fine-medium sand, with some clay
C-SS-DU-2	3.7	W/ESE	70	30	2.1	0-2 inches: moist, brown, medium sand organic soil with some clay. 2-10 inches: moist, brown, silty clay
C-SS-DU-2 D	same	same	same	30	2.3	Same as C-SS-DU-2
C-SS-DU-2 T	same	same	same	30	1.9	Same as C-SS-DU-2
C-SS-DU-3	1.6	E/N	40	33	2.3	0-3 inches: moist, brown, medium sand organic soil, with some clay. 3-10 inches: moist, brown, silty clay. Average depths of increments: 10 inches.
C-SS-DU-4	1.2	E/NNW	30	32	3.0	Dry-moist, light brown, fine-medium sand, with some silt and clay, trace fine gravel. Had occasional refusal (rocks) from 6-9 inches.
C-SS-DU-5	7.1	E/NNW	100	22	1.9	0-2 inches: moist, brown, sand and clay, with trace roots. 2-12 inches: moist, brown, silty clay.

Note:
The acreage of each decision unit was determined in a geographic information system.
The third column from the left indicates where the incremental sampling started and the direction it proceeded toward.
The distance in feet between intervals is estimated.
An attempt was made to collect all increments from a depth of 0-12 inches.
However, some increments were collected from less than 12 inches deep due to refusal conditions (rock/gravel, roots, etc.).

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TABLE 2
SURFICIAL SOIL 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
C-SS-DU-1	***SEMI-VOLATILES***	*(µg/kg)*		*(µg/kg)*	*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*	
	Fluoranthene	6,200			730,000		730,000		5,500		46,000,000	
	Phenanthrene	4,800			56,000		160,000		2,100		1,600,000	
	PESTICIDES/PCBS	*(µg/kg)*		*(µg/kg)*	*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*	
	No pesticides/PCBs found to exceed criteria											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Aluminum (B)	8,000		6,900	1.0		1.0		NA		50,000	DD
	Arsenic	7.2	B	5.8	4.6		4.6		4.6		7.6	
	Chromium [III] (B,H) - assumed present*			18	1,000,000	D	1,000,000	D	3,000,000	G,X	790,000	
	Chromium [Total] (H) - analyzed (assume Cr III)*	20	B	18	30		30		3.3		2,500	
	Chromium [VI] - assumed not present*				30		30		3.3		2,500	
	Iron (B)	15,000	B	12,000	6.0		6.0		NA		160,000	
	Magnesium (B)	11,000	B		8,000		22,000		NA		1,000,000	D
	Selenium (B)	1.0	JB	0.41	4.0		4.0		0.40		2,600	
C-SS-DU-2	***SEMI-VOLATILES***	*(mg/kg)*		*(mg/kg)*	(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)	
	Benzo(a)pyrene (Q)	2,100			NLL		NLL		NLL		2,000	
	Fluoranthene	6,300			730,000		730,000		5,500		46,000,000	
	Phenanthrene	4,700			56,000		160,000		2,100		1,600,000	
	PESTICIDES/PCBS	*(mg/kg)*		*(mg/kg)*	(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)	
	No pesticides/PCBs found to exceed criteria											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Aluminum (B)	8,000		6,900	1.0		1.0		NA		50,000	DD
	Arsenic	6.7	B	5.8	4.6		4.6		4.6		7.6	
	Chromium [III] (B,H) - assumed present*			18	1,000,000	D	1,000,000	D	3,000,000	G,X	790,000	
	Chromium [Total] (H) - analyzed (assume Cr III)*	19	B	18	30		30		3.3		2,500	
	Chromium [VI] - assumed not present*				30		30		3.3		2,500	
	Iron (B)	14,000	B	12,000	6.0		6.0		NA		160,000	
	Magnesium (B)	9,100	B		8,000		22,000		NA		1,000,000	D
	Selenium (B)	1.1	JB	0.41	4.0		4.0		0.40		2,600	

µg/kg = microgram/kilogram mg/kg = milligram/kilogram
Qualifier definitions in Appendix D. Footnote definitions in Appendix E.
Shaded Criteria indicate an exceedance.
A blank Default Background column means that value has not been determined.

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TABLE 2
SURFICIAL SOIL 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
C-SS-DU-2D	***SEMI-VOLATILES***	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No semi-volatiles found to exceed criteria											
	PESTICIDES/PCBS	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No pesticides/PCBs found to exceed criteria											
	INORGANICS	(mg/kg)		(mg/kg)	(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)	
	Aluminum (B)	7,900		6,900	1.0		1.0		NA		50,000	DD
	Arsenic	6.1	B	5.8	4.6		4.6		4.6		7.6	
	Chromium [III] (B,H) - assumed present*			18	1,000,000	D	1,000,000	D	3,000,000	G,X	790,000	
	Chromium [Total] (H) - analyzed (assume Cr III)*	21	B	18	30		30		3.3		2,500	
	Chromium [VI] - assumed not present*				30		30		3.3		2,500	
	Iron (B)	14,000	B	12,000	6.0		6.0		NA		160,000	
	Magnesium (B)	9,200	B		8,000		22,000		NA		1,000,000	D
	Selenium (B)	1.0	JB	0.41	4.0		4.0		0.40		2,600	
	Strontium (B)	93	B		92		260		420	X	330,000	
C-SS-DU-2T	***SEMI-VOLATILES***	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	Benzo(a)pyrene (Q)	3,400			NLL		NLL		NLL		2,000	
	Fluoranthene	10,000			730,000		730,000		5,500		46,000,000	
	Phenanthrene	7,700			56,000		160,000		2,100		1,600,000	
	PESTICIDES/PCBS	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No pesticides/PCBs found to exceed criteria											
	INORGANICS	(mg/kg)		(mg/kg)	(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)	
	Aluminum (B)	8,100		6,900	1.0		1.0		NA		50,000	DD
	Arsenic	6.2	B	5.8	4.6		4.6		4.6		7.6	
	Chromium [III] (B,H) - assumed present*			18	1,000,000	D	1,000,000	D	3,000,000	G,X	790,000	
	Chromium [Total] (H) - analyzed (assume Cr III)*	20	B	18	30		30		3.3		2,500	
	Chromium [VI] - assumed not present*				30		30		3.3		2,500	
	Iron (B)	14,000	B	12,000	6.0		6.0		NA		160,000	
	Magnesium (B)	9,300	B		8,000		22,000		NA		1,000,000	D
	Selenium (B)	1.0	JB	0.41	4.0		4.0		0.40		2,600	

µg/kg = microgram/kilogram mg/kg = milligram/kilogram
Qualifier definitions in Appendix D. Footnote definitions in Appendix E.
Shaded Criteria indicate an exceedance.
A blank Default Background column means that value has not been determined.

5250 Conner Detroit
MIB000000184
June 2-3, 2014

TABLE 2
SURFICIAL SOIL 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
C-SS-DU-3	***SEMI-VOLATILES***	*(µg/kg)*		*(µg/kg)*	*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*	
	Benzo(a)pyrene (Q)	2,500			NLL		NLL		NLL		2,000	
	Fluoranthene	7,800			730,000		730,000		5,500		46,000,000	
	Naphthalene	750			35,000		100,000		730		16,000,000	
	Phenanthrene	7,000			56,000		160,000		2,100		1,600,000	
	PESTICIDES/PCBS	*(µg/kg)*		*(µg/kg)*	*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*	
	No pesticides/PCBs found to exceed criteria											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Aluminum (B)	7,200		6,900	1.0		1.0		NA		50,000	DD
	Arsenic	6.6	B	5.8	4.6		4.6		4.6		7.6	
	Chromium [III] (B,H) - assumed present*			18	1,000,000	D	1,000,000	D	3,000,000	G,X	790,000	
	Chromium [Total] (H) - analyzed (assume Cr III)*	18	B	18	30		30		3.3		2,500	
	Chromium [VI] - assumed not present*				30		30		3.3		2,500	
	Cyanide (P,R), total	0.48	JB	0.39	4.0		4.0		0.10		12	
	Iron (B)	14,000	B	12,000	6.0		6.0		NA		160,000	
	Magnesium (B)	11,000	B		8,000		22,000		NA		1,000,000	D
	Selenium (B)	0.98	JB	0.41	4.0		4.0		0.40		2,600	
	Strontium (B)	130	B		92		260		420	X	330,000	
C-SS-DU-4	***SEMI-VOLATILES***	*(µg/kg)*		*(µg/kg)*	*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*	
	Benzo(a)pyrene (Q)	5,100			NLL		NLL		NLL		2,000	
	Carbazole	1,400			9,400		39,000		1,100		530,000	
	Fluoranthene	15,000			730,000		730,000		5,500		46,000,000	
	Naphthalene	1,100			35,000		100,000		730		16,000,000	
	Phenanthrene	11,000			56,000		160,000		2,100		1,600,000	
	PESTICIDES/PCBS	*(µg/kg)*		*(µg/kg)*	*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*	
	No pesticides/PCBs found to exceed criteria											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Chromium [III] (B,H) - assumed present*			18	1,000,000	D	1,000,000	D	3,000,000	G,X	790,000	
	Chromium [Total] (H) - analyzed (assume Cr III)*	12	B	18	30		30		3.3		2,500	
	Chromium [VI] - assumed not present*				30		30		3.3		2,500	
	Magnesium (B)	9,900	B		8,000		22,000		NA		1,000,000	D
	Selenium (B)	0.7	JB	0.41	4.0		4.0		0.40		2,600	

µg/kg = microgram/kilogram mg/kg = milligram/kilogram
Qualifier definitions in Appendix D. Footnote definitions in Appendix E.
Shaded Criteria indicate an exceedance.
A blank Default Background column means that value has not been determined.

5250 Conner Detroit
MIB000000184
June 2-3, 2014

TABLE 2
SURFICIAL SOIL 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
C-SS-DU-5	***SEMI-VOLATILES***	*(µg/kg)*		*(µg/kg)*	*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*	
	Benzo(a)pyrene (Q)	2,400			NLL		NLL		NLL		2,000	
	Fluoranthene	5,800			730,000		730,000		5,500		46,000,000	
	Phenanthrene	2,600			56,000		160,000		2,100		1,600,000	
	PESTICIDES/PCBS	*(µg/kg)*		*(µg/kg)*	*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*	
	No pesticides/PCBs found to exceed criteria											
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Aluminum (B)	7,800		6,900	1.0		1.0		NA		50,000	DD
	Arsenic	6.3	B	5.8	4.6		4.6		4.6		7.6	
	Chromium [III] (B,H) - assumed present*			18	1,000,000	D	1,000,000	D	3,000,000	G,X	790,000	
	Chromium [Total] (H) - analyzed (assume Cr III)*	20	B	18	30		30		3.3		2,500	
	Chromium [VI] - assumed not present*				30		30		3.3		2,500	
	Iron (B)	15,000	B	12,000	6.0		6.0		NA		160,000	
	Magnesium (B)	9,700	B		8,000		22,000		NA		1,000,000	D
	Selenium (B)	1.0	JB	0.41	4.0		4.0		0.40		2,600	

Notes:
Volatiles analysis was not requested (see chain-of-custody documents in Appendix D).
Exposure pathway columns with no criteria exceedances are hidden.

*Chromium III is naturally occurring and chromium VI is not naturally occurring.
*The total chromium analysis included both III and VI, but based on past Property uses without chromium VI sources, an assumption is made that the total chromium analysis includes only chromium III.
*Therefore, the 18 mg/kg background is also applied here to total chromium.

µg/kg = microgram/kilogram mg/kg = milligram/kilogram
Qualifier definitions in Appendix D. Footnote definitions in Appendix E.
Shaded Criteria indicate an exceedance.
A blank Default Background column means that value has not been determined.

TABLE 3

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE NUMBER	LOCATION COORDINATES		CORE INTERVAL (feet)	RECOVERY (inches)	UNIT THICKNESS (inches)	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS*
	Easting	Northing					
C-SB-01	748555.501	209291.653	0-4	34	0-18	Moist, brown, silty clay with some tree roots.	Deep grab sample. VOA portion of sample collected at 22 inches of 4-8 feet core. Remaining sample portion collected from 20-34 inches of 4-8 feet core. PID = 0.0 for all cores.
					18-23	Very moist, black, silty/clayey, fine sand.	
					23-34	Moist, variegated, silty clay with clayey sand at 30-33 inches.	
			4-8	43	0-4	Slough.	
					4-43	Moist, variegated, silty clay.	
			8-12	45	0-3	Slough.	
					3-6	Moist, variegated, silty clay.	
					6-8	Very moist, brown, clayey, fine sand.	
					8-45	Moist, variegated, silty clay.	

TABLE 3

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE NUMBER	LOCATION COORDINATES		CORE INTERVAL (feet)	RECOVERY (inches)	UNIT THICKNESS (inches)	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS*
	Easting	Northing					
C-SB-02/ C-SB-02 DUP	748368.826	209168.753	0-4	45	0-25	Moist, brown, silty clay with trace sand and gravel and some broken asphalt and coal chunks.	Deep grab sample. VOA portion of sample collected at 15 inches of 4-8 feet core.
					25-34	Moist, black/brown, silty, fine sand.	
					34-45	Moist, brown, silty clay with some sand and occasional black streaking.	Remaining sample portion collected from 12-30 inches of 4-8 feet core.
			4-8	45	0-4	Slough.	PID = 0.0 for all cores.
					4-14	Moist, brown, silty clay with some sand and occasional black streaking.	
					14-45	Moist, variegated, silty clay with trace fine sand.	

TABLE 3

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE NUMBER	LOCATION COORDINATES		CORE INTERVAL (feet)	RECOVERY (inches)	UNIT THICKNESS (inches)	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS*
	Easting	Northing					
C-SB-03/ C-SB-03/ MS/MSD	748345.058	209117.303	0-4	39	0-10	Dry/moist, dark brown, silty, fine sand with trace slag.	Deep grab sample.
					10-39	Moist, brown, fine sand with trace silt and occasional clay chunks (fill).	VOA portion of sample collected at 26 inches of 4-8 feet core.
			4-8	35	0-6	Slough.	Remaining sample portion collected from 12-28 inches of 4-8 feet core.
					6-28	Moist, brown, fine sand with trace silt and occasional clay chunks (fill).	
					28-35	Moist, variegated, silty clay with trace fine sand.	PID = 0.0 for all cores.
			8-11	39	0-5	Slough.	
					5-39	Moist, variegated, silty clay with trace fine sand.	

TABLE 3

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE NUMBER	LOCATION COORDINATES		CORE INTERVAL (feet)	RECOVERY (inches)	UNIT THICKNESS (inches)	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS*
	Easting	Northing					
C-SB-04	748424.066	209127.291	0-4	45	0-14	Moist, dark brown, clayey silt and fine sand with organics/roots in top 3 inches.	Deep grab sample. VOA portion of sample collected at 30 inches of 4-8 feet core.
					14-26	Moist, brown, silty clay.	
					26-34	Moist, brown, silty, fine sand.	Remaining sample portion collected from 24-32 inches of 4-8 feet core.
					34-45	Moist, variegated, silty clay with trace fine sand.	
			4-8	48	0-5	Slough.	PID = 0.0 for all cores.
					4-48	Moist, variegated, silty clay with trace fine sand.	
C-SB-05	748490.938	209071.527	0-4	47	0-27	Moist, brown, silty clay with trace sand.	Deep grab sample.
					27-29	Moist, brown, fine sand with trace silt.	VOA portion of sample collected at 16 inches of 4-8 feet core.
					29-47	Moist, variegated, silty clay with trace sand.	Remaining sample portion collected from 12-20 inches of 4-8 feet core.
			4-8	30	0-30	Moist, variegated, silty clay with trace sand.	PID = 0.0 for all cores.

TABLE 3

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE NUMBER	LOCATION COORDINATES		CORE INTERVAL (feet)	RECOVERY (inches)	UNIT THICKNESS (inches)	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS*
	Easting	Northing					
C-SB-06	748540.201	209012.984	0-4	47	0-7	Dry, dark brown, silty clay with some organics/roots.	Deep grab sample.
					7-47	Moist, mixed brown and variegated, silty clay.	VOA portion of sample collected at 27 inches of 4-8 feet core.
			4-8	48	0-7	Moist, mixed brown and variegated, silty clay.	Remaining sample portion collected from 20-30 inches of 4-8 feet core.
					7-25	Moist, dark brown, silty clay with some brick at 19-24 inches.	PID = 0.0 for all cores.
					25-48	Moist, variegated, silty clay with trace sand.	

TABLE 3

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE NUMBER	LOCATION COORDINATES		CORE INTERVAL (feet)	RECOVERY (inches)	UNIT THICKNESS (inches)	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS*
	Easting	Northing					
C-SB-07	748601.656	209019.515	0-4	41	0-9	Dry, dark brown, silty/clayey, fine sand with some organics/roots.	Deep grab sample. VOA portion of sample collected at 19 inches of 4-8 feet core. Remaining sample portion collected from 15-25 inches of 4-8 feet core. PID = 0.0 for all cores.
					9-29	Moist, brown, silty, fine sand.	
					29-41	Moist, brown, silty clay with trace sand.	
			4-8	48	0-3	Slough.	
					3-7	Moist, brown, silty clay with trace sand.	
					7-15	Very moist, brown silt.	
					15-48	Moist, variegated, silty clay with trace sand.	
C-SB-08	748643.822	209075.724	0-4	45	0-14	Dry/moist, dark brown, silty, fine sand with some concrete debris.	Deep grab sample. VOA portion of sample collected at 20 inches of 4-8 feet core. Remaining sample portion collected from 16-26 inches of 4-8 feet core.
					14-45	Moist, brown/variegated, silty clay with trace sand.	
			4-8	48	0-48	Moist, variegated, silty clay with trace sand. PID = 0.0 for all cores.	

TABLE 3

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE NUMBER	LOCATION COORDINATES		CORE INTERVAL (feet)	RECOVERY (inches)	UNIT THICKNESS (inches)	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS*
	Easting	Northing					
C-SB-09	748563.381	209109.300	0-4	33	0-28	Dry/moist, brown, silty clay mixed with some gravel, wood, bark and concrete debris.	Deep grab sample. VOA portion of sample collected at 18 inches of 4-8 feet core.
					28-33	Moist, black/brown silt with some fine sand.	
			4-8	48	0-3	Slough.	Remaining sample portion collected from 14-24 inches of 4-8 feet core.
					3-10	Moist, black/brown silt with some fine sand.	
					10-14	Very moist, brown, clayey, fine/medium sand.	PID = 0.0 for all cores.
					14-48	Moist, black/brown silt with some fine sand.	

TABLE 3

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE NUMBER	LOCATION COORDINATES		CORE INTERVAL (feet)	RECOVERY (inches)	UNIT THICKNESS (inches)	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS*
	Easting	Northing					
C-SB-10	748529.362	209109.313	0-4	41	0-2	Dry, dark brown, silty/clayey, fine sand with some organics/roots.	Deep grab sample. VOA portion of sample collected at 14 inches of 4-8 feet core.
					2-19	Moist, brown, silty clay with lots of gravel, concrete and asphalt.	
					19-39	Moist/very moist, brown, silty; fine sand with trace clay.	Remaining sample portion collected from 12-24 inches of 4-8 feet core.
					39-41	Moist, variegated, silty clay with trace fine sand.	PID = 0.0 for all cores.
			4-8	48	0-12	Slough.	
					12-48	Moist, variegated, silty clay with trace fine sand.	

TABLE 3

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE NUMBER	LOCATION COORDINATES		CORE INTERVAL (feet)	RECOVERY (inches)	UNIT THICKNESS (inches)	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS*
	Easting	Northing					
C-SB-11	748421.724	209211.867	0-4	36	0-4	Moist, brown, silty clay with some organics/roots.	Deep grab sample.
					4-14	Moist, mixed, brown/gray/black, silty clay with concrete and asphalt.	VOA portion of sample collected at 12 inches of 4-8 feet core.
					14-18	Moist, brown, silty clay.	Remaining sample portion collected from 10-24 inches of 4-8 feet core.
					18-21	Moist, brown, fine/medium sand with some silt.	
					21-26	Moist, variegated, silty clay.	PID = 0.0 for all cores.
					26-36	Moist, dark brown, silty clay with trace sand.	
			4-8	46	0-2	Slough.	
					2-46	Moist, variegated, silty clay with trace fine sand.	

TABLE 3

SOIL BORING LITHOLOGY AND SAMPLE LOG

SAMPLE NUMBER	LOCATION COORDINATES		CORE INTERVAL (feet)	RECOVERY (inches)	UNIT THICKNESS (inches)	LITHOLOGICAL DESCRIPTION WITH PHOTOIONIZATION DETECTOR (PID) READING*	SAMPLE INTERVALS AND COMMENTS*
	Easting	Northing					
C-SB-12	748575.189	209174.756	0-4	44	0-9	Moist, dark brown, silty, fine sand with trace clay and organics/roots.	Deep grab sample.
					9-16	Moist, dark brown, fine sand with some silt and wood debris.	VOA portion of sample collected at 18 inches of 4-8 feet core.
					16-44	Moist, brown/variegated, silty clay with trace sand.	Remaining sample portion collected from 12-24 inches of 4-8 feet core.
			4-8	42	0-3	Slough.	PID = 0.0 for all cores.
					3-42	Moist, brown/variegated, silty clay with trace sand.	

Location Coordinates: Michigan Georef NAD 1983 meters

* PID reading units are parts per million (ppm)

5250 Conner Detroit
MIB000000184
June 2, 2014

TABLE 4
SOIL BORING SAMPLE DATA SUMMARY

					Groundwater Protection						Ambient Air (Y)		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	Nonresidential Particulate Soil Inhalation Criteria	Footnotes	Residential Direct Contact Criteria	Footnotes
C-SB-01	***VOLATILES***	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No volatile organic compounds were detected													
	SEMI-VOLATILES	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No semi-volatile organic compounds were detected													
	PESTICIDES/PCBS	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No pesticides or PCBs were detected													
	INORGANICS	(mg/kg)		(mg/kg)	(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)	
	Arsenic	15		5.8	4.6		4.6		4.6		910		7.6	
	Chromium [III] (B,H) - assumed present*			18	1,000,000	D	1,000,000	D	3,000,000	G,X	150,000		790,000	
	Chromium [Total] (H) - analyzed (assume Cr III)*	19		18	30		30		3.3		240		2,500	
	Chromium [VI] - assumed not present*				30		30		3.3		240		2,500	
	Cobalt	8.2		6.8	0.8		2.0		2.0		5,900		2,600	
	Iron (B)	37,000		12,000	6.0		6.0		NA		ID		160,000	
	Molybdenum (B)	3.0			1.5		4.2		64	X	ID		2,600	
C-SB-02	***VOLATILES***	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No volatile organic compounds were detected													
	SEMI-VOLATILES	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No semi-volatile organic compounds were detected													
	PESTICIDES/PCBS	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No pesticides or PCBs were detected													
	INORGANICS	(mg/kg)		(mg/kg)	(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)	
	Iron (B)	13,000		12,000	6.0		6.0		NA		ID		160,000	
C-SB-02-DUP	***VOLATILES***	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No volatile organic compounds were detected													
	SEMI-VOLATILES	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No semi-volatile organic compounds were detected													
	PESTICIDES/PCBS	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No pesticides or PCBs were detected													
	INORGANICS	(mg/kg)		(mg/kg)	(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)	
	Cobalt	7.0		6.8	0.8		2.0		2.0		5,900		2,600	
	Iron (B)	20,000		12,000	6.0		6.0		NA		ID		160,000	
	Molybdenum (B)	2.5			1.5		4.2		64	X	ID		2,600	

µg/kg = microgram/kilogram mg/kg = milligram/kilogram
Qualifier definitions in Appendix D. Footnote definitions in Appendix E.
Shaded Criteria indicate an exceedance.
A blank Default Background column means that value has not been determined.

5250 Conner Detroit
MIB000000184
June 2, 2014

TABLE 4
SOIL BORING SAMPLE DATA SUMMARY

Sample Number	Hazardous Substance (Footnotes)	Sample Concentration	Qualifiers	Statewide Default Background Levels	Groundwater Protection: Residential Drinking Water Protection Criteria	Footnotes	Groundwater Protection: Nonresidential Drinking Water Protection Criteria	Footnotes	Groundwater Protection: Groundwater Surface Water Interface Protection Criteria	Footnotes	Ambient Air (Y): Nonresidential Particulate Soil Inhalation Criteria	Footnotes	Direct Contact: Residential Direct Contact Criteria	Footnotes
C-SB-03	***VOLATILES***	*(µg/kg)*		*(µg/kg)*	*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*	
	No volatile organic compounds were detected													
	SEMI-VOLATILES	*(µg/kg)*		*(µg/kg)*	*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*	
	No semi-volatile organic compounds exceeded any criteria													
	PESTICIDES/PCBS	*(µg/kg)*		*(µg/kg)*	*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*	
	No pesticides or PCBs were detected													
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	No inorganic analytes were detected above criteria													
C-SB-04	***VOLATILES***	*(µg/kg)*		*(µg/kg)*	*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*	
	No volatile organic compounds were detected													
	SEMI-VOLATILES	*(µg/kg)*		*(µg/kg)*	*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*	
	No semi-volatile organic compounds were detected													
	PESTICIDES/PCBS	*(µg/kg)*		*(µg/kg)*	*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*	
	No pesticides or PCBs were detected													
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Arsenic	7.7		5.8	4.6		4.6		4.6		910		7.6	
	Chromium [III] (B,H) - assumed present*			18	1,000,000	D	1,000,000	D	3,000,000	G,X	150,000		790,000	
	Chromium [Total] (H) - analyzed (assume Cr III)*	23		18	30		30		3.3		240		2,500	
	Chromium [VI] - assumed not present*				30		30		3.3		240		2,500	
	Cobalt	14		6.8	0.8		2.0		2.0		5,900		2,600	
	Iron (B)	32,000		12,000	6.0		6.0		NA		ID		160,000	
	Manganese (B)	620		440	1.0		1.0		55	G,X	1,500		25,000	
C-SB-05	***VOLATILES***	*(µg/kg)*		*(µg/kg)*	*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*	
	No volatile organic compounds were detected													
	SEMI-VOLATILES	*(µg/kg)*		*(µg/kg)*	*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*	
	No semi-volatile organic compounds were detected													
	PESTICIDES/PCBS	*(µg/kg)*		*(µg/kg)*	*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*		*(µg/kg)*	
	No pesticides or PCBs were detected													
	INORGANICS	*(mg/kg)*		*(mg/kg)*	*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*		*(mg/kg)*	
	Arsenic	6.6		5.8	4.6		4.6		4.6		910		7.6	
	Chromium [III] (B,H) - assumed present*			18	1,000,000	D	1,000,000	D	3,000,000	G,X	150,000		790,000	
	Chromium [Total] (H) - analyzed (assume Cr III)*	21		18	30		30		3.3		240		2,500	
	Chromium [VI] - assumed not present*				30		30		3.3		240		2,500	
	Cobalt	14		6.8	0.8		2.0		2.0		5,900		2,600	
	Iron (B)	33,000		12,000	6.0		6.0		NA		ID		160,000	
	Manganese (B)	500		440	1.0		1.0		55	G,X	1,500		25,000	
	Molybdenum (B)	2.3			1.5		4.2		64	X	ID		2,600	

µg/kg = microgram/kilogram mg/kg = milligram/kilogram
Qualifier definitions in Appendix D. Footnote definitions in Appendix E.
Shaded Criteria indicate an exceedance.
A blank Default Background column means that value has not been determined.

5250 Conner Detroit
MIB000000184
June 2, 2014

TABLE 4
SOIL BORING SAMPLE DATA SUMMARY

Sample Number	Hazardous Substance (Footnotes)	Sample Concentration	Qualifiers	Statewide Default Background Levels	Groundwater Protection: Residential Drinking Water Protection Criteria	Footnotes	Groundwater Protection: Nonresidential Drinking Water Protection Criteria	Footnotes	Groundwater Protection: Groundwater Surface Water Interface Protection Criteria	Footnotes	Ambient Air (Y): Nonresidential Particulate Soil Inhalation Criteria	Footnotes	Direct Contact: Residential Direct Contact Criteria	Footnotes
C-SB-06	***VOLATILES***	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No volatile organic compounds were detected													
	SEMI-VOLATILES	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No semi-volatile organic compounds were detected													
	PESTICIDES/PCBS	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No pesticides or PCBs were detected													
	INORGANICS	(mg/kg)		(mg/kg)	(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)	
	Arsenic	11		5.8	4.6		4.6		4.6		910		7.6	
	Chromium [III] (B,H) - assumed present*			18	1,000,000	D	1,000,000	D	3,000,000	G,X	150,000		790,000	
	Chromium [Total] (H) - analyzed (assume Cr III)*	19		18	30		30		3.3		240		2,500	
	Chromium [VI] - assumed not present*				30		30		3.3		240		2,500	
	Cobalt	12		6.8	0.8		2.0		2.0		5,900		2,600	
	Iron (B)	29,000		12,000	6.0		6.0		NA		ID		160,000	
	Manganese (B)	1,900		440	1.0		1.0		55	G,X	1,500		25,000	
	Molybdenum (B)	2.2			1.5		4.2		64	X	ID		2,600	
C-SB-07	***VOLATILES***	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No volatile organic compounds were detected													
	SEMI-VOLATILES	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No semi-volatile organic compounds were detected													
	PESTICIDES/PCBS	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No pesticides or PCBs were detected													
	INORGANICS	(mg/kg)		(mg/kg)	(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)	
	Chromium [III] (B,H) - assumed present*			18	1,000,000	D	1,000,000	D	3,000,000	G,X	150,000		790,000	
	Chromium [Total] (H) - analyzed (assume Cr III)*	20		18	30		30		3.3		240		2,500	
	Chromium [VI] - assumed not present*				30		30		3.3		240		2,500	
	Cobalt	11		6.8	0.8		2.0		2.0		5,900		2,600	
	Iron (B)	27,000		12,000	6.0		6.0		NA		ID		160,000	
	Manganese (B)	640		440	1.0		1.0		55	G,X	1,500		25,000	

µg/kg = microgram/kilogram mg/kg = milligram/kilogram
Qualifier definitions in Appendix D. Footnote definitions in Appendix E.
Shaded Criteria indicate an exceedance.
A blank Default Background column means that value has not been determined.

5250 Conner Detroit
MIB000000184
June 2, 2014

TABLE 4
SOIL BORING SAMPLE DATA SUMMARY

					Groundwater Protection						Ambient Air (Y)		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	Nonresidential Particulate Soil Inhalation Criteria	Footnotes	Residential Direct Contact Criteria	Footnotes
C-SB-08	***VOLATILES***	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No volatile organic compounds were detected													
	SEMI-VOLATILES	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No semi-volatile organic compounds were detected													
	PESTICIDES/PCBS	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No pesticides or PCBs were detected													
	INORGANICS	(mg/kg)		(mg/kg)	(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)	
	Arsenic	10		5.8	4.6		4.6		4.6		910		7.6	
	Cobalt	10		6.8	0.8		2.0		2.0		5,900		2,600	
	Iron (B)	23,000		12,000	6.0		6.0		NA		ID		160,000	
	Manganese (B)	470		440	1.0		1.0		55	G,X	1,500		25,000	
	Molybdenum (B)	2.0			1.5		4.2		64	X	ID		2,600	
C-SB-09	***VOLATILES***	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No volatile organic compounds were detected													
	SEMI-VOLATILES	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No semi-volatile organic compounds were detected													
	PESTICIDES/PCBS	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No pesticides or PCBs were detected													
	INORGANICS	(mg/kg)		(mg/kg)	(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)	
	Arsenic	7.0		5.8	4.6		4.6		4.6		910		7.6	
	Cobalt	11		6.8	0.8		2.0		2.0		5,900		2,600	
	Iron (B)	23,000		12,000	6.0		6.0		NA		ID		160,000	
C-SB-10	***VOLATILES***	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No volatile organic compounds were detected													
	SEMI-VOLATILES	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No semi-volatile organic compounds were detected													
	PESTICIDES/PCBS	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No pesticides or PCBs were detected													
	INORGANICS	(mg/kg)		(mg/kg)	(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)	
	Arsenic	10		5.8	4.6		4.6		4.6		910		7.6	
	Chromium [III] (B,H) - assumed present*			18	1,000,000	D	1,000,000	D	3,000,000	G,X	150,000		790,000	
	Chromium [Total] (H) - analyzed (assume Cr III)*	22		18	30		30		3.3		240		2,500	
	Chromium [VI] - assumed not present*				30		30		3.3		240		2,500	
	Cobalt	15		6.8	0.8		2.0		2.0		5,900		2,600	
	Iron (B)	32,000		12,000	6.0		6.0		NA		ID		160,000	
	Manganese (B)	970		440	1.0		1.0		55	G,X	1,500		25,000	

µg/kg = microgram/kilogram mg/kg = milligram/kilogram
Qualifier definitions in Appendix D. Footnote definitions in Appendix E.
Shaded Criteria indicate an exceedance.
A blank Default Background column means that value has not been determined.

5250 Conner Detroit
MIB000000184
June 2, 2014

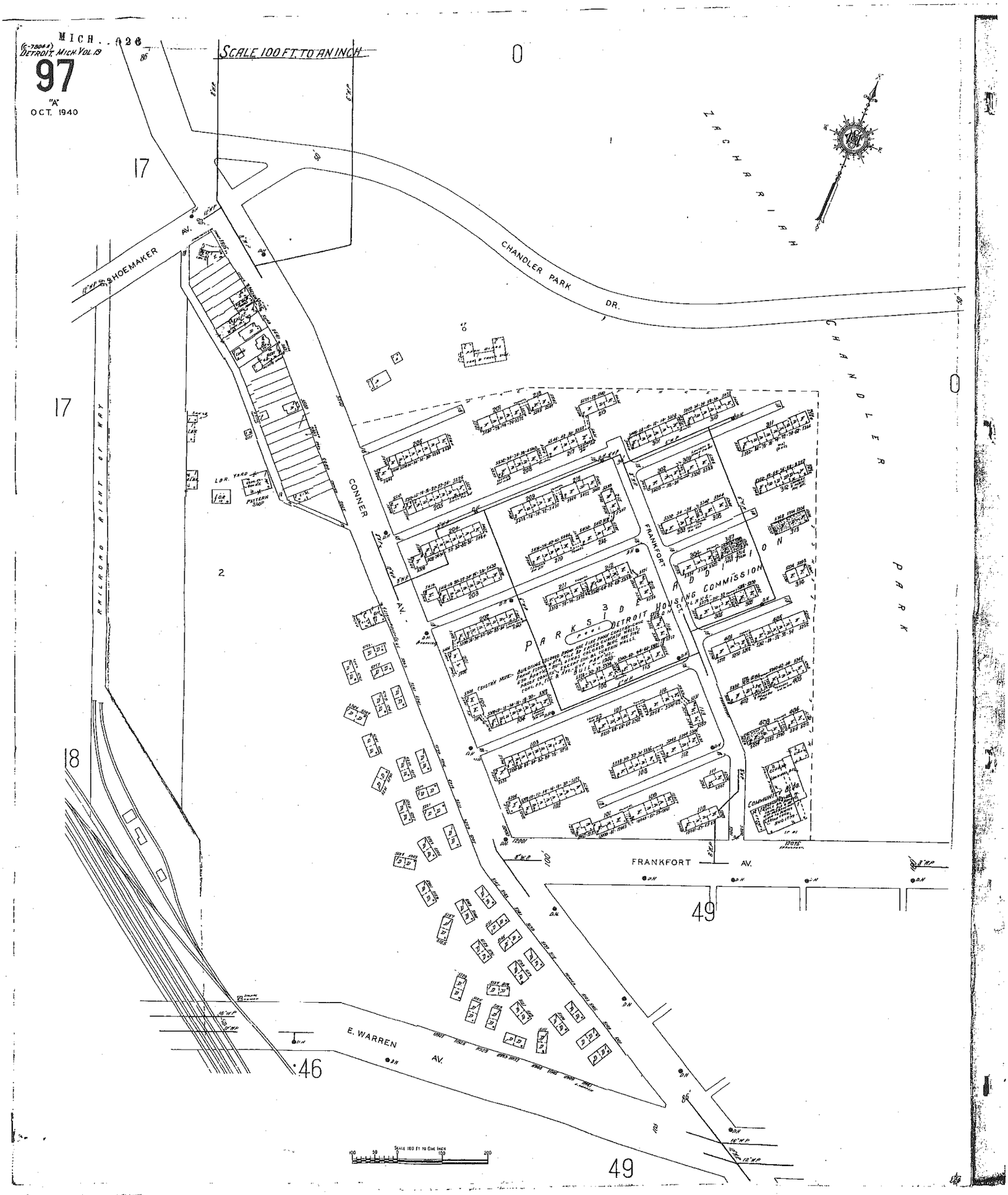
TABLE 4
SOIL BORING SAMPLE DATA SUMMARY

					Groundwater Protection						Ambient Air (Y)		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	Nonresidential Particulate Soil Inhalation Criteria	Footnotes	Residential Direct Contact Criteria	Footnotes
C-SB-11	***VOLATILES***	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No volatile organic compounds were detected													
	SEMI-VOLATILES	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No semi-volatile organic compounds were detected													
	PESTICIDES/PCBS	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No pesticides or PCBs were detected													
	INORGANICS	(mg/kg)		(mg/kg)	(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)	
	Arsenic	6.4		5.8	4.6		4.6		4.6		910		7.6	
	Chromium [III] (B,H) - assumed present*			18	1,000,000	D	1,000,000	D	3,000,000	G,X	150,000		790,000	
	Chromium [Total] (H) - analyzed (assume Cr III)*	23		18	30		30		3.3		240		2,500	
	Chromium [VI] - assumed not present*				30		30		3.3		240		2,500	
	Cobalt	13		6.8	0.8		2.0		2.0		5,900		2,600	
	Iron (B)	30,000		12,000	6.0		6.0		NA		ID		160,000	
	Molybdenum (B)	2.2			1.5		4.2		64	X	ID		2,600	
C-SB-12	***VOLATILES***	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No volatile organic compounds were detected													
	SEMI-VOLATILES	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No semi-volatile organic compounds were detected													
	PESTICIDES/PCBS	(µg/kg)		(µg/kg)	(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)		(µg/kg)	
	No pesticides or PCBs were detected													
	INORGANICS	(mg/kg)		(mg/kg)	(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)	
	Arsenic	7.7		5.8	4.6		4.6		4.6		910		7.6	
	Chromium [III] (B,H) - assumed present*			18	1,000,000	D	1,000,000	D	3,000,000	G,X	150,000		790,000	
	Chromium [Total] (H) - analyzed (assume Cr III)*	27		18	30		30		3.3		240		2,500	
	Chromium [VI] - assumed not present*				30		30		3.3		240		2,500	
	Cobalt	14		6.8	0.8		2.0		2.0		5,900		2,600	
	Iron (B)	34,000		12,000	6.0		6.0		NA		ID		160,000	
	Manganese (B)	480		440	1.0		1.0		55	G,X	1,500		25,000	

Notes:
Exposure pathway columns with no criteria exceedances are hidden.

*Chromium III is naturally occurring and chromium VI is not naturally occurring.
*The total chromium analysis included both III and VI, but based on past Property uses without chromium VI sources, an assumption is made that the total chromium analysis includes only chromium III.
*Therefore, the 18 mg/kg background is also applied here to total chromium.

µg/kg = microgram/kilogram mg/kg = milligram/kilogram
Qualifier definitions in Appendix D. Footnote definitions in Appendix E.
Shaded Criteria indicate an exceedance.
A blank Default Background column means that value has not been determined.


MICH. 026
(C-7804A) DETROIT, MICH. VOL. 19
97
"A"
OCT. 1940
SCALE 100 FT. TO AN INCH
0
17
17
18
46
49
49
0
SHOEMAKER AV.
CHANDLER PARK DR.
ZACHARIAH
CHANDLER PARK
RAILROAD RIGHT OF WAY
CONNER AV.
FRANKFORT AV.
FRANKFORT AV.
E. WARREN AV.
PARKSIDE ADDITION
DETROIT HOUSING COMMISSION
LOR. YARD
PATTERN SHOP
COMMUNITY BLDG.
SCALE 100 FT. TO ONE INCH

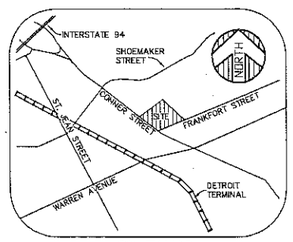
1940

1999
2019
5250 Conner St
Image U.S. Geological Survey
1999
Google Earth

7/17/2001
5250 Conner St
Image © 2019 Maxar Technologies
Google Earth
Imagery Date: 7/17/2001 42°23'29.41" N 82°58'42.67" W elev 602 ft eye alt 3883 ft

2005

ALTA/ACSM LAND TITLE SURVEY



VICINITY MAP
(NOT TO SCALE)

PARKING

NO ON-SITE MARKED PARKING

PARCEL AREA

513,335 SQUARE FEET = 11.78 ACRES

BASIS OF BEARING

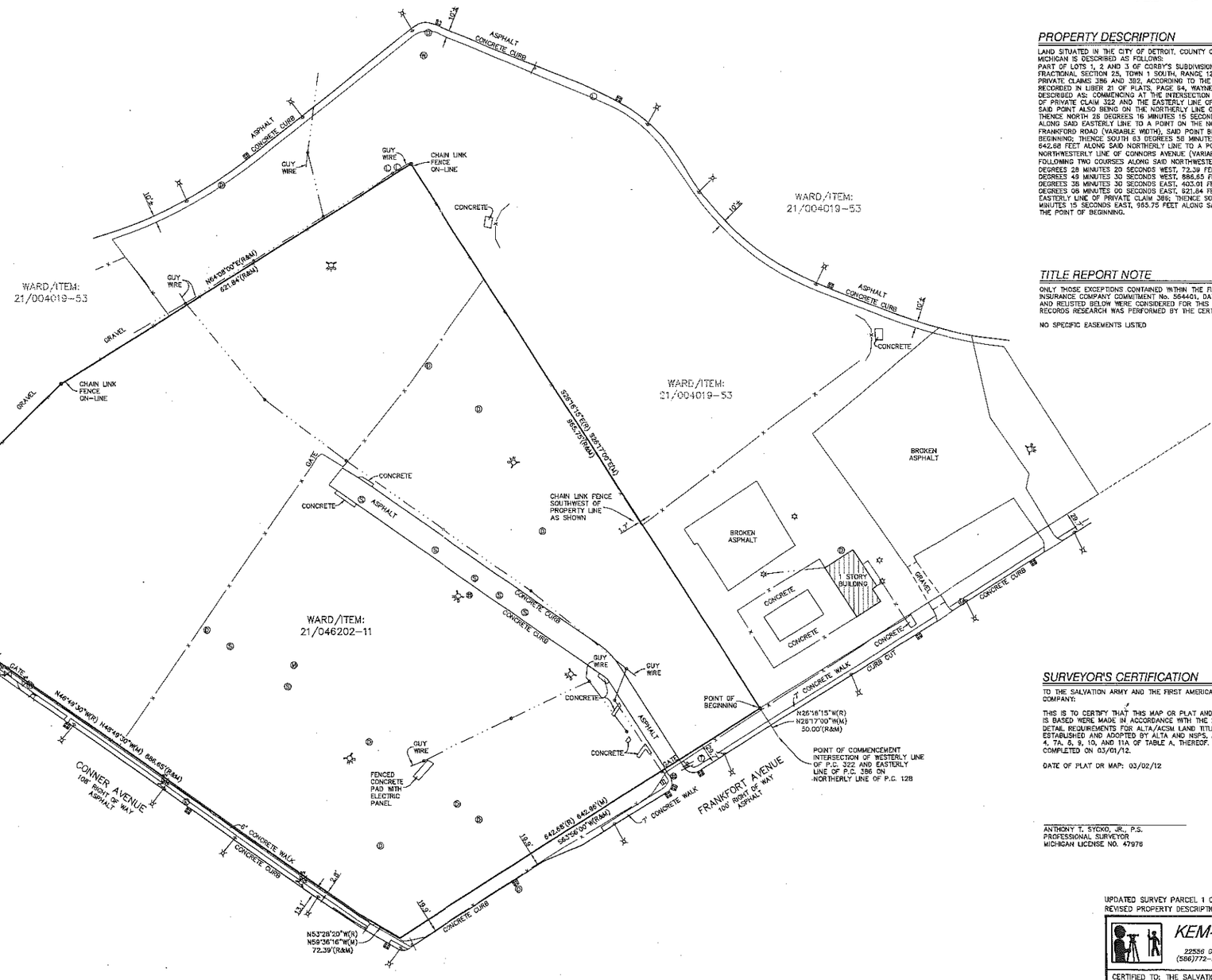
SOUTH 83°55'00" WEST, BEING THE NORTHERLY RIGHT OF WAY LINE OF FRANKFORT AVENUE PER SUBJECT PROPERTY DESCRIPTION.

FLOOD NOTE

SUBJECT PARCEL LIES WITHIN ZONE C: AREAS OF MINIMAL FLOODING AS SHOWN ON FLOOD INSURANCE RATE MAP, COMMUNITY – PANEL NUMBER 260222 0015 B, DATED APRIL 17, 1984, PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

SURVEYOR'S NOTE

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES OTHER THAN THE STRUCTURE INVENTORY SHOWN HEREON.



LEGEND

•	SET 1/2" REBAR WITH CAP P.S. 47976
(R&M)	RECORD AND MEASURED DIMENSION
(R)	RECORD DIMENSION
(M)	MEASURED DIMENSION
E	ELECTRIC MANHOLE
E	ELECTRIC PANEL
L	PUBLIC LIGHTING MANHOLE
	LIGHT POLE WITH STREET LAMP
	UTILITY POLE
T	TELEPHONE MANHOLE
	TRAFFIC SIGNAL
S	SANITARY MANHOLE
	ROUND CATCH BASIN
	SQUARE CATCH BASIN
S	STORM DRAIN MANHOLE
	FIRE HYDRANT
W	WATER GATE MANHOLE
	WATER VALVE
U	UNKNOWN MANHOLE
	LIGHTPOST/LAMP POST
	SINGLE POST SIGN
	PARCEL BOUNDARY LINE
	ADJOINER PARCEL LINE
	CONCRETE CURB
	EDGE OF CONCRETE
	EDGE OF ASPHALT
	EDGE OF GRAVEL
x	CHAIN LINK FENCE
	OVERHEAD UTILITY LINE

NORTH

GRAPHIC SCALE

(IN FEET)
1 inch = 80 ft.

PROPERTY DESCRIPTION

LAND SITUATED IN THE CITY OF DETROIT, COUNTY OF WAYNE, STATE OF MICHIGAN IS DESCRIBED AS FOLLOWS:
PART OF LOTS 1, 2 AND 3 OF CORBY'S SUBDIVISION OF PART OF FRACTIONAL SECTION 25, TOWN 1 SOUTH, RANGE 12 EAST ALSO PART OF PRIVATE CLAIMS 386 AND 382, ACCORDING TO THE PLAT THEREOF AS RECORDED IN LIBER 21 OF PLATS, PAGE 84, WAYNE COUNTY RECORDS DESCRIBED AS: COMMENCING AT THE INTERSECTION OF THE WESTERLY LINE OF PRIVATE CLAIM 322 AND THE EASTERLY LINE OF PRIVATE CLAIM 386, SAID POINT ALSO BEING ON THE NORTHERLY LINE OF PRIVATE CLAIM 128; THENCE NORTH 28 DEGREES 16 MINUTES 15 SECONDS WEST, 50.00 FEET ALONG SAID EASTERLY LINE TO A POINT ON THE NORTHERLY LINE OF FRANKFORD ROAD (VARIABLE WIDTH), SAID POINT BEING THE POINT OF BEGINNING; THENCE SOUTH 63 DEGREES 58 MINUTES 00 SECONDS WEST, 642.68 FEET ALONG SAID NORTHERLY LINE TO A POINT ON THE NORTHWESTERLY LINE OF CONNORS AVENUE (VARIABLE WIDTH); THENCE THE FOLLOWING TWO COURSES ALONG SAID NORTHWESTERLY LINE, (1) NORTH 53 DEGREES 28 MINUTES 20 SECONDS WEST, 72.39 FEET, AND (2) NORTH 46 DEGREES 49 MINUTES 30 SECONDS WEST, 586.65 FEET; THENCE NORTH 51 DEGREES 38 MINUTES 30 SECONDS EAST, 403.01 FEET; THENCE NORTH 64 DEGREES 08 MINUTES 00 SECONDS EAST, 621.84 FEET TO A POINT ON THE EASTERLY LINE OF PRIVATE CLAIM 386; THENCE SOUTH 28 DEGREES 16 MINUTES 15 SECONDS EAST, 865.75 FEET ALONG SAID EASTERLY LINE TO THE POINT OF BEGINNING.

TITLE REPORT NOTE

ONLY THOSE EXCEPTIONS CONTAINED WITHIN THE FIRST AMERICAN TITLE INSURANCE COMPANY COMMITMENT No. 564401, DATED DECEMBER 19, 2011, AND RELISTED BELOW WERE CONSIDERED FOR THIS SURVEY. NO OTHER RECORDS RESEARCH WAS PERFORMED BY THE CERTIFYING SURVEYOR.

NO SPECIFIC EASEMENTS LISTED

SURVEYOR'S CERTIFICATION

TO THE SALVATION ARMY AND THE FIRST AMERICAN TITLE INSURANCE COMPANY:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDED ITEMS 1, 2, 4, 7A, 8, 9, 10, AND 11A OF TABLE A, THEREOF. THE FIELD WORK WAS COMPLETED ON 03/01/12.

DATE OF PLAT OR MAP: 03/02/12

ANTHONY T. SYOKO, JR., P.S.
PROFESSIONAL SURVEYOR
MICHIGAN LICENSE NO. 47976

UPDATED SURVEY PARCEL 1 ONLY
REVISED PROPERTY DESCRIPTION PARCEL 2, DECEMBER 28, 2005

KEM-TEC & ASSOCIATES
PROFESSIONAL SURVEYORS
22556 GRATIOT AVE * EASTPOINTE, MICHIGAN 48021
(586)772-2222 * (800)295-7222 * FAX (586)772-4048

CERTIFIED TO: THE SALVATION ARMY AND FIRST AMERICAN TITLE INSURANCE COMPANY	
DATE: NOVEMBER 4, 2005	JOB #: 05-31832
SCALE: 1" = 80'	SHEET: 1 OF 1
DRW. BY: TS	REV.: MARCH 2, 2012

ATWELL-HICKS
DEVELOPMENT CONSULTANTS

Phase I Environmental Site Assessment Report

for the

Proposed Kroc Community Center
Northeast Corner of Connor Avenue and Frankfort Street
Detroit, MI 48213

Prepared For:

The Salvation Army
16130 Northland Drive
Southfield, MI 48075

Atwell-Hicks, LLC Project No. 05001482.40

January 18, 2006

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Detail Report

1.0 General Information

Client Information:
The Salvation Army
Joseph Barger
16130 Northland Drive
Southfield, MI 48075

Project Information:
05001482.40 Salvation Army
05001482.40

Site Information:
Proposed Kroc Community Center
Northeast Corner of Connor Avenue and Frankfort Street
Detroit, MI 48213
County: Wayne
Latitude, Longitude: 42.390634, -82.979138
Site Access Contact: Joseph Barger

Consultant Information:
Atwell-Hicks, LLC
50182 Schoenherr Road
Shelby Township, MI 48315

Phone: 586-786-9800
Fax: 586-786-5588
E-mail Address: rpayne@atwell-hicks.com
Inspection Date: 12/22/2005
Report Date: 01/13/2006
Site Assessor: Rebecca A. Payne - Environmental Specialist
Senior Reviewer: Allan R. Longyear, PG - Project Manager

Signed By:

Allan R. Longyear, PG, Project Manager

General Field Notes

During the site visit, Atwell observed the subject site to consist of approximately 30 acres of developed land.

2.0 Executive Summary

2.1 General Site Setting

Current Use of Property

The western half of the subject site (Parcel 1) is vacant land with the exception of a large pad-mounted transformer. The eastern half of the subject site (Parcel 2) consists of one vacant building (previously used as a community bathhouse) and a filled in swimming pool located on the southeastern portion of the subject site, with landscaped park area, baseball diamonds, and a basketball court to the north. The subject building occupies approximately one percent of the property.

2.2 Findings and Conclusions

Database/Records Review

Atwell retained Environmental Data Resources (EDR) of Milford, Connecticut, to review federal and state records related to the subject site and nearby properties within the ASTM search radius (as seen on the table below). However, Atwell typically reviews local, state, or federal database records of those sites of known environmental contamination (i.e., State Hazardous Waste Site (SHWS), Leaking Underground Storage Tank (LUST), Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), and National Priorities List (NPL) sites) within a one-quarter mile radius of the subject site. Atwell considers sites within this specified search radius as having the potential to impact the subject site. Also, Atwell typically reviews local, state, or federal database records of those sites of suspected environmental contamination (i.e., Underground Storage Tank (UST) and Resource Conservation and Recovery Act (RCRA) generator sites), which adjoin the subject site, or, in the professional opinion of Atwell, are of such nature and proximity to the subject site to represent Recognized Environmental Conditions (RECs).

EDR identified six RCRA generator/FINDS sites, three LUST sites, and five UST sites located within one-quarter mile of the subject site. Three of the six RCRA generator/FINDS sites did not have any

2.0 Executive Summary (continued)

2.2 Findings and Conclusions (continued)

Database/Records Review (continued)

reported violations, and therefore, Atwell concluded these sites do not represent an REC to the subject site, at this time. The remaining three of the six RCRA generator/FINDS sites are discussed below.

The EDR Orphan Summary report identified three BEA sites located within one-quarter mile of the subject site. The Orphan Summary is a list of sites that cannot be mapped by the EDR database. BEA sites are properties with contamination present at concentrations greater than the MDEQ Residential Cleanup Criteria. Two of the three BEA sites are located at least 1000 feet from the subject site, and therefore Atwell determined that these sites do not appear to represent an REC to the subject site, at this time. One of the three BEA sites, 5555 Conner/11457 Shoemaker, is located adjacent to the west of the subject site beyond Conner Avenue. The EDR report indicated that 5555 Conner/11457 Shoemaker had a BEA conducted for the site in March 2001. Atwell determined that based upon the presence of contamination on the western adjacent property, this site represents an REC to the subject site, at this time.

EDR identified the western adjacent address, 5417 Conner, as a RCRA-SQG/FINDS site, occupied by National Plating Company, Inc., although the National Plating Company, Inc. does not presently occupy the western adjacent address. The EDR report did not identify any reported violations. However, historically plating operations typically consisted of the heavy industrial use of various chemicals and often had air discharges likely to result in heavy metal contamination (due to air particulate fallout) in the surrounding areas. Although, National Plating Company, Inc. did not have any reported violations, the heavy industrial use of the western adjacent property represents an REC to the subject site.

EDR identified the Firestone Service Center, located approximately 1/8th of a mile southeast of the subject site, as a closed LUST and RCRA generator site. According to the EDR report, a 1,000-gallon used oil UST, that was installed in 1981, was removed in July 1993. During the UST removal activities a release was reported. The EDR report stated that the release was closed in April 1994. Further, the EDR report indicated that no reported RCRA violations were recorded for the Firestone Service Center. Based upon the closed LUST/UST and no reported RCRA violations, Atwell determined that this property does not represent an REC to the subject site, at this time.

EDR identified the Samaritan Center, Inc., located adjacent to the west of the subject site, as an active UST site. According to the EDR report, the Samaritan Center currently has two 6,000-gallon fuel oil USTs, which were installed in October 1998. The EDR report further indicated that a 10,000-gallon diesel UST, which was installed in January 1984, was removed from the site in September 1999. No releases have been reported at this site, however, as discussed in the Orphan Summary, this site is also listed as a BEA site (known contamination). Therefore, Atwell determined that based upon the known contamination at the adjacent Samaritan Center, Inc., this site represents an REC to the subject site.

The EDR report identified the northern adjacent property, Chandler Park Service Yard, as an active UST and closed LUST site. Reportedly in March 1968, a 4,000-gallon gasoline and diesel UST were installed at the site. The EDR report indicates that the 4,000-gallon UST is currently in use at the Service Yard. The EDR report further indicates that a release was reported in September 1997, however the source of the release or the substance released were not noted. According to the MDEQ website the substance released from the UST was gasoline and the release was closed in January 1998. The closed LUST status of the site does not appear to represent an REC to the site, at this time. However, additional information obtained from the City of Detroit Fire Department (Section 6.2) indicates that the Service Yard may have had additional USTs, as well as violations due to poor housekeeping and spills.

The EDR report identified the northern adjacent property, Chandler Park Service Yard, as a RCRA SQG/FINDS site. According to the EDR report, the Service Yard received informal violations in June 1997 in regards to used oil generation and general requirements. The EDR report indicates that

2.0 Executive Summary (continued)

2.2 Findings and Conclusions (continued)

Database/Records Review (continued)

compliance with the violations was achieved in August 1998. Although, the violations appear to have been resolved, based upon additional information obtained from the City of Detroit Fire Department regarding poor housekeeping practices of hazardous materials and chemical spills, the adjacent Service Yard appears to represent an REC to the subject site.

The EDR report identified the Max Gas site, located approximately 1/4 mile southeast of the subject site, as an active UST and open LUST site. The EDR report indicates that the Max Gas site currently has one 4,000-gallon gasoline, one 8,000-gallon gasoline, and one 10,000-gallon UST, with unknown contents, in use at the site. The site previously had two 10,000-gallon gasoline USTs at the site which were installed in 1981 and removed in 1999. According to the EDR report, a release was reported in August 1998 and the release has not been closed. However, Atwell has determined that based upon the distance and hydraulically down-gradient (groundwater pathway) location from the subject site, this site does not represent an REC to the subject site, at this time.

Historical/Document Review

Based on information gathered during the site investigation, review of aerial photographs, review of historical address indexes, and review of municipal records, Atwell concluded that Parcel 1 of the subject site was originally developed prior to the 1930's as residential single-family dwellings. A multi-family housing development, Parkside Housing Development, was constructed on Parcel 1 in 1940. In the mid to late 1990's the housing complex was demolished and the land has remained vacant. Parcel 2 has been part of Chandler Park since at least the 1930's. In the 1950's a public swimming pool and associated community bathhouse were constructed on the south end of Parcel 2, which are still present. Parcel 2 also consists of landscaped areas with a few baseball diamonds, and a basketball court.

Atwell reviewed the City of Detroit Building and Safety Engineering Oil and Gas cards, which contain information regarding USTs, ASTs, and chemical storage. The Oil and Gas cards did not have any records for the subject site range of addresses. The Oil and Gas cards indicated that two adjacent properties to the west of the subject site, 5415 and 5441 Conner, have record of USTs. A 2,000-gallon diesel UST was noted to have been installed in July 1965 at 5415 Conner and 5441 Conner was previously a US Post Office which had a 3,000-gallon UST installed in 1957 and a 6,000-gallon UST installed in 1963. No additional information is contained within the Oil and Gas cards. The presence of USTs combined with the historical heavy manufacturing and industrial use (formerly National Plating Company) of the western adjacent properties, represent RECs to the subject site.

Atwell contacted the City of Detroit Fire Department for information regarding current or former USTs or ASTs at the subject site, as well as, any hazardous material storage or spill response records. Fire department records indicate that the subject site files did not identify any items indicative of environmental concern for the subject site. Fire Department files for the northern adjacent City of Detroit Parks and Recreation Service building, located at 5650 Conner Avenue, indicated that in 1963 one, 4,000-gallon gasoline UST was installed and one, 1,000-gallon gasoline UST was removed. The Fire Department file referenced a violation dated January 1954, to repair the gasoline pump leak. A Fire Department report dated March 1964, stated that during the removal of the 1,000-gallon UST, approximately 50 gallons of gasoline was observed in the UST excavation. The report noted that the excavation was "flushed with water immediately" and the excavation was monitored with an "X.P Meter" which did not have any detectable readings. The report noted that the excavation was backfilled with sand, and that no further activity was necessary. A 1982 site inspection noted that in 1982, the Service Yard had one, 6,000-gallon and one, 10,000-gallon USTs. The number of USTs and known release of gasoline at the City of Detroit Parks and Recreation Garage represents an REC to the subject site.

0 Executive Summary (continued)

2.2 Findings and Conclusions (continued)

Historical/Document Review (continued)

Additionally, the Fire Department records noted several violations regarding out-of-date and leaking hazardous materials and spillage and runoff from drum storage areas were observed in the garage drain and the street sewer from ASTs stored at the rear of the building. Atwell determined that based upon the history of poor housekeeping of hazardous materials and chemical leaks and spills, the adjacent Parks and Recreation Service Yard, represents an REC to the subject site.

Site Reconnaissance Findings

Atwell evaluated the subject site for the possible presence of USTs. Typical indicators of USTs include: (1) gas pumps or pump islands; (2) vent pipes; (3) fill ports; or (4) unusual depressions. During the site reconnaissance, Atwell did not observe any readily apparent evidence of the current/former presence of USTs at the subject site.

The lack of visible evidence of any potential USTs and the fact that the individual and agencies identified in this report were not aware of or did not have record of the presence of any USTs does not preclude the possibility that USTs could be present at the subject site property. Visible evidence of USTs, such as fill ports or vent pipes, may have been obscured from view and USTs could have been used at the subject site property without the knowledge of the current owner/operator, site contact or government agency.

Atwell inspected the subject site for the presence of oil-cooled electrical equipment that may contain polychlorinated biphenyls (PCBs). During the site reconnaissance, Atwell observed one, large pad-mounted transformer located on the western portion (Parcel 1) of the subject site and a damaged pole-mounted transformer was observed near at the northeast corner of Parcel 1, which was observed to be on the ground. No leaks or stains were observed during the site inspection, however approximately one foot of snow covered the ground surface during the site reconnaissance. The transformers are reportedly owned by Detroit Edison and not labeled as to their PCB content. The presence of a damaged transformer located on the ground, indicates that the transformer has possibly leaked oils onto the surface of the ground, and as such, represents an REC to the subject site.

According to DTE personnel, DTE outdoor transformers typically contain a non-PCB, mineral oil-based dielectric fluid. The company has indicated, however, that during manufacturing or routine maintenance, concentrations of less than 500 parts per million (ppm) PCBs may have been inadvertently introduced into the units.

It is also acknowledged by DTE that no formalized testing program has been established by the company to evaluate PCB levels in the dielectric fluids of its outdoor transformers. DTE assumes, for regulatory purposes, that the level of PCBs in its untested transformers ranges from 50 to 500 ppm. In the event of a release of fluid from any of its units, it is DTE's policy to clean the area impacted by the release in accordance with established federal cleanup standards as defined by the EPA in CFR Part 761.

During the site reconnaissance, Atwell observed two areas of soil mounds located on the subject site. Soil mounds were observed near the end of former Frankfort Court located on Parcel 1 and along the southeast portion of Parcel 2. In addition, during the 1990's demolition of the Parkside Housing Development, it is likely that fill materials were used across the site (Parcel 1). The origination of the suspected fill soils and soil mounds is unknown and as such, potential fill materials represents an REC to the subject site. Areas of general construction debris (wood, concrete, asphalt shingles, etc.) and general solid debris was observed throughout the subject site.

2.0 Executive Summary (continued)

2.2 Findings and Conclusions (continued)

Other Environmental Considerations

The scope of services for this Phase I ESA did not include the following: inspection or sampling of suspect ACMs; evaluation of the presence of lead-based paint; evaluation for the potential presence of Radon in the area of the subject site; evaluation of suspect wetland areas; a mold evaluation; evaluation of items of non-compliance with applicable local, state, or federal regulations, and addressing any client-specific items for the subject site.

2.3 Recommendations

Recommended Actions

Atwell has concluded that aerial photograph data failure occurred between the years 1937-1949 and 1973-1985; Sanborn coverage of the subject site was not available prior to 1950 for the subject site. In addition, Sanborn coverage was not readily available for all areas of the subject site. Approximately one foot of snow covered the entire site during the December 22, 2005 site reconnaissance. Additionally, during the site reconnaissance, all areas of the subject site were not readily accessible due to safety concerns or limited access. It should be noted that the first developed use of the subject site (prior to residential use in 1937) could not be determined during the course of this Phase I ESA and therefore, represents a data failure. These gaps, conditions or absences of information represent data failure in records pertaining to the subject site.

Atwell has performed this Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Practice E1527-00 specifications for the 30 acres of property located at the northeast corner of Conner Avenue and Frankfort Street, Detroit, Michigan. During the course of this Phase I investigation, Atwell identified the following RECs associated with the subject site and/or nearby properties: 1) fill materials and soil mounds, of unknown origins, observed on the subject site; 2) damaged pole-mounted transformer observed on the ground of the subject site; 3) north adjacent City of Detroit Parks and Recreation Garage with a history of USTs, LUSTs, poor housekeeping of hazardous materials and chemical spills; 4) western adjacent properties with history of USTs, known contamination (BEAs), and heavy industrial use. Therefore, Atwell recommends that a Limited Phase II Subsurface Investigation be conducted to determine the nature, extent, magnitude and materiality of the identified RECs.

Suggested Actions to Address Business Environmental Risk

The scope of services for this Phase I ESA did not include providing suggested actions to address business environmental risk.

2.4 Disclaimer

This report was prepared solely for The Salvation Army's benefit and no other party or entity shall have any claim against Atwell due to the performance or nonperformance of the services presented herein. Only The Salvation Army may rely upon this report for the sole purpose of obtaining financing, obtaining refinancing, acquisition of the subject site, lease of the subject site, or sale of the subject site. Any other parties seeking reliance upon this report must obtain Atwell's prior written approval for such reliance. Atwell specifically disclaims any and all claims by parties claiming as a third party beneficiary.

Li-44596 Pg-1
206246559 5/01/2006 09:00AM
Bernard J. Youngblood
Wayne Co. Register of Deeds

$12.00 DEED

$6.00 REMONUMENTATION

Date: April 20, 2006 **QUIT CLAIM DEED**

MAY 01 2006

Subject to the following paragraph, the City of Detroit, a Michigan public body corporate whose address is 2 Woodward Avenue, Detroit, MI 48226, quit claims to the Detroit Housing Commission, a Michigan public body corporate, whose address is 1301 E. Jefferson, Detroit, Michigan 48207, the premises located in the City of Detroit, Wayne County, Michigan, described as:

Part of Private Claims 386 and 392, Also part of fractional Section 25, T1S, R12E, and also parts of Lots 1, 2 and 3, of Corby's Subdivision as recorded in Liber 21 of plats, Page 64, Wayne County Records, all being in the City of Detroit, Wayne County, Michigan and being more particularly described as: Commencing at the intersection of the Westerly line of Private Claim 322 and the Easterly line of Private Claim 386, said point also being on the Northerly line of Private Claim 128; thence North 26 degrees 16 minutes 15 seconds West, 50.00 feet along said Easterly line to a point on the Northerly line of Franfort Road (variable width), said point being the point of beginning; thence South 63 degrees 56 minutes 00 seconds West, 642.68 feet along said Northerly line to a point on the Northwesterly line of Connors Avenue (variable width); thence the following two courses along said Northwesterly line, (1) North 53 degrees 28 minutes 20 seconds West, 72.39 feet and (2) North 46 Degrees 49 minutes 30 seconds West 886.65 feet, thence North [illegible] degrees 38 minutes 30 seconds East, 403.01 feet; thence North 64 degrees 08 minutes 00 seconds East, 621.84 feet to a point on the Easterly line of Private Claim 386; thence South 26 degrees 16 minutes 15 seconds East 965.75 feet along said Easterly line to the point of beginning and containing 803,682 square feet or 18.450 acres.

A/K/A 5250 Conner (Parkside TVP I) Ward/Item #: 21/016202

(the "**Property**"), for the sum of Zero Dollars ($0.00) and other good and valuable consideration, subject to and reserving to the City of Detroit its rights under public easements and rights of way, easements of record, applicable zoning ordinances, development plans pursuant to Act 344 of 1945 as amended (if any), and restrictions of record.

CITY OF DETROIT, a Michigan public body corporate

By: _____
Douglass J. Diggs, Its Director of Development Activities

Receipt #133871
RECORDED
BERNARD J. YOUNGBLOOD, REGISTER OF DEED
WAYNE COUNTY, MI

QCD 13-42 29 S E NO REVENUE ATTACHED

STATE OF MICHIGAN)
)ss.
COUNTY OF WAYNE)

The foregoing instrument was acknowledged before me on April 18, 2006, by Douglas J. Diggs, the Director of Development Activities of the City of Detroit, a Michigan public body corporate, on behalf of the City.

DOSHIA BARTON
NOTARY PUBLIC, WAYNE CO., MI
MY COMMISSION EXPIRES Aug 1, 2008

Doshia Barton
Notary Public, State of Michigan, County of Wayne
My commission expires on: Aug 1, 2008
Acting in the County of Wayne

Approved by the City Law Department
pursuant to Sec. 6-406 of the Charter of
the City of Detroit

Chief Assistant Corporation Counsel

Approved by City Council on January 27, 2006
Detroit Legal News February 14, 2006, pages 5-9
Approved by Mayor on January 27, 2006
Detroit Legal News February 16, 2006, page 8

This instrument drafted by and when recorded,
return to:
Hurticene Hardaway, Esq.
General Counsel
Detroit Housing Commission
1301 E. Jefferson
Detroit, MI 48207

Exempt from transfer taxes pursuant to
MCL § 207.505(h)(i) and MCL § 207.526(h)(i).

The Regency Title Agency
an agency for Fidelity National Title Insurance Company

Commitment No. CD1064

SCHEDULE A

1. Effective Date: June 1, 2004, at 8:00 A.M.
This Commitment is valid and binding for a period of 90 days from the date hereof. Thereafter it is void and of no effect.

2. Policy (or Policies) to be issued: Amount

OWNER'S POLICY $1.00

Proposed Insured:

Not Applicable

MORTGAGE POLICY: exceptions $

Proposed Insured:

3. The estate or interest in the land described or referred to in this Commitment and covered herein is:
FEE SIMPLE and title thereto is at the effective date hereof vested in:

City of Detroit

4. The land referred to in this Commitment is located in the City of Detroit, County of Wayne, State of Michigan, and is described as follows:

Part of Private Claims 386 and 392, Also part of fractional Section 25, T1S, R12E, and also parts of Lots 1, 2 and 3, of Corby's Subdivision as recorded in Liber 21 of plats, Page 64, Wayne County Records, all being in the City of Detroit, Wayne County, Michigan and being more particularly described as: Commencing at the Intersection of the Westerly line of Private Claim 322 and the Easterly line of Private Claim 386, said point also being on the Northerly line of Private Claim 128; thence North 26 degrees 16 minutes 15 seconds West, 50.00 feet along said Easterly line to a point on the Northerly line of Franfort Road (variable width), said point being the point of beginning; thence South 63 degrees 56 minutes 00 seconds West, 642.68 feet along said Northerly line to a point on the Northwesterly line of Connors Avenue (variable width); thence the following two courses along said Northwesterly line, (1) North 53 degrees 28 minutes 20 seconds West, 72.39 feet and (2) North 46 Degrees 49 minutes 30 seconds West 886.65 feet, thence North 51 degrees 38 minutes 30 seconds East, 403.01 feet; thence North 64 degrees 08 minutes 00 seconds East, 621.84 feet to a point on the Easterly line of Private Claim 386; thence South 26 degrees 16 minutes 15 seconds East 965.75 feet along said Easterly line to the point of beginning and containing 803,682 square feet or 18.450 acres.

Address: 5250 Conner, Detroit, MI

Countersigned at: The Regency Title Agency
20245 West Twelve Mile Road, Ste. 113
Southfield, MI 48076

Examining matters: Jamie L. Naiman
(248) 746-3900
FAX: (248)357-4557

By: _____
Authorized Signatory

Commitment No. CD1064

SCHEDULE B
PART I

(REQUIREMENTS)

The following are the requirements to be complied with:

Item (a) Payment to or for the account of the grantors or mortgagors of the full consideration for the estate or interest to be insured.

Item (b) Proper instrument(s) creating the estate or interest to be insured must be executed and duly filed for record, to wit:

Item (c) Record discharge/release of the following or same will be shown on the final policy:

Leasehold Construction Mortgage given by The Villages at Parkside I, LLC to City of Detroit, acting by and through the Detroit Housing Commission, dated November 24, 1998, recorded February 5, 1999, in Liber 30061, Page 4638, Wayne County Records.

Item (d) Provide insurer with evidence of payment of taxes due, if any, plus interest and penalties:

2003 and all prior taxes are paid.

2003 Winter taxes are EXEMPT
2004 Summer taxes are EXEMPT

Tax Identification No.: 21-046202

The Regency Title Agency
an agency for Fidelity National Title Insurance Company

Commitment No. CD1064

SCHEDULE B
PART II

(EXCEPTIONS)

Schedule B of the policy or policies to be issued will contain exceptions to the following matters unless the same are disposed of to the satisfaction of the Company:

1. Defects, liens, encumbrances, adverse claims or other matters, if any, created, first appearing in the public records or attaching subsequent to the effective date hereof but prior to the date the proposed insured acquires for value of record the estate or interest or mortgage thereon covered by this Commitment.

2. 2004 taxes which are a lien pursuant to Public Act 143 of 1995 and any other taxes and/or assessments which become a lien or become due and payable subsequent to the date of this commitment.

3. Resolution recorded in Liber 22112, Page 909, Wayne County Records.

4. Groundlease dated November 24, 1998, disclosed in instrument recorded in Liber 30061, Page 4638, Wayne County Records.

5. Interest of United States Department of Housing and Urban Development, disclosed in instrument recorded in Liber 30061, Page 4638, Wayne County Records.

NOTE: This policy omits any covenant, condition or restriction based on race, color, religion, sex, handicap, familial status, or national origin, unless and only to the extent that the restriction is not in violation of state or federal law, or relates to a handicap, but does not discriminate against handicapped people.

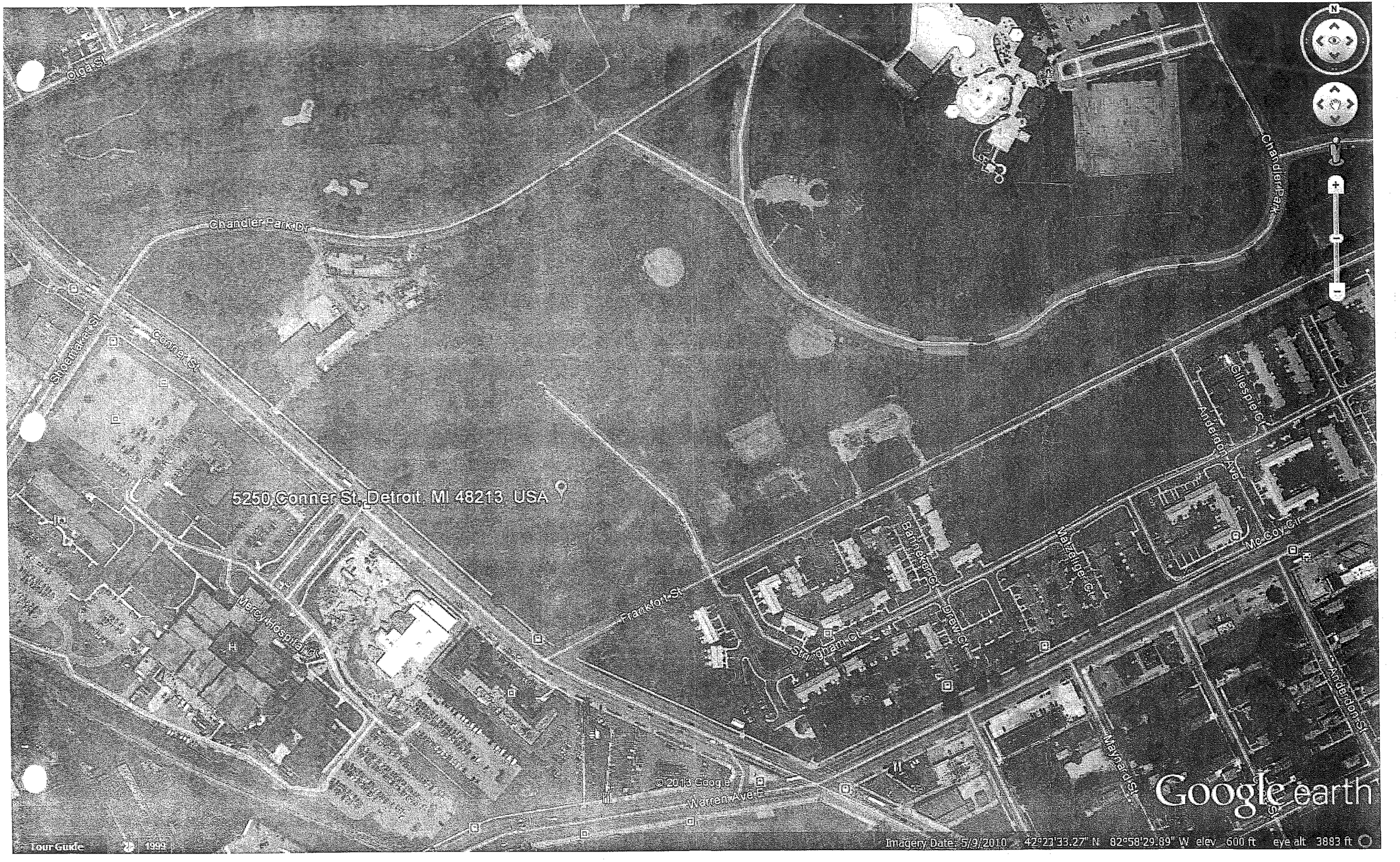
Attachment A

Part of Private Claims 386 and 392, Also part of fractional Section 25, T1S, R12E, and also parts of Lots 1, 2 and 3, of Corby's Subdivision as recorded in Liber 21 of plats, Page 64, Wayne County Records, all being in the City of Detroit, Wayne County, Michigan and being more particularly described as: Commencing at the intersection of the Westerly line of Private Claim 322 and the Easterly line of Private Claim 386, said point also being on the Northerly line of Private Claim 128; thence North 26 degrees 16 minutes 15 seconds West, 50.00 feet along said Easterly line to a point on the Northerly line of Franfort Road (variable width), said point being the point of beginning; thence South 63 degrees 56 minutes 00 seconds West, 642.68 feet along said Northerly line to a point on the Northwesterly line of Connors Avenue (variable width); thence the following two courses along said Northwesterly line, (1) North 53 degrees 28 minutes 20 seconds West, 72.39 feet and (2) North 46 Degrees 49 minutes 30 seconds West 886.65 feet, thence North 51 degrees 38 minutes 30 seconds East, 403.01 feet; thence North 64 degrees 08 minutes 00 seconds East, 621.84 feet to a point on the Easterly line of Private Claim 386; thence South 26 degrees 16 minutes 15 seconds East 965.75 feet along said Easterly line to the point of beginning and containing 803,682 square feet or 18.450 acres.

A/K/A 5250 Conner

Ward/Item(s): 21/046202

2010



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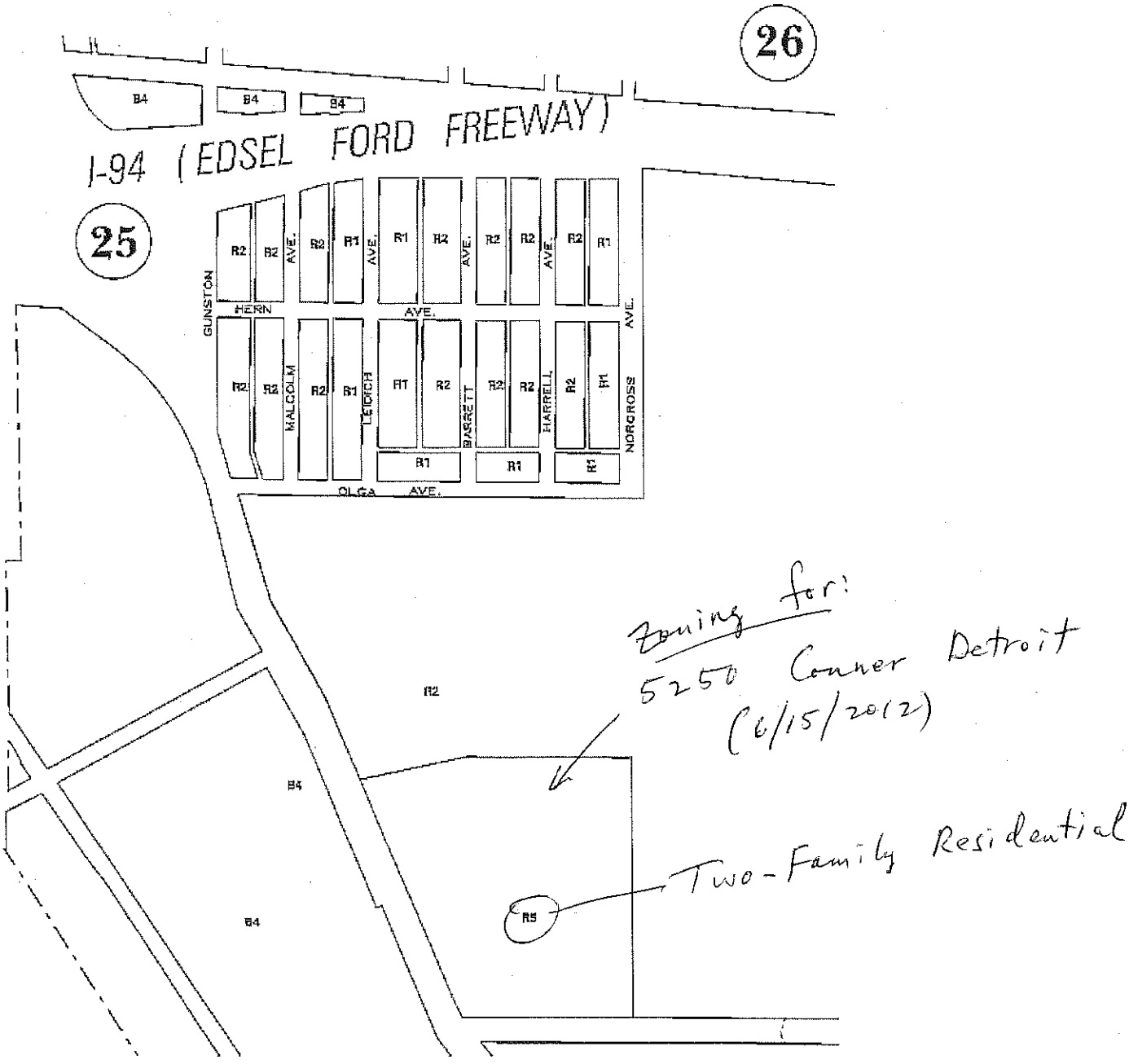
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B4
R5
Zoning for:
5250 Conner Detroit
(6/15/2012)
Two-Family Residential

5250 Conner

ff To Know

-- Hate to bear bad news, but it's best to know: state law permits the Detroit Water and Sewerage Department to put past-due bill amounts on the City of Detroit property tax roll as a lien. For payment-plan options, call (313) 267-8000.

-- If you have small electronics like cell phones, camera, laptop computers, GPS systems or iPods - or printer toner and ink cartridges - available for recycle, please take them to the following eastside Recreation Centers: **Lipke**, 19320 Van Dyke; **Young**, 2751 Bradby; or **Heilmann**, 19601 Crusade. more info call (313) 224 25.

-- The Detroit Department of Transportation will implement weekday schedule service changes effective Sept. 29. The following routes will be affected: #14 Crosstown, #16 Dexter, #17 Eight Mile, #18 Fenkell, #19 Fort, #22 Greenfield, #23 Hamilton, #25 Jefferson/Fort, and #37 Michigan. More info, call (313) 933-1300.

-- The Detroit Recreation Department will host a skating party Sept. 22 from 4:30 p.m. until 7 p.m. at Great Skate, 29100 Hayes in Roseville. Price is $7 and includes skate rental. Call 3) 224-1125.

Continued on pg. 8

CHANDLER PARK: EVERYBODY'S PARK -- FOR THE EASTSIDE AND THE WHOLE RE-

Imagine this: Chandler Park's 200 acres carefully manicured with the golf course, newly erected outdoor fields and structures to support competitive sports leagues for all ages, an Olympic-size pool for year-round competitive swimming, an ice arena to practice Arabesques or hockey tournaments, an Aquatic Center with new amenities, a fitness center with sports skill training, public park space like no other with themed community gardens, greenhouses and the Conner Creek Greenway.

Adjacent to this dream of a recreation complex sits University YES Academy East, a secondary (grades 6-12), high-performing charter school.

Transforming this imagination into reality is the work of the Chandler Park Promise Coalition (CPPC), a network of organizational and community stakeholders whose commitment to the eastside is deeply etched in its personal and professional DNA.

Some of you may remember that this coalition was born out of the Salvation Army Kroc Initiative, which promised tens of millions of dollars in support of a new community center at Chandler Park and then walked away from that commitment. That broken promise is a lesson that is fueling a vision for the eastside through the transformation of Chandler Park into an education and recreation mecca. The CPPC owns this vision and is quickly advancing key elements of the implementation plan through designated education and recreation work groups. The Chandler Park recreation complex vision is guided by the CPPC leadership group and a hard-working recreation/ conservancy work group made up of residents, agencies, recreation experts and CPPC organization members.

Progress Report — With help from the Kellogg Foundation:

- A benchmarking report on other recreational facilities locally and around the nation has been completed. It guided CPPC in the creation of the overall recreation vision. It will also inform a business/ sustainability plan for the recreation complex that is now being commissioned.
- The CPPC leadership group has decided on a park conservancy model that includes public-private partnerships with the City of Detroit and Wayne County, and a tax-exempt non-profit Chandler Park conservancy similar to what has been created for Belle Isle and Campus Martius. The recreation/ conservancy work group is now meeting with executives from the mayor's office and Wayne County to discuss how CPPC's concept for Chandler Park could fit with the city's creation of a "recreation trust" to ensure the future of Detroit's recreational assets.
- A fund development feasibility study and plan is underway for both the recreation complex and the UYAE school. This feasibility analysis, to be completed this month, will guide the fundraising campaign that CPPC will undertake. The resulting case study will be developed to help educate and eventually persuade donors, government and investors that this vision for Chandler Park is needed, and can transform this community.

The eastside's education and recreation future is now.

DAQUANE CROSS, GRADUATE OF KING HIGH SCHOOL AND ENLISTEE IN THE UNITED STATES ARMY, WOULD LIKE TO SAY, "WHEN YOU FIND SOMETHING YOU HAVE A PASSION FOR, GO FOR IT!"
(Via Willie Mae Gaskin)

24TH ANNUAL EASTSIDE EXTRAVAGANZA SET FOR OCT. 5

Reserve Your Spot!

Can you believe it's been 24 years? Well, it has, and Warren Conner is back with the area's premier annual event: The Eastside Extravaganza.

Get your glad rags ready and come on out for this affair, put on every year to support the wonderful exploits of Warren/Conner Development Coalition.

Presented by Flagstar Bank, the event will be held at the venerable Roostertail off of East Jefferson. As usual, it will be a blast. Roop Raj, Fox 2 anchor, will be your host.

Come hungry, because "Strollin' on the River" will feature mouth-watering signature dishes from eastside restaurants including Milt's Gourmet Barbecue, Sala Thai, The Samaritan Cafe, Sindbad's, The Sunday Dinner Co. and more.

You can get your dance on too with the popular "Steppin' in the D Dance Party," featuring the Eastside's "Notorious," one of the hottest R&B bands in the city.

"Featuring signature dishes from eastside restaurants including Milt's Gourmet Barbeque, Sala Thai, The Samaritan Café, Sindbad's, The Sunday Dinner Company, and more."

Other highlights include the MOE Better Awards, which honors the **M**ost **O**utstanding on the **E**astside; the Angela Brown Wilson Eastside Youth Award; and the Christopher Turner and Tonya Allen Eastside Neighborhood Leadership Award.

An auction will offer up hot items: Comerica Park suite for 21, Princess Cruise and dinner, University of Michigan tickets and tailgate party, Ahee jewelry and more.

A 50-50 raffle will deliver a minimum prize of $500. Last year's actual prize was over $1,000 so come prepared to scoop up those tickets and go away with extra cash!

The Extravaganza's co-sponsors include PVS Chemicals, DMC, Quicken Loans, Comerica, Mack Alter LLC, MGM Grand Casino, Henry Ford Health Systems, Fifth Third Bank, Samaritan Center, Taubman, and St. John Providence Health System.

Come on out: This will be a ticketless event. To reserve a seat or for more info call (313) 331-3714 or go to www.warrenconner.org. Prices are $65 for full-event admission, $600 for a table for 10 and $25 for "Steppin' in the D Dance Party" only, starting at 9 p.m.

ODIOUS AND PITIFUL PROPERTIES (O.P.P)

Odious. adj. Deserving hatred or repugnanc
--Merriam Webster's Collegiate Dictionary

Most Detroiters wish to live and work in clean, blight-free environments. In fact, a key mission of the Warren/Conner Development Coalition has been to rid the city of abandoned buildings, littered lots and other eyesores. In an effort to educate our readers and expose chronic offenders, The Pipeline each issue will identify at least one unsightly eastside property and, if we can, disclose owners' names.

Okay, last issue's offender was so heinous, so egregious, that it bears a redux. Nearly daily, a dump truck ILLEGALLY hauls all manner of debris to 12165 Mack, which, believe it or not, is NOT an actual dump site. Actually, it's behind Warren Conner's headquarters. You can imagine how nauseating it is to see this activity - which continues with apparent impunity - and its lovely remnants, on a daily basis. It's abjectly horrid.

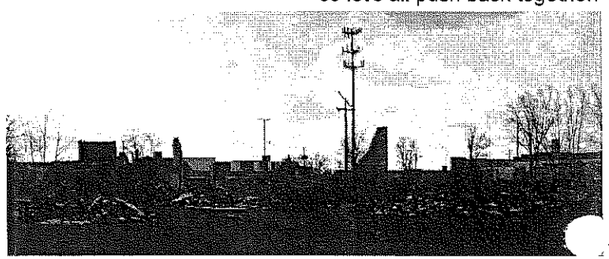
What's worse, although W/ CDC just recently moved to its new location, this site has been in this condition for at least five years! Really, what kind of city do we live in that stuff like this can go on this badly, for this long? (And make no mistake: we would feel the same were it not by our property). Problem is, cleanup would cost tens of thousands of bucks, says Jackie Bejma, commercial revitalization project manager for LAND, Inc., Warren Conner's non-profit real estate subsidiary, adding that she has provided photos of this disaster to the City of Detroit, to no avail thus far.

The outrageous offender is one well-known speculator by the name of Matthew Tatarian, who has not been reachable for comment (his business address is 3574 Second Avenue in Detroit. Why not send him your thoughts, people?) Records show he owns dozens of properties throughout the city. He's been ticketed several times by the Department of Public Works, but we don't know if he's paid them.

We're working on it, and other actions, including a nuisance abatement suit.

As we say every other O.P.P., it's not normal to live by, near or with this stuff, folks.

There's power in numbers, so let's all push back together.



12165 Mack Avenue, Detroit, MI 48215

Spielberg, John (DEQ)

From: Pels, Jan <pels.jan@epa.gov>
Sent: Thursday, February 13, 2014 12:32 PM
To: Spielberg, John (DEQ)
Cc: Walczak, Joe (DEQ)
Subject: Another Detroit property for assessment.....this makes 3 total so far...
Attachments: Concept Plan 09-27-13.pdf

Thank you!
Jan Pels
Phone: (312) 886-3009
U.S. EPA Region 5
77 W. Jackson, Mail Code SB-7J
Chicago, IL 60604

From: Newport, Robert
Sent: Thursday, February 13, 2014 9:07 AM
To: Pels, Jan
Cc: Grosshans, Jon
Subject: FW: MDEQ Funds for Environmental Site Assessments

Hi Jan

We have one additional address on the east side for an environmental site assessment.

Thanks again for all your work to plan how to best use the available funds.

Bob Newport
NPDES Programs Branch
U.S. EPA Region 5 (Chicago Office)
newport.bob@epa.gov

From: Jackie Bejma [mailto:JBejma@warrenconner.org]
Sent: Thursday, February 13, 2014 7:59 AM
To: Newport, Robert
Subject: RE: MDEQ Funds for Environmental Site Assessments

Bob,

I have one other address that needs Phase II – 5250 Conner, Detroit MI 48215.

That is the site for the new proposed charter school adjacent to Chandler Park, Master Plan for which is attached (in case you didn't get to see or hear about it when you were here).

Jackie

Spielberg, John (DEQ)

From: Pels, Jan <pels.jan@epa.gov>
Sent: Thursday, February 13, 2014 2:17 PM
To: Spielberg, John (DEQ)
Cc: Walczak, Joe (DEQ)
Subject: FW: MDEQ Funds for Environmental Site Assessments- Ownership of last property....

Thank you!
Jan Pels
Phone: (312) 886-3009
U.S. EPA Region 5
77 W. Jackson, Mail Code SB-7J
Chicago, IL 60604

From: Newport, Robert
Sent: Thursday, February 13, 2014 12:20 PM
To: Pels, Jan
Cc: Grosshans, Jon
Subject: FW: MDEQ Funds for Environmental Site Assessments

Hi Jan

The newest site is owned by the Detroit Housing Authority.

Bob Newport
NPDES Programs Branch
U.S. EPA Region 5 (Chicago Office)
newport.bob@epa.gov

From: Jackie Bejma [mailto:JBejma@warrenconner.org]
Sent: Thursday, February 13, 2014 12:01 PM
To: Newport, Robert
Subject: RE: MDEQ Funds for Environmental Site Assessments

Bob,

That site is owned by the Detroit Housing Commission, who have agreed to transfer it to the eventual school.

I am happy to talk with MDEQ whenever necessary.

I really appreciate the opportunity, and look forward to working more with EPA.

Thanks,
Jackie

W, 2/12/14

Mtg. on TC SIs 2-3

present - Dave, Davis, Joe, Teresa, Antonia

Joe - thinks each prop. owner should get final report

Ci + Tam - need to show what impacts lake

F, 2/14/14 Det. Conner St. BFRA

tx Brian Vosburg ~1115-1130

✓ - Det. Housing Comm. - since 1938 - was public housing since then

✓ - did ph I a couple yrs. ago for residential use

- found closed UST site near before

✓ - will sell to ~~non profit~~ charter school, for $1 in exch. for guaranteed jobs/pub. benef.

- what's left - transformer on pole + road

- his schedule today - avail. 3-430 p

- Warren/Conner gp. - he works w/ Maggie

- UST was at City recreation dept.

- he'll email me survey of 19-acre property

Call-in info

877-226-9607

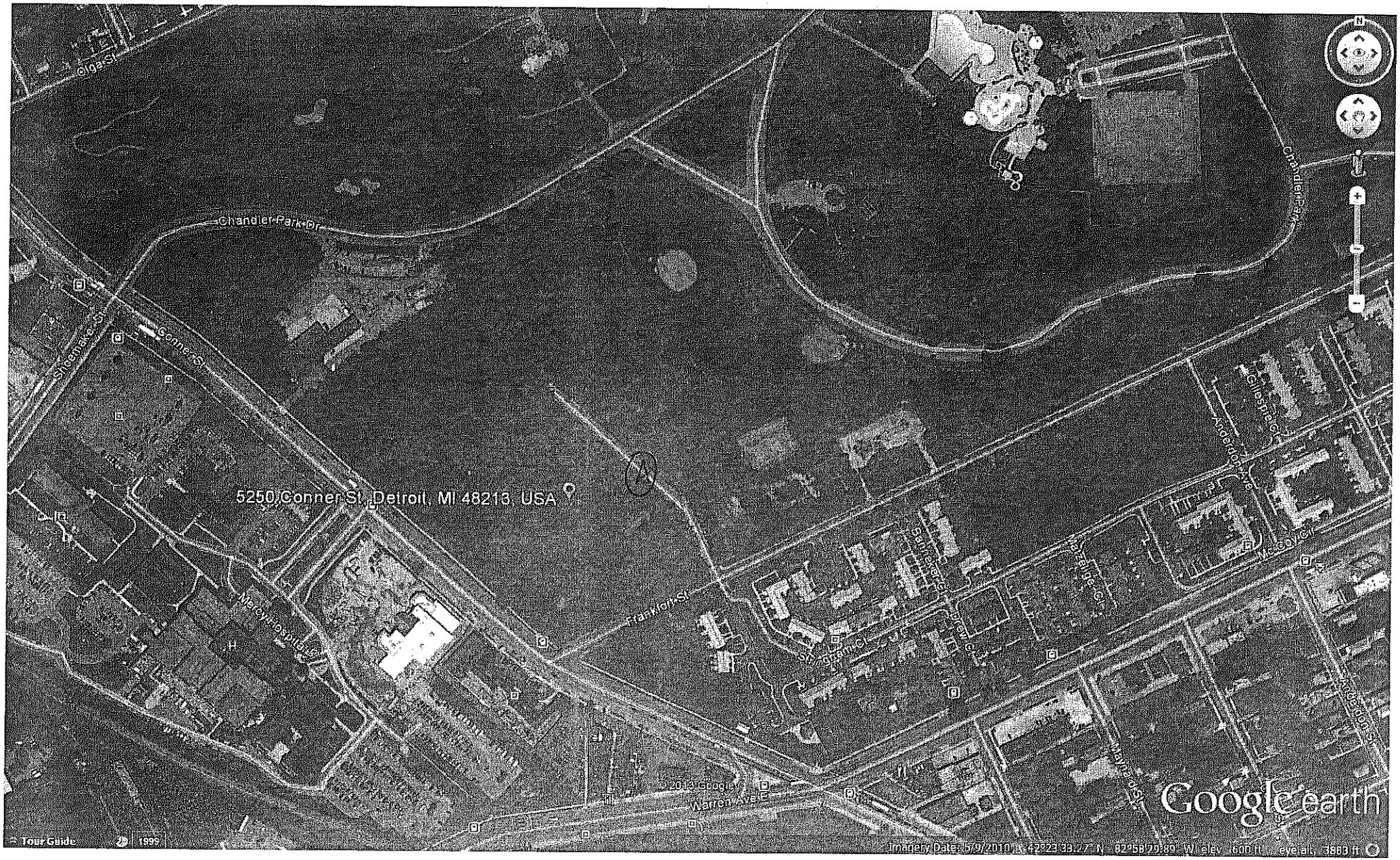
#6623822088#

312-886-3009

Jan Pels

- need ownership info, prop. bkd.

- Call in # =



Brian
2/14/14

A-pole w/ transformer

Spielberg, John (DEQ)

From: Brian Vosburg <VosburgB@dhcmi.org>
Sent: Friday, February 14, 2014 2:01 PM
To: Spielberg, John (DEQ)
Subject: 5250 Conner Property
Attachments: ALTA 03-02-12.pdf

Jim,

Attached is the survey for the 5250 Conner property, listed as Ward 21/046202-11 on the survey. The other parcels listed are City of Detroit Recreation Dept. parcels that are not part of the charter school property.

Thanks,

Brian Vosburg, AICP
Contract Administrator
Development Department
Detroit Housing Commission
2211 Orleans
Detroit, MI 48207
313.877.8661 p
313.392.0157 f
vosburgb@dhcmi.org
www.dhcmi.org

Fri, 2/14/14 conf. call 3p – 330

present: Jan, Jo~~le~~, me, Brian Vosberg
P. W.

Need to know:

- ownership
- contacts
- prop. info.
- future use
- letter from owner

2006 ph I – community water then, but fell thru

- comm'l/recreational standard
- have in pdf → he'll email

(Brian) – was farmland, 1938 public housing, → WW II general housing

1996-97 – demolished, vacant since

(Jan) – env. concerns?

(Br.) – former CUST site at city rec. yard

→ ph II needed

(Br.) – interested in green infrastructure, handling storm water on-site

- east end was nat. stream → later below gd. as culvert, now returning to marsh
- one of Hope 6 sites
- no asb. piping found, but foundations found

(Jan) – my email: include type of work to be done

Spielberg, John (DEQ)

From: Pels, Jan <pels.jan@epa.gov>
Sent: Friday, February 14, 2014 3:51 PM
To: Spielberg, John (DEQ); Walczak, Joe (DEQ)
Subject: RE: Info to collect/document the status of these Detroit Properties... some ideas...

(1)

John, Joe:
Thanks for setting up the impromptu call with Brian Vosburg of the Detroit Housing Authority this afternoon! It was a good call, and I think very helpful in defining expectations for the assessment at this property (5250 Conner). It sounds like the information that you can provide through an assessment will be very helpful to Detroit!

I just confirmed that the letter from Brian is important to have to show that Detroit is involved and knows/wants the work to be done.

Once you get the Phase I report from Brian, it would be good to summarize the site, what's known, what needs to be determined from the assessment, etc. This might be good to run by Brian, since he seems to be very knowledgeable about the property, and knows what info he needs going forward!

Please cc: me when you email the summary to him, so that we can all be kept up to date on where things are at....

I will check with our GPR folks, and if you could also, maybe between the two of them, we can provide that additional information on the subsurface conditions. I don't think that this would need to be included in the assessment report, since I believe our guys generate their own reports... on the other hand, if your guys do this, you could include it as an attachment to your report..??? Something to think about... In any case, I'll let you know what I find out regarding their availability in the near future.

Have a great holiday weekend! :)

Thank you!
Jan Pels
Phone: (312) 886-3009
U.S. EPA Region 5
77 W. Jackson, Mail Code SB-7J
Chicago, IL 60604

From: Pels, Jan
Sent: Friday, February 14, 2014 1:44 PM
To: Spielberg, John (DEQ); Walczak, Joe (DEQ)
Subject: Info to collect/document the status of these Detroit Properties... some ideas...

John, Joe:
I think we need to have some basic information gathered for each property, not unlike your application form.... But I think we should ask for the information that we need, and document it for our records (versus giving them the forms to fill out).

Also, I'll confirm this here, but I think we will want a letter from the local government department that owns each site basically acknowledging that they need these assessments completed, and their planned reuse of the properties. This will document their support, which we'll need, and which you'll want to have to get access...

w does this sound????

We don't have to discuss this internal stuff with the folks today, but we can mention that we'll be asking for information on the properties, and that we will probably also ask for a letter (once we confirm what we want them to include).

Talk with you in a bit!

Thank you!
Jan Pels
Phone: (312) 886-3009
U.S. EPA Region 5
77 W. Jackson, Mail Code SB-7J
Chicago, IL 60604

(2) 2/14/14, 3:51 pm

Spielberg, John (DEQ)

From: Brian Vosburg <VosburgB@dhcmi.org>
Sent: Friday, February 14, 2014 4:18 PM
To: Spielberg, John (DEQ)
Subject: RE: 5250 Conner Phase I Enviro

(1)

Yes, this is on the ground measurements of the actual buildings. Demolition occurred after this drawing was created.

Brian

From: Spielberg, John (DEQ) [mailto:SPIELBERGJ@michigan.gov]
Sent: Friday, February 14, 2014 4:15 PM
To: Brian Vosburg
Subject: RE: 5250 Conner Phase I Enviro

Brian: Is the attached a plan of the housing project drawn from on-the-ground measurements of the buildings prior to demolition? Dates on the plan are 1996. Thanks a lot,

John E. Spielberg

Michigan Department of Environmental Quality
Constitution Hall 5S, 525 W. Allegan Street
Lansing, MI 48913 (48933 for FedEx or UPS)
Phones: 517-284-5155 (o), 517-242-6640 (c)
Fax: 517-335-4887 E-mail: spielbergj@michigan.gov

From: Brian Vosburg [mailto:VosburgB@dhcmi.org]
Sent: Friday, February 14, 2014 3:34 PM
To: Spielberg, John (DEQ)
Subject: RE: 5250 Conner Phase I Enviro

Jim,

Attached is the old/original site plan for Villages at Parkside that I could easily find. It's noted as NIC (not in contract) for the architect who was using this drawing as the base to come up with a new site plan. However the drawing is to scale for the old site plan for the Village I portion of the land.

Brian

From: Brian Vosburg
Sent: Friday, February 14, 2014 3:27 PM
To: SPIELBERGJ@michigan.gov
Subject: 5250 Conner Phase I Enviro

n,

Here is the Phase 1 environmental for 5250 Conner. The Kroc Center project with the Salvation Army was cancelled shortly after the Phase 1 was completed.

Feel free to call with any questions.

Brian Vosburg, AICP
Contract Administrator
Development Department
Detroit Housing Commission
2211 Orleans
Detroit, MI 48207
313.877.8661 p
313.392.0157 f
vosburgb@dhcmi.org
www.dhcmi.org

(2) 2/14/14, 4:18 pm

5250 Conner Detroit
5250 Conner Street
Detroit, MI 48213

Inquiry Number: 3865614.2s
February 25, 2014

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

5250 CONNER STREET
DETROIT, MI 48213

COORDINATES

Latitude (North):	42.3905000 - 42° 23' 25.80"
Longitude (West):	82.9793000 - 82° 58' 45.48"
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	337077.6
UTM Y (Meters):	4694818.0
Elevation:	600 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	42082-D8 GROSSE POINTE, MI
Most Recent Revision:	1983

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2012
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List

Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators

Federal institutional controls / engineering controls registries

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls
LUCIS..... Land Use Control Information System

Federal ERNS list

ERNS..... Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

MI SWF/LF..... Solid Waste Facilities Database

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

MI AST..... Aboveground Tanks
INDIAN UST..... Underground Storage Tanks on Indian Land
FEMA UST..... Underground Storage Tank Listing

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

EXECUTIVE SUMMARY

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
ODI ..... Open Dump Inventory
MI SWRCY ..... Recycling Facilities
MI HIST LF ..... Inactive Solid Waste Facilities
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL ..... Clandestine Drug Labs
MI DEL SHWS ..... Delisted List of Contaminated Sites
MI CDL ..... Clandestine Drug Lab Listing
US HIST CDL ..... National Clandestine Laboratory Register

Local Land Records

LIENS 2 ..... CERCLA Lien Information
MI LIENS ..... Lien List

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
MI SPILLS ..... Pollution Emergency Alerting System

Other Ascertainable Records

DOT OPS ..... Incident and Accident Data
DOD ..... Department of Defense Sites
FUDS ..... Formerly Used Defense Sites
CONSENT ..... Superfund (CERCLA) Consent Decrees
ROD ..... Records Of Decision
UMTRA ..... Uranium Mill Tailings Sites
US MINES ..... Mines Master Index File
TRIS ..... Toxic Chemical Release Inventory System
TSCA ..... Toxic Substances Control Act
FTTS ..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS ..... FIFRA/TSCA Tracking System Administrative Case Listing
SSTS ..... Section 7 Tracking Systems
ICIS ..... Integrated Compliance Information System
PADS ..... PCB Activity Database System
MLTS ..... Material Licensing Tracking System
RADINFO ..... Radiation Information Database
RAATS ..... RCRA Administrative Action Tracking System
RMP ..... Risk Management Plans
MI UIC ..... Underground Injection Wells Database
MI DRYCLEANERS ..... Drycleaning Establishments
MI NPDES ..... List of Active NPDES Permits
INDIAN RESERV ..... Indian Reservations
SCRD DRYCLEANERS ..... State Coalition for Remediation of Drycleaners Listing
MI COAL ASH ..... Coal Ash Disposal Sites
MI Financial Assurance ..... Financial Assurance Information Listing
2020 COR ACTION ..... 2020 Corrective Action Program List

LEAD SMELTERS..... Lead Smelter Sites
PRP..... Potentially Responsible Parties
COAL ASH DOE..... Steam-Electric Plant Operation Data
US FIN ASSUR..... Financial Assurance Information
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER..... PCB Transformer Registration Database
EPA WATCH LIST..... EPA WATCH LIST

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

MI RGA LF..... Recovered Government Archive Solid Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS list

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERCLIS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FEDERAL-MOGUL SITE	11031 SHOEMAKER ST	W 1/4 - 1/2 (0.494 mi.)	D26	52

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 09/10/2013 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHRYSLER GROUP LLC	***11570 E WARREN AVE***	***SW 1/8 - 1/4 (0.220 mi.)***	***12***	***22***

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 09/10/2013 has revealed that there is 1 RCRA-CESQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAMARITAN MANOR	5555 CONNER ST	NW 1/8 - 1/4 (0.189 mi.)	B8	18

State- and tribal - equivalent CERCLIS

MI SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Environmental Quality's' Contaminated Sites List on Diskette With Address.

A review of the MI SHWS list, as provided by EDR, and dated 10/01/2013 has revealed that there are 2 MI SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ST JEAN 5664 BURIED DRUMS	***5664 ST. JEAN***	***WNW 1/4 - 1/2 (0.418 mi.)***	***C18***	***40***
Facility Status: Interim Response in progress				

Lower Elevation	Address	Direction / Distance	Map ID	Page
MI DEPT/NATURAL RESOURCES AND	***14241 E WARREN AVE***	***ENE 1/2 - 1 (0.992 mi.)***	***27***	***54***
Facility Status: See Leaking Underground Storage Tank Site Database				

State and tribal leaking storage tank lists

MI LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental Quality's Leaking Underground Storage Tank (LUST) Database.

A review of the MI LUST list, as provided by EDR, and dated 11/01/2013 has revealed that there are 8 MI LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHANDLER PARK SERVICE YARD Facility Status: Closed	*5650 CONNER ST*	*NW 1/8 - 1/4 (0.183 mi.)*	*B7*	*17*
PRICES USED CARS Facility Status: Open	*11409 E WARREN AVE*	*SW 1/4 - 1/2 (0.299 mi.)*	*15*	*29*
DDOT SHOEMAKER GARAGE Facility Status: Open	*5149 ST JEAN AVE*	*WSW 1/4 - 1/2 (0.310 mi.)*	*16*	*31*
HURRICANE INDUSTRIES LLC Facility Status: Closed	*5640 ST JEAN AVE*	*WNW 1/4 - 1/2 (0.403 mi.)*	*C17*	*38*
WARREN E FUEL Facility Status: Open	*12620 E WARREN*	*E 1/4 - 1/2 (0.424 mi.)*	*19*	*41*
CITY OF DETROIT Facility Status: Open	*11031 SHOEMAKER*	*W 1/4 - 1/2 (0.494 mi.)*	*D23*	*46*

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRESTONE SVC CTR Facility Status: Closed	*11919 E WARREN AVE*	*SSE 0 - 1/8 (0.113 mi.)*	*A2*	*8*
SUPERAMERICA PROPERTY NO. 391 Facility Status: Open Facility Status: Closed	*4700 CONNER*	*ESE 1/4 - 1/2 (0.468 mi.)*	*22*	*44*

State and tribal registered storage tank lists

MI UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Quality's Michigan UST database.

A review of the MI UST list, as provided by EDR, and dated 01/06/2014 has revealed that there are 3 MI UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHANDLER PARK SERVICE YARD	*5650 CONNER ST*	*NW 1/8 - 1/4 (0.183 mi.)*	*B7*	*17*
SAMARITAN CENTER INC	5555 CONNER AVE	NW 1/8 - 1/4 (0.189 mi.)	B9	20

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRESTONE SVC CTR	*11919 E WARREN AVE*	*SSE 0 - 1/8 (0.113 mi.)*	*A2*	*8*

State and tribal institutional control / engineering control registries

MI AUL: A listing of sites with institutional and/or engineering controls in place.

A review of the MI AUL list, as provided by EDR, and dated 03/26/2013 has revealed that there are 2 MI AUL sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CITY OF DETROIT	*11031 SHOEMAKER ST*	*W 1/4 - 1/2 (0.494 mi.)*	*D24*	*50*
FORMER FEDERAL MOGUL (CITY OF	11031 SHOEMAKER,	W 1/4 - 1/2 (0.494 mi.)	D25	51

State and tribal Brownfields sites

MI BROWNFIELDS: Brownfields and USTfield Site Database.

A review of the MI BROWNFIELDS list, as provided by EDR, and dated 07/27/2012 has revealed that there is 1 MI BROWNFIELDS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CITY OF DETROIT	*11031 SHOEMAKER ST*	*W 1/4 - 1/2 (0.494 mi.)*	*D24*	*50*

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 09/10/2013 has revealed that there are 4 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NATIONAL PLATING CO INC	*5417 CONNER ST*	*NW 0 - 1/8 (0.089 mi.)*	*1*	*7*
CITY OF DETROIT CHANDLER PARK	*5650 CONNER ST*	*NW 1/8 - 1/4 (0.183 mi.)*	*B6*	*14*
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
FIRESTONE SVC CTR	*11919 E WARREN AVE*	*SSE 0 - 1/8 (0.113 mi.)*	*A2*	*8*
DAIMLERCHRYSLER CORP	*11800 E WARREN AVE*	*SSE 0 - 1/8 (0.119 mi.)*	*A4*	*12*

NY MANIFEST: Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

A review of the NY MANIFEST list, as provided by EDR, has revealed that there is 1 NY MANIFEST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRESTONE SVC CTR	***11919 E WARREN AVE***	***SSE 0 - 1/8 (0.113 mi.)***	***A2***	***8***

MI BEA: Baseline Environmental Assessment.

A review of the MI BEA list, as provided by EDR, and dated 08/21/2013 has revealed that there are 5 MI BEA sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	5555 CONNER AVE. AND 11	NW 1/8 - 1/4 (0.189 mi.)	B10	21

Lower Elevation	Address	Direction / Distance	Map ID	Page
GALLARY AT WARREN CONNER	4899 CONNER STREET	ESE 1/4 - 1/2 (0.273 mi.)	14	29
CONNER-CHENE PROPERTIES LLC	4737 CONNER AVENUE	ESE 1/4 - 1/2 (0.426 mi.)	20	44
4749 (AKA 4705) CONNER AVENUE	4749 CONNER	SSE 1/4 - 1/2 (0.429 mi.)	21	44
SUPERAMERICA PROPERTY NO. 391	***4700 CONNER***	***ESE 1/4 - 1/2 (0.468 mi.)***	***22***	***44***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 3 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WARREN CONNER SERVICE	12200 E WARREN AVE	ESE 1/8 - 1/4 (0.219 mi.)	11	21
BOB S SUNOCO SERVICE	5581 CONNER AVE	NW 1/8 - 1/4 (0.229 mi.)	13	28

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	11919 E WARREN AVE	SSE 0 - 1/8 (0.113 mi.)	A3	12

EXECUTIVE SUMMARY

EDR US Hist Cleaners: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

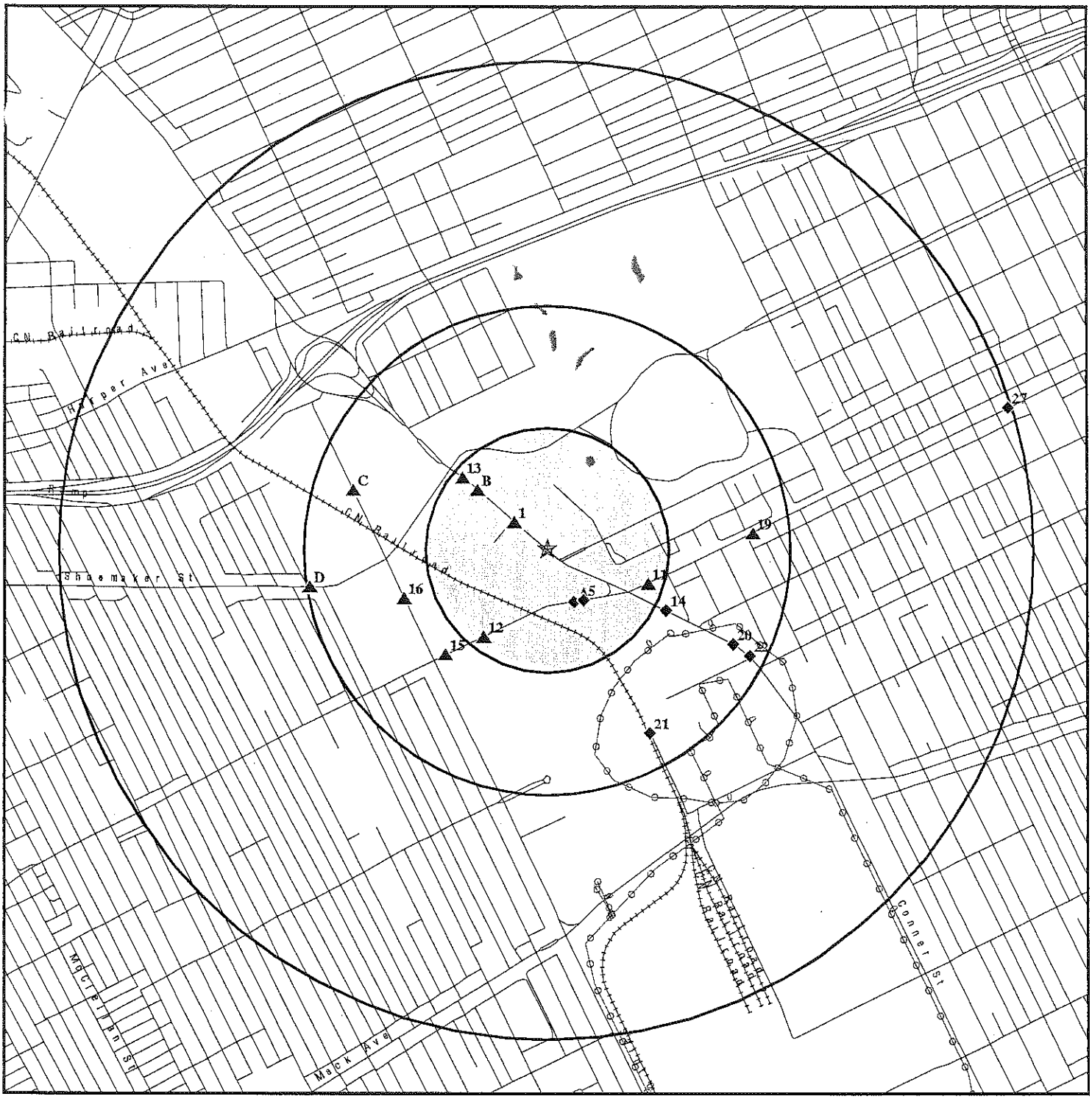
A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there is 1 EDR US Hist Cleaners site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
LAUNDRY MART	11818 E WARREN AVE	SE 1/8 - 1/4 (0.127 mi.)	5	14

Due to poor or inadequate address information, the following sites were not mapped. Count: 20 records.

Site Name	Database(s)
CITY OF DETROIT	FINDS, US AIRS
DETROIT BLDG TRADES	FINDS, US AIRS
DETROIT PUB SCHOOLS	FINDS, US AIRS
DETROIT CITY OF	FTTS, HIST FTTS, FINDS
KING SCRAP IRON & METAL CO	MI UST
MI DEPT/TRANSPORTATION	RCRA NonGen / NLR, FINDS
MI DEPT/TRANSPORTATION	RCRA NonGen / NLR, FINDS
MI DEPT/TRANSPORTATION	RCRA NonGen / NLR, FINDS
MI DEPT/TRANSPORTATION	RCRA NonGen / NLR, FINDS
MI DEPT/TRANSPORTATION	RCRA NonGen / NLR, FINDS
DETROIT SCHOOLS	RCRA NonGen / NLR
MI DEPT/TRANSPORTATION	RCRA NonGen / NLR, FINDS
CITY OF DETROIT/FIRE DEPARTMENT	FINDS
CITY OF DETROIT FIRE DEPARTMENT	FINDS
CITY OF DETROIT FIRE DEPARTMENT	FINDS
CITY OF DETROIT FIRE DEPARTMENT	FINDS
DETROIT EDISON CO	FINDS
DETROIT RESOURCE RECOVERY FACI	FINDS
DETROIT DEPT OF PUBLIC WORKS	FINDS
DETROIT WATER AND SEWAGE DEPT	FINDS

OVERVIEW MAP - 3865614.2s



0 1/4 1/2 1 Miles

- ☆ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 5250 Conner Detroit	CLIENT: MDEQ/ERD/Superfund
ADDRESS: 5250 Conner Street Detroit MI 48213	CONTACT: John Spielberg
LAT/LONG: 42.3905 / 82.9793	INQUIRY #: 3865614.2s
	DATE: February 25, 2014 7:47 pm

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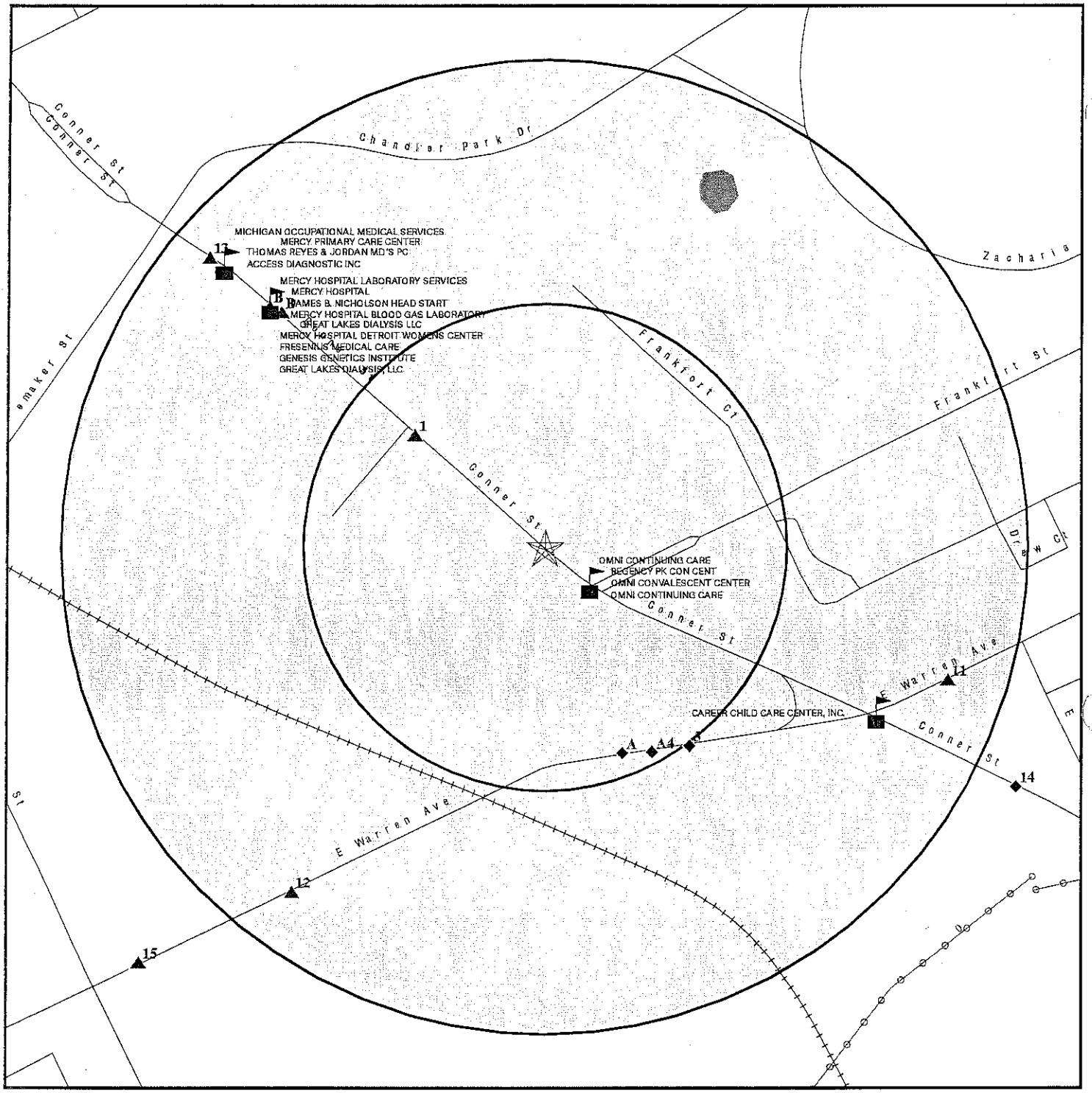
DETAIL MAP - 3865614.2s



- ☆ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
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This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 5250 Conner Detroit	CLIENT: MDEQ/ERD/Superfund
ADDRESS: 5250 Conner Street Detroit MI 48213	CONTACT: John Spielberg
LAT/LONG: 42.3905 / 82.9793	INQUIRY #: 3865614.2s
	DATE: February 25, 2014 7:49 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	1	NR	NR	1
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-CESQG	0.250		0	1	NR	NR	NR	1
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
MI SHWS	1.000		0	0	1	1	NR	2
State and tribal landfill and/or solid waste disposal site lists								
MI SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
MI LUST	0.500		1	1	6	NR	NR	8
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
MI UST	0.250		1	2	NR	NR	NR	3

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MI AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
MI AUL	0.500		0	0	2	NR	NR	2
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
MI BROWNFIELDS	0.500		0	0	1	NR	NR	1
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
MI SWRCY	0.500		0	0	0	NR	NR	0
MI HIST LF	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
MI DEL SHWS	1.000		0	0	0	0	NR	0
MI CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
MI LIENS	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
MI SPILLS	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		3	1	NR	NR	NR	4
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
MI UIC	TP		NR	NR	NR	NR	NR	0
NY MANIFEST	0.250		1	0	NR	NR	NR	1
MI DRYCLEANERS	0.250		0	0	NR	NR	NR	0
MI NPDES	TP		NR	NR	NR	NR	NR	0
MI AIRS	TP		NR	NR	NR	NR	NR	0
MI BEA	0.500		0	1	4	NR	NR	5
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
MI COAL ASH	0.500		0	0	0	NR	NR	0
MI WDS	TP		NR	NR	NR	NR	NR	0
MI Financial Assurance	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		1	2	NR	NR	NR	3
EDR US Hist Cleaners	0.250		0	1	NR	NR	NR	1
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
MI RGA LUST	TP		NR	NR	NR	NR	NR	0
MI RGA LF	TP		NR	NR	NR	NR	NR	0
MI RGA HWS	TP		NR	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1
NW
< 1/8
0.089 mi.
469 ft.

NATIONAL PLATING CO INC
5417 CONNER ST
DETROIT, MI 48213

RCRA NonGen / NLR **1000260122**
FINDS **MID072791510**

Relative:
Higher

Actual:
605 ft.

RCRA NonGen / NLR:

Date form received by agency:	08/18/1980
Facility name:	NATIONAL PLATING CO INC
Facility address:	5417 CONNER ST
	DETROIT, MI 48213
EPA ID:	MID072791510
Contact:	JOSEPH PELINO
Contact address:	5417 CONNER ST
	DETROIT, MI 48213
Contact country:	US
Contact telephone:	(313) 925-0550
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	NO ACTIVE O/OP AS NOT GENERATING WASTE
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/03/1970
Owner/Op end date:	Not reported

Owner/operator name:	NO ACTIVE O/OP AS NOT GENERATING WASTE
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/03/1970
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No

NATIONAL PLATING CO INC (Continued) **1000260122**

Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

FINDS:

Registry ID: 110003603333

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

A2
SSE
< 1/8
0.113 mi.
597 ft.

Relative:
Lower

Actual:
598 ft.

FIRESTONE SVC CTR **1000844532**
11919 E WARREN AVE **RCRA NonGen / NLR** **MID985665660**
DETROIT, MI 48214 **FINDS**
MI LUST
MI UST
Site 1 of 3 in cluster A **NY MANIFEST**
MI WDS
MI RGA LUST

RCRA NonGen / NLR:
Date form received by agency: 09/17/1998
Facility name: FIRESTONE SVC CTR
Facility address: 11919 E WARREN AVE
DETROIT, MI 48214
EPA ID: MID985665660
Contact: JEFF WEBB
Contact address: 11919 E WARREN AVE
DETROIT, MI 48214
Contact country: US
Contact telephone: (313) 925-9500
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: BRIDGESTONE FIRESTONE
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported

FIRESTONE SVC CTR (Continued) **1000844532**

Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1970
Owner/Op end date: Not reported

Owner/operator name: BRIDGESTONE FIRESTONE
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1970
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 08/23/1993
Facility name: FIRESTONE SVC CTR
Classification: Conditionally Exempt Small Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

FINDS:

Registry ID: 110003685450

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of

FIRESTONE SVC CTR (Continued) **1000844532**

events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

LUST:

Facility ID:	00007815
Source:	STATE OF MICHIGAN
Owner Name:	Alan T Akerman
Owner Address:	1344 Willow Ln
Owner City,St,Zip:	Birmingham, MI 48009-4838
Owner Contact:	Not reported
Owner Phone:	( ) -
Country:	USA
District:	SE Michigan District Office
Site Name:	Firestone Mastercare
Latitude:	42.38895
Longitude:	-82.97935
Date of Collection:	01/11/2001
Method of Collection:	Address Matching-House Number
Accuracy:	100
Accuracy Value Unit:	FEET
Horizontal Data:	NAD83
Point Line Area:	POINT
Desc Category:	Plant Entrance (Freight)
Leak Number:	C-0910-93
Release Date:	07/22/1993
Substance Released:	Used Oil
Release Status:	Closed
Release Closed Date:	04/15/1994

UST:

Facility ID:	00007815
Facility Type:	CLOSED
Owner Name:	ALAN T AKERMAN
Owner Address:	1344 WILLOW LN
Owner City,St,Zip:	BIRMINGHAM, MI 48009-4838
Owner Country:	USA
Owner Contact:	Not reported
Owner Phone:	( ) -
Contact:	JEFF WEBB
Contact Phone:	(313) 925-9500
Date of Collection:	01/11/2001
Accuracy:	100
Accuracy Value Unit:	FEET
Horizontal Datum:	NAD83
Source:	STATE OF MICHIGAN
Point Line Area:	POINT
Desc Category:	Plant Entrance (Freight)
Method of Collection:	Address Matching-House Number
Latitude:	42.38895
Longitude:	-82.97935
Tank ID:	1
Tank Status:	**Removed from Ground**

FIRESTONE SVC CTR (Continued) **1000844532**

Capacity:	1000
Product:	Used Oil
Install Date:	03/24/1981
Remove Date:	07/14/1993
Tank Release Detection:	Not reported
Pipe Realease Detection:	Not reported
Piping Material:	Bare Steel,Galvanized Steel
Piping Type:	Gravity Fed?
Construction Material:	Asphalt Coated or Bare Steel,Cathodically Protected Steel
Impressed Device:	No

NY MANIFEST:

EPA ID:	MID985665660
Country:	USA
Mailing Name:	FIRESTONE SERVICE CTR
Mailing Contact:	LEE EVANS
Mailing Address:	11919 E WARREN AVE
Mailing Address 2:	Not reported
Mailing City:	DETROIT
Mailing State:	MI
Mailing Zip:	48214
Mailing Zip4:	Not reported
Mailing Country:	USA
Mailing Phone:	303-427-4567

Document ID:	NYB4490631
Manifest Status:	Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID:	NY86412Z
Trans2 State ID:	Not reported
Generator Ship Date:	931021
Trans1 Recv Date:	931021
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	931102
Part A Recv Date:	Not reported
Part B Recv Date:	931216
Generator EPA ID:	MID985665660
Trans1 EPA ID:	ILD099202681
Trans2 EPA ID:	Not reported
TSDF ID:	NYD049836679
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Quantity:	00110
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	002
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	93

WDS:

Site Id:	MID985665660
WMD Id:	409096
Site Specific Name:	FIRESTONE SVC CTR
Mailing Address:	11919 E WARREN AVE
Mailing City/State/Zip:	48214
Mailing County:	WAYNE

FIRESTONE SVC CTR (Continued) 1000844532

RGA LUST:

2012	FIRESTONE STORE #2535/015318	11919 E WARREN
2011	FIRESTONE STORE #2535/015318	11919 E WARREN
2010	FIRESTONE STORE #2535/015318	11919 E WARREN
2009	FIRESTONE STORE #2535/015318	11919 E WARREN
2008	FIRESTONE STORE #2535/015318	11919 E WARREN
2007	FIRESTONE STORE #2535/015318	11919 E WARREN
2006	FIRESTONE STORE #2535/015318	11919 E WARREN
2005	FIRESTONE STORE #2535/015318	11919 E WARREN
2004	FIRESTONE STORE #2535/015318	11919 E WARREN
2003	FIRESTONE STORE #2535/015318	11919 E WARREN
2001	FIRESTONE STORE #2535/015318	11919 E WARREN
2000	FIRESTONE STORE #2535/015318	11919 E WARREN
1999	FIRESTONE STORE #2535/015318	11919 E WARREN
1998	FIRESTONE STORE #2535/015318	11919 E WARREN
1997	FIRESTONE STORE #2535/015318	11919 E WARREN

A3 **EDR US Hist Auto Stat** 1015176376
SSE **11919 E WARREN AVE** N/A
< 1/8 **DETROIT, MI 48214**
0.113 mi.
597 ft. **Site 2 of 3 in cluster A**

Relative: EDR Historical Auto Stations:
Lower Name: FIRESTONE TIRE & SERVICE CENTERS
Year: 1999
Actual: Address: 11919 E WARREN AVE
598 ft.

A4 **DAIMLERCHRYSLER CORP** **RCRA NonGen / NLR** 1001488214
SSE **11800 E WARREN AVE** **FINDS** MIR000040352
< 1/8 **DETROIT, MI 48214**
0.119 mi.
628 ft. **Site 3 of 3 in cluster A**

Relative: RCRA NonGen / NLR:
Lower Date form received by agency: 01/23/2001
Facility name: DAIMLERCHRYSLER CORP
Actual: Facility address: 11800 E WARREN AVE
599 ft. DETROIT, MI 48214
EPA ID: MIR000040352
Mailing address: 4500 SAINT JEAN ST
DETROIT, MI 48214
Contact: JESSICA SHEHAB
Contact address: 11800 E WARREN AVE
DETROIT, MI 48214
Contact country: US
Contact telephone: (313) 252-6524
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: MICHAEL LUTSCH (PROPERTY OWNER)
Owner/operator address: Not reported
Not reported

DAIMLERCHRYSLER CORP (Continued) **1001488214**

Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 04/20/2000
Owner/Op end date: Not reported

Owner/operator name: DAIMLERCHRYSLER CORPORATION
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1901
Owner/Op end date: Not reported

Owner/operator name: DAIMLERCHRYSLER CORPORATION
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1901
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 06/25/1999
Facility name: DAIMLERCHRYSLER CORP
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE

DAIMLERCHRYSLER CORP (Continued) **1001488214**

MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

FINDS:

Registry ID: 110003710663

Environmental Interest/Information System
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5
SE
1/8-1/4
0.127 mi.
669 ft.

LAUNDRY MART
11818 E WARREN AVE
DETROIT, MI

EDR US Hist Cleaners **1009476026**
N/A

Relative:
Lower

Actual:
599 ft.

EDR Historical Cleaners:

Name:	LAUNDRY MART
Year:	1964
Type:	LAUNDRIES SELF SERVE
Name:	SNOW WHITE WASH A-MAT
Year:	1970
Type:	LAUNDRIES SELF SERVE

B6
NW
1/8-1/4
0.183 mi.
964 ft.

CITY OF DETROIT CHANDLER PARK
5650 CONNER ST
DETROIT, MI

RCRA NonGen / NLR **1000888231**
FINDS **MI0000261008**

Site 1 of 5 in cluster B

Relative:
Higher

Actual:
605 ft.

RCRA NonGen / NLR:

Date form received by agency:	05/08/1997
Facility name:	CITY OF DETROIT CHANDLER PARK
Facility address:	5650 CONNER ST DETROIT, MI 48213
EPA ID:	MI0000261008
Mailing address:	8221 W DAVISON DETROIT, MI 48238
Contact:	CLEDOS POWELL
Contact address:	5650 CONNER ST DETROIT, MI 48213
Contact country:	US
Contact telephone:	(313) 852-4041
Contact email:	Not reported
EPA Region:	05
Land type:	Municipal
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

CITY OF DETROIT CHANDLER PARK (Continued) **1000888231**

Owner/Operator Summary:

Owner/operator name:	DETROIT CITY OF DPW
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Operator
Owner/Op start date:	01/01/1970
Owner/Op end date:	Not reported

Owner/operator name:	DETROIT CITY OF DPW
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/1970
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	04/29/1994
Facility name:	CITY OF DETROIT CHANDLER PARK
Classification:	Large Quantity Generator

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Facility Has Received Notices of Violations:

Regulation violated:	Not reported

CITY OF DETROIT CHANDLER PARK (Continued) **1000888231**

Area of violation: Used Oil - Generators
Date violation determined: 06/03/1997
Date achieved compliance: 08/06/1998
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/03/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 06/03/1997
Date achieved compliance: 08/06/1998
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/03/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 05/08/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Used Oil - Generators
Date achieved compliance: 08/06/1998
Evaluation lead agency: State

Evaluation date: 05/08/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 08/06/1998
Evaluation lead agency: State

FINDS:

Registry ID: 110003564410

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

B7
NW
1/8-1/4
0.183 mi.
964 ft.

CHANDLER PARK SERVICE YARD
5650 CONNER ST
DETROIT, MI 48213

Site 2 of 5 in cluster B

MI LUST **U000268647**
MI UST **N/A**
MI WDS
MI RGA LUST

Relative:
Higher

Actual:
605 ft.

LUST:

Facility ID:	00019064
Source:	STATE OF MICHIGAN
Owner Name:	City of Detroit (GSD)
Owner Address:	65 Cadillac Sq Ste 3200
Owner City,St,Zip:	Detroit, MI 48226
Owner Contact:	Brad Dick (Deputy Director)
Owner Phone:	Not reported
Country:	USA
District:	SE Michigan District Office
Site Name:	Chandler Park Service Yard
Latitude:	42.39365
Longitude:	-82.98424
Date of Collection:	01/11/2001
Method of Collection:	Address Matching-House Number
Accuracy:	100
Accuracy Value Unit:	FEET
Horizontal Data:	NAD83
Point Line Area:	POINT
Desc Category:	Plant Entrance (Freight)
Leak Number:	C-0840-97
Release Date:	09/15/1997
Substance Released:	Gasoline
Release Status:	Closed
Release Closed Date:	01/28/1998

UST:

Facility ID:	00019064
Facility Type:	ACTIVE
Owner Name:	CITY OF DETROIT (GSD)
Owner Address:	65 CADILLAC SQ STE 3200
Owner City,St,Zip:	DETROIT, MI 48226
Owner Country:	USA
Owner Contact:	Brad Dick (Deputy Director)
Owner Phone:	Not reported
Contact:	David Koskela
Contact Phone:	(313) 267-7105
Date of Collection:	01/11/2001
Accuracy:	100
Accuracy Value Unit:	FEET
Horizontal Datum:	NAD83
Source:	STATE OF MICHIGAN
Point Line Area:	POINT
Desc Category:	Plant Entrance (Freight)
Method of Collection:	Address Matching-House Number
Latitude:	42.39365
Longitude:	-82.98424
Tank ID:	1
Tank Status:	**Currently In Use**
Capacity:	4000
Product:	Gasoline, Diesel
Install Date:	03/19/1968

CHANDLER PARK SERVICE YARD (Continued) **U000268647**

Remove Date: Not reported
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Double Walled, Flexible Piping
Piping Type: Not reported
Construction Material: Cathodically Protected Steel
Impressed Device: No

WDS:
Site Id: MI0000261008
WMD Id: 390867
Site Specific Name: DETROIT CHANDLER PARK CITY OF
Mailing Address: 8221 W DAVISON
Mailing City/State/Zip: 48238
Mailing County: WAYNE

RGA LUST:

2012	CHANDLER PARK SERVICE YARD	5650 CONNER ST
2011	CHANDLER PARK SERVICE YARD	5650 CONNER ST
2010	CHANDLER PARK SERVICE YARD	5650 CONNER ST
2009	CHANDLER PARK SERVICE YARD	5650 CONNER ST
2008	CHANDLER PARK SERVICE YARD	5650 CONNER ST
2007	CHANDLER PARK SERVICE YARD	5650 CONNER ST
2006	CHANDLER PARK SERVICE YARD	5650 CONNER ST
2005	CHANDLER PARK SERVICE YARD	5650 CONNER ST
2004	CHANDLER PARK SERVICE YARD	5650 CONNER ST
2003	CHANDLER PARK SERVICE YARD	5650 CONNER ST

B8 **SAMARITAN MANOR** **RCRA-CESQG** **1014924614**
NW **5555 CONNER ST** **MIK207865926**
1/8-1/4 **DETROIT, MI 48213**
0.189 mi.
999 ft. **Site 3 of 5 in cluster B**

Relative:
Higher

Actual:
605 ft.

RCRA-CESQG:
Date form received by agency: 04/18/2011
Facility name: SAMARITAN MANOR
Facility address: 5555 CONNER ST
DETROIT, MI 48213
EPA ID: MIK207865926
Contact: SEAN KELLY
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: (586) 242-7522
Contact email: SEAN.KELLY@WASTE365.COM
EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any

SAMARITAN MANOR (Continued) **1014924614**

time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	SAMARITAN MANOR
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	04/01/2011
Owner/Op end date:	Not reported

Owner/operator name:	SAMARITAN MANOR
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	04/01/2011
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

B9
NW
1/8-1/4
0.189 mi.
999 ft.

SAMARITAN CENTER INC
5555 CONNER AVE
DETROIT, MI 48213

MI UST **U003325711**
N/A

Site 4 of 5 in cluster B

Relative:
Higher

Actual:
605 ft.

UST:

Facility ID:	00035730
Facility Type:	ACTIVE
Owner Name:	SAMARITAN CENTER INC
Owner Address:	5555 CONNER ST #2244
Owner City,St,Zip:	DETROIT, MI 48213-3405
Owner Country:	USA
Owner Contact:	Not reported
Owner Phone:	(313) 579-4000
Contact:	Loren P Brown
Contact Phone:	(517) 423-7451
Date of Collection:	10/08/2005
Accuracy:	100
Accuracy Value Unit:	FEET
Horizontal Datum:	NAD83
Source:	STATE OF MICHIGAN
Point Line Area:	POINT
Desc Category:	Plant Entrance (Freight)
Method of Collection:	GPS Code Meas. Standard Positioning Service SA Off
Latitude:	42.38990
Longitude:	-82.98270

Tank ID:	1
Tank Status:	**Removed from Ground**
Capacity:	10000
Product:	Diesel
Install Date:	01/01/1984
Remove Date:	09/01/1999
Tank Release Detection:	Manual Tank Gauging
Pipe Realease Detection:	Not reported
Piping Material:	Bare Steel
Piping Type:	Suction: No Valve At Tank
Construction Material:	Asphalt Coated or Bare Steel
Impressed Device:	No

Tank ID:	2
Tank Status:	**Currently In Use**
Capacity:	6000
Product:	FUEL/OIL
Install Date:	10/01/1998
Remove Date:	Not reported
Tank Release Detection:	Automatic Tank Gauging,Inter Monitoring Double Walled Tank,Inter Monitoring/Second Containment
Pipe Realease Detection:	Interstitial Monitoring Double Walled Piping,Interstitial Monitoring/Second Containment
Piping Material:	Secondary Containment
Piping Type:	Gravity Fed?,Suction: No Valve At Tank
Construction Material:	Double Walled,Fiberglass Reinforced plastic
Impressed Device:	No

Tank ID: 3

SAMARITAN CENTER INC (Continued) U003325711

Tank Status:	**Currently In Use**
Capacity:	6000
Product:	FUEL/OIL
Install Date:	10/01/1998
Remove Date:	Not reported
Tank Release Detection:	Automatic Tank Gauging,Inter Monitoring Double Walled Tank,Inter Monitoring/Second Containment
Pipe Realease Detection:	Interstitial Monitoring Double Walled Piping,Interstitial Monitoring/Second Containment
Piping Material:	Secondary Containment
Piping Type:	Gravity Fed?,Suction: No Valve At Tank
Construction Material:	Double Walled,Fiberglass Reinforced plastic
Impressed Device:	No

B10
NW
1/8-1/4
0.189 mi.
999 ft.

5555 CONNER AVE. AND 11457 SCHOEMAKER
DETROIT, MI 48213

Site 5 of 5 in cluster B

MI BEA S105768292
N/A

Relative:
Higher

Actual:
605 ft.

BEA:

Secondary Address:	Not reported
BEA Number:	1309
District:	Southeast MI
Date Received:	03/02/2001
Submitter Name:	Samaritan
Petition Determination:	Affirmed
Petition Disclosure:	1
Category:	Different Hazardous Substance(s)
Determination 20107A:	No Request
Reviewer:	novake
Division Assigned:	Environmental Response Division

11
ESE
1/8-1/4
0.219 mi.
1156 ft.

WARREN CONNER SERVICE
12200 E WARREN AVE
DETROIT, MI

EDR US Hist Auto Stat 1009485987
N/A

Relative:
Higher

Actual:
600 ft.

EDR Historical Auto Stations:

Name:	WARREN-CONNER SUPER SERVICE
Year:	1940
Type:	GASOLINE AND OIL SERVICE STATIONS
Name:	WARREN CONNER SERVICE
Year:	1954
Type:	GASOLINE STATIONS
Name:	WARREN CONNER SERVICE
Year:	1964
Type:	GASOLINE STATIONS

12
SW
1/8-1/4
0.220 mi.
1160 ft.

CHRYSLER GROUP LLC
11570 E WARREN AVE
DETROIT, MI 48214

RCRA-SQG **1001968377**
US AIRS **MIR000028530**

Relative:
Higher

Actual:
601 ft.

RCRA-SQG:

Date form received by agency:	05/06/2013
Facility name:	CHRYSLER GROUP LLC
Facility address:	11570 E WARREN AVE DETROIT, MI 48214
EPA ID:	MIR000028530
Contact:	TAMARR HAMILTON
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(313) 252-6147
Contact email:	TT31@CHRYSLER.COM
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHRYSLER GROUP LLC
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	06/10/2009
Owner/Op end date:	Not reported

Owner/operator name:	CHRYSLER GROUP LLC
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	06/10/2009
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No

CHRYSLER GROUP LLC (Continued) **1001968377**

User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 06/11/2012
Facility name: CHRYSLER GROUP LLC
Classification: Small Quantity Generator

Date form received by agency: 04/12/2011
Facility name: CHRYSLER GROUP LLC
Classification: Small Quantity Generator

Date form received by agency: 03/22/2010
Facility name: CHRYSLER GROUP LLC
Classification: Small Quantity Generator

Date form received by agency: 07/02/2009
Facility name: CHRYSLER GROUP LLC
Classification: Small Quantity Generator

Date form received by agency: 03/24/2009
Facility name: CHRYSLER GROUP LLC
Classification: Small Quantity Generator

Date form received by agency: 04/21/2008
Facility name: CHRYSLER GROUP LLC
Classification: Small Quantity Generator

Date form received by agency: 11/02/2007
Facility name: CHRYSLER GROUP LLC
Classification: Small Quantity Generator

Date form received by agency: 04/11/2007
Facility name: CHRYSLER GROUP LLC
Classification: Small Quantity Generator

Date form received by agency: 04/26/2006
Facility name: CHRYSLER GROUP LLC
Classification: Small Quantity Generator

Date form received by agency: 04/25/2005
Facility name: CHRYSLER GROUP LLC
Classification: Small Quantity Generator

Date form received by agency: 02/24/2004
Facility name: CHRYSLER GROUP LLC
Classification: Small Quantity Generator

Date form received by agency: 04/17/2003
Facility name: CHRYSLER GROUP LLC
Classification: Small Quantity Generator

Date form received by agency: 08/13/2002
Facility name: CHRYSLER GROUP LLC

CHRYSLER GROUP LLC (Continued) **1001968377**

Classification: Small Quantity Generator

Date form received by agency: 01/23/2001
Facility name: CHRYSLER GROUP LLC
Classification: Small Quantity Generator

Date form received by agency: 11/12/1997
Facility name: CHRYSLER GROUP LLC
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

AIRS (AFS):

Compliance and Violation Data Major Sources:
EPA plant ID: 110009395207
Plant name: CHRYSLER MACK AVE
Plant address: 11570 WARREN E
DETROIT, MI 48214
County: WAYNE
Region code: 05
Dunn & Bradst #: Not reported
Air quality cntrl region: 123
Sic code: 3711
Sic code desc: MOTOR VEHICLES AND CAR BODIES
North Am. industrial classf: 333618
NAIC code description: Other Engine Equipment Manufacturing
Default compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Default classification: POTENTIAL EMISSIONS ARE BELOW ALL APPLICABLE MAJOR SOURCE THRESHOLDS IF AND ONLY IF THE SOURCE COMPLIES WITH FEDERALLY ENFORCEABLE REGULATIONS OR LIMITATIONS.
Govt facility: ALL OTHER FACILITIES NOT OWNED OR OPERATED BY A FEDERAL, STATE, OR LOCAL GOVERNMENT
Current HPV: Not reported

Compliance and Enforcement Major Issues:
Air program: SIP SOURCE
National action type: MULTI MEDIA INSPECTION - LEVEL 2 OR GREATER
Date achieved: 001127
Penalty amount: 000000000

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 020826
Penalty amount: Not reported

CHRYSLER GROUP LLC (Continued) **1001968377**

Air program: Not reported
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 020826
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 040624
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 070425
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 090930
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 090930
Penalty amount: Not reported

Air program: Not reported
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 090930
Penalty amount: Not reported

Air program: Not reported
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 090930
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 130411
Penalty amount: Not reported

Air program: Not reported
National action type: STATE CONDUCTED PCE/ ON-SITE
Date achieved: 130411
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 130501
Penalty amount: Not reported

Air program: Not reported
National action type: STATE CONDUCTED FCE / ON-SITE
Date achieved: 130501
Penalty amount: Not reported

Air program: SIP SOURCE
National action type: MULTI MEDIA INSPECTION - LEVEL 2 OR GREATER

CHRYSLER GROUP LLC (Continued) 1001968377

Date achieved: 980813
Penalty amount: 000000000

Air program: SIP SOURCE
National action type: MULTI MEDIA INSPECTION - LEVEL 2 OR GREATER
Date achieved: 990518
Penalty amount: 000000000

Historical Compliance Minor Sources:
State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1004
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1101
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1102
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1103
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1104
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1104
Air prog code hist file: TITLE V PERMITS

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1201
Air prog code hist file: TITLE V PERMITS

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1202
Air prog code hist file: TITLE V PERMITS

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1203
Air prog code hist file: Not reported

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1204
Air prog code hist file: Not reported

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1301
Air prog code hist file: Not reported

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1302
Air prog code hist file: Not reported

CHRYSLER GROUP LLC (Continued) **1001968377**

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1303
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1004
Air prog code hist file: Not reported

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1101
Air prog code hist file: Not reported

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1101
Air prog code hist file: TITLE V PERMITS

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1102
Air prog code hist file: Not reported

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1102
Air prog code hist file: TITLE V PERMITS

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1103
Air prog code hist file: Not reported

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1103
Air prog code hist file: TITLE V PERMITS

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1104
Air prog code hist file: Not reported

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1201
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1201
Air prog code hist file: Not reported

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1202
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1202
Air prog code hist file: Not reported

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date: 1203
Air prog code hist file: SIP SOURCE

State compliance status: IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS

CHRYSLER GROUP LLC (Continued) **1001968377**

Hist compliance date:	1203
Air prog code hist file:	TITLE V PERMITS
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1204
Air prog code hist file:	SIP SOURCE
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1204
Air prog code hist file:	TITLE V PERMITS
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1301
Air prog code hist file:	SIP SOURCE
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1301
Air prog code hist file:	TITLE V PERMITS
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1302
Air prog code hist file:	SIP SOURCE
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1302
Air prog code hist file:	TITLE V PERMITS
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1303
Air prog code hist file:	Not reported
State compliance status:	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS
Hist compliance date:	1303
Air prog code hist file:	TITLE V PERMITS

13
NW
1/8-1/4
0.229 mi.
1209 ft.

BOB S SUNOCO SERVICE
5581 CONNER AVE
DETROIT, MI

EDR US Hist Auto Stat **1009493293**
N/A

Relative:
Higher

Actual:
605 ft.

EDR Historical Auto Stations:

Name:	BOB S SUNOCO SERVICE
Year:	1964
Type:	GASOLINE STATIONS

14
ESE
1/4-1/2
0.273 mi.
1441 ft.

GALLARY AT WARREN CONNER
4899 CONNER STREET
DETROIT, MI 48228

MI BEA **S113828160**
N/A

Relative:
Lower

Actual:
596 ft.

BEA:

Secondary Address:	Not reported
BEA Number:	5669
District:	Southeast MI
Date Received:	08/09/2012
Submitter Name:	LBUBS 2007-C1 Conner Retail, LLC
Petition Determination:	No Request
Petition Disclosure:	0
Category:	Not reported
Determination 20107A:	No Request
Reviewer:	scheelsj
Division Assigned:	RRD

15
SW
1/4-1/2
0.299 mi.
1577 ft.

PRICES USED CARS
11409 E WARREN AVE
DETROIT, MI 48214

MI LUST **U000266731**
MI UST **N/A**
MI WDS
MI RGA LUST

Relative:
Higher

Actual:
602 ft.

LUST:

Facility ID:	00033505
Source:	STATE OF MICHIGAN
Owner Name:	Prices Used Cars
Owner Address:	11409 E Warren Ave
Owner City,St,Zip:	Detroit, MI 48214-1662
Owner Contact:	Not reported
Owner Phone:	(313) 921-1700
Country:	USA
District:	SE Michigan District Office
Site Name:	Price Used Cars And Parts
Latitude:	42.38733
Longitude:	-82.98388
Date of Collection:	01/11/2001
Method of Collection:	Address Matching-House Number
Accuracy:	100
Accuracy Value Unit:	FEET
Horizontal Data:	NAD83
Point Line Area:	POINT
Desc Category:	Plant Entrance (Freight)
Leak Number:	C-1175-91
Release Date:	06/11/1991
Substance Released:	Unknown
Release Status:	Open
Release Closed Date:	Not reported

UST:

Facility ID:	00033505
Facility Type:	CLOSED
Owner Name:	PRICES USED CARS
Owner Address:	11409 E WARREN AVE
Owner City,St,Zip:	DETROIT, MI 48214-1662
Owner Country:	USA
Owner Contact:	Not reported

PRICES USED CARS (Continued) **U000266731**

Owner Phone:	(313) 921-1700
Contact:	PRICES USED CARS
Contact Phone:	(313) 921-1700
Date of Collection:	01/11/2001
Accuracy:	100
Accuracy Value Unit:	FEET
Horizontal Datum:	NAD83
Source:	STATE OF MICHIGAN
Point Line Area:	POINT
Desc Category:	Plant Entrance (Freight)
Method of Collection:	Address Matching-House Number
Latitude:	42.38733
Longitude:	-82.98388

Tank ID:	1
Tank Status:	**Removed from Ground**
Capacity:	60000
Product:	Gasoline
Install Date:	11/24/1950
Remove Date:	12/16/1989
Tank Release Detection:	Not reported
Pipe Realease Detection:	Not reported
Piping Material:	Unknown
Piping Type:	Not reported
Construction Material:	Asphalt Coated or Bare Steel
Impressed Device:	No

Tank ID:	2
Tank Status:	**Removed from Ground**
Capacity:	60000
Product:	Gasoline
Install Date:	11/24/1950
Remove Date:	12/16/1989
Tank Release Detection:	Not reported
Pipe Realease Detection:	Not reported
Piping Material:	Unknown
Piping Type:	Not reported
Construction Material:	Asphalt Coated or Bare Steel
Impressed Device:	No

Tank ID:	3
Tank Status:	**Removed from Ground**
Capacity:	60000
Product:	Gasoline
Install Date:	11/24/1950
Remove Date:	12/16/1989
Tank Release Detection:	Not reported
Pipe Realease Detection:	Not reported
Piping Material:	Unknown
Piping Type:	Not reported
Construction Material:	Asphalt Coated or Bare Steel
Impressed Device:	No

WDS:
Site Id: MIG000054476

PRICES USED CARS (Continued) **U000266731**

WMD Id: 436535
Site Specific Name: PRICE USED CARS
Mailing Address: 11409 E WARREN AVE
Mailing City/State/Zip: 48214
Mailing County: WAYNE

RGA LUST:

2012	PRICES USED CARS	11409 E WARREN AVE
2011	PRICES USED CARS	11409 E WARREN AVE
2010	PRICES USED CARS	11409 E WARREN AVE
2009	PRICES USED CARS	11409 E WARREN AVE
2008	PRICES USED CARS	11409 E WARREN AVE
2007	PRICES USED CARS	11409 E WARREN AVE
2006	PRICES USED CARS	11409 E WARREN AVE
2005	PRICES USED CARS	11409 E WARREN AVE
2004	PRICES USED CARS	11409 E WARREN AVE
2003	PRICES USED CARS	11409 E WARREN AVE
2001	PRICES USED CARS	11409 E WARREN

16
WSW
1/4-1/2
0.310 mi.
1637 ft.

DDOT SHOEMAKER GARAGE
5149 ST JEAN AVE
DETROIT, MI 48207

MI LUST **U004159125**
MI UST **N/A**
MI RGA LUST

Relative:
Higher

Actual:
600 ft.

LUST:

Facility ID: 00013466
Source: STATE OF MICHIGAN
Owner Name: Detroit Dept of Transportation
Owner Address: 1301 E Warren Ave
Owner City,St,Zip: Detroit, MI 48207
Owner Contact: Accounting Division
Owner Phone: (313) 833-3000
Country: USA
District: SE Michigan District Office
Site Name: Dept Of Transportation
Latitude: 42.38912
Longitude: -82.98553
Date of Collection: 01/11/2001
Method of Collection: Address Matching-House Number
Accuracy: 100
Accuracy Value Unit: FEET
Horizontal Data: NAD83
Point Line Area: POINT
Desc Category: Plant Entrance (Freight)

Leak Number: C-0023-03
Release Date: 01/28/2003
Substance Released: Diesel
Release Status: Open
Release Closed Date: Not reported

Leak Number: C-0111-02
Release Date: 03/04/2002
Substance Released: Diesel
Release Status: Open
Release Closed Date: Not reported

DDOT SHOEMAKER GARAGE (Continued) **U004159125**

Leak Number: C-0617-02
Release Date: 11/12/2002
Substance Released: Used Oil
Release Status: Open
Release Closed Date: Not reported

Leak Number: C-0995-00
Release Date: 12/13/2000
Substance Released: Unknown
Release Status: Open
Release Closed Date: Not reported

Leak Number: C-1310-99
Release Date: 12/15/1999
Substance Released: Unknown
Release Status: Open
Release Closed Date: Not reported

Leak Number: C-1324-01
Release Date: 10/19/2001
Substance Released: Diesel
Release Status: Open
Release Closed Date: Not reported

UST:
Facility ID: 00013466
Facility Type: ACTIVE
Owner Name: DETROIT DEPT OF TRANSPORTATION
Owner Address: 1301 E WARREN AVE
Owner City,St,Zip: DETROIT, MI 48207
Owner Country: USA
Owner Contact: Accounting Division
Owner Phone: (313) 833-3000
Contact: Boris Timarac
Contact Phone: (313) 320-1381
Date of Collection: 01/11/2001
Accuracy: 100
Accuracy Value Unit: FEET
Horizontal Datum: NAD83
Source: STATE OF MICHIGAN
Point Line Area: POINT
Desc Category: Plant Entrance (Freight)
Method of Collection: Address Matching-House Number
Latitude: 42.38912
Longitude: -82.98553

Tank ID: 1
Tank Status: Removed from Ground
Capacity: 25000
Product: Diesel
Install Date: 05/06/1979
Remove Date: 03/21/2003
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Fiberglass reinforced plastic
Piping Type: Not reported
Construction Material: Cathodically Protected Steel
Impressed Device: No

DDOT SHOEMAKER GARAGE (Continued) **U004159125**

Tank ID: 2
Tank Status: Removed from Ground
Capacity: 25000
Product: Diesel
Install Date: 05/06/1979
Remove Date: 03/21/2003
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Fiberglass reinforced plastic
Piping Type: Not reported
Construction Material: Cathodically Protected Steel
Impressed Device: No

Tank ID: 3
Tank Status: Removed from Ground
Capacity: 25000
Product: Diesel
Install Date: 05/06/1979
Remove Date: 03/21/2003
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Fiberglass reinforced plastic
Piping Type: Not reported
Construction Material: Cathodically Protected Steel
Impressed Device: No

Tank ID: 4
Tank Status: Closed in Ground
Capacity: 25000
Product: Diesel
Install Date: 05/06/1979
Remove Date: 03/21/2003
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Fiberglass reinforced plastic
Piping Type: Not reported
Construction Material: Cathodically Protected Steel
Impressed Device: No

Tank ID: 5
Tank Status: Removed from Ground
Capacity: 12000
Product: Gasoline
Install Date: 05/06/1979
Remove Date: 03/21/2003
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Fiberglass reinforced plastic
Piping Type: Not reported
Construction Material: Cathodically Protected Steel
Impressed Device: No

Tank ID: 6

DDOT SHOEMAKER GARAGE (Continued) U004159125

Tank Status:	**Removed from Ground**
Capacity:	2500
Product:	ANTI/FREEZE
Install Date:	05/06/1979
Remove Date:	03/21/2003
Tank Release Detection:	Not reported
Pipe Realease Detection:	Not reported
Piping Material:	Fiberglass reinforced plastic
Piping Type:	Suction: No Valve At Tank
Construction Material:	Fiberglass Reinforced plastic
Impressed Device:	No

Tank ID:	7
Tank Status:	**Removed from Ground**
Capacity:	10000
Product:	TRANS OIL
Install Date:	05/06/1979
Remove Date:	03/21/2003
Tank Release Detection:	Not reported
Pipe Realease Detection:	Not reported
Piping Material:	Fiberglass reinforced plastic
Piping Type:	Not reported
Construction Material:	Cathodically Protected Steel
Impressed Device:	No

Tank ID:	8
Tank Status:	**Removed from Ground**
Capacity:	10000
Product:	ENGINE OIL
Install Date:	05/06/1979
Remove Date:	03/21/2003
Tank Release Detection:	Not reported
Pipe Realease Detection:	Not reported
Piping Material:	Fiberglass reinforced plastic
Piping Type:	Not reported
Construction Material:	Cathodically Protected Steel
Impressed Device:	No

Tank ID:	9
Tank Status:	**Removed from Ground**
Capacity:	5000
Product:	Used Oil
Install Date:	05/06/1979
Remove Date:	11/12/2002
Tank Release Detection:	Not reported
Pipe Realease Detection:	Not reported
Piping Material:	Bare Steel
Piping Type:	Not reported
Construction Material:	Cathodically Protected Steel
Impressed Device:	No

Tank ID:	10
Tank Status:	**Removed from Ground**

DDOT SHOEMAKER GARAGE (Continued) **U004159125**

Capacity:	10000
Product:	Gasoline
Install Date:	01/01/1946
Remove Date:	12/16/1999
Tank Release Detection:	Not reported
Pipe Realease Detection:	Not reported
Piping Material:	Bare Steel
Piping Type:	Not reported
Construction Material:	Asphalt Coated or Bare Steel
Impressed Device:	No

Tank ID:	11
Tank Status:	**Removed from Ground**
Capacity:	10000
Product:	Gasoline
Install Date:	01/01/1946
Remove Date:	12/16/1999
Tank Release Detection:	Not reported
Pipe Realease Detection:	Not reported
Piping Material:	Bare Steel
Piping Type:	Not reported
Construction Material:	Asphalt Coated or Bare Steel
Impressed Device:	No

Tank ID:	14
Tank Status:	**Removed from Ground**
Capacity:	1000
Product:	WATER
Install Date:	01/01/1946
Remove Date:	12/16/1999
Tank Release Detection:	Not reported
Pipe Realease Detection:	Not reported
Piping Material:	Bare Steel
Piping Type:	Not reported
Construction Material:	Asphalt Coated or Bare Steel
Impressed Device:	No

Tank ID:	15
Tank Status:	**Currently In Use**
Capacity:	550
Product:	Diesel
Install Date:	01/01/1980
Remove Date:	Not reported
Tank Release Detection:	Manual Tank Gauging, Tank Tightness Testing, Inventory Control, Automatic Tank Gauging, Interstitial Monitoring Double Walled Tank
Pipe Realease Detection:	Automatic Line Leak Detectors, Interstitial Monitoring Double Walled Piping, Interstitial Monitoring/Second Containment, Line Tightness Testing
Piping Material:	Fiberglass Reinforced Plastic, Double Walled
Piping Type:	Pressure
Construction Material:	Composite (Steel with Fiberglass), Double Walled
Impressed Device:	No

DDOT SHOEMAKER GARAGE (Continued) **U004159125**

Tank ID: 16
Tank Status: **Currently In Use**
Capacity: 25000
Product: Diesel
Install Date: 01/01/2003
Remove Date: Not reported
Tank Release Detection: Manual Tank Gauging, Tank Tightness Testing, Inventory Control, Automatic Tank Gauging, Interstitial Monitoring Double Walled Tank
Pipe Realease Detection: Automatic Line Leak Detectors, Interstitial Monitoring Double Walled Piping, Interstitial Monitoring/Second Containment, Line Tightness Testing
Piping Material: Fiberglass Reinforced Plastic, Double Walled
Piping Type: Pressure
Construction Material: Composite (Steel with Fiberglass), Double Walled
Impressed Device: No

Tank ID: 17
Tank Status: **Currently In Use**
Capacity: 25000
Product: Diesel
Install Date: 01/01/2003
Remove Date: Not reported
Tank Release Detection: Automatic Tank Gauging, Interstitial Monitoring Double Walled Tank
Pipe Realease Detection: Automatic Line Leak Detectors, Interstitial Monitoring Double Walled Piping
Piping Material: Fiberglass Reinforced Plastic
Piping Type: Pressure
Construction Material: Composite (Steel with Fiberglass)
Impressed Device: No

Tank ID: 18
Tank Status: **Currently In Use**
Capacity: 25000
Product: Diesel
Install Date: 01/01/2003
Remove Date: Not reported
Tank Release Detection: Manual Tank Gauging, Tank Tightness Testing, Inventory Control, Automatic Tank Gauging, Interstitial Monitoring Double Walled Tank
Pipe Realease Detection: Automatic Line Leak Detectors, Interstitial Monitoring Double Walled Piping, Interstitial Monitoring/Second Containment, Line Tightness Testing
Piping Material: Fiberglass Reinforced Plastic, Double Walled
Piping Type: Pressure
Construction Material: Fiberglass Reinforced Plastic, Double Walled
Impressed Device: No

Tank ID: 19
Tank Status: **Currently In Use**
Capacity: 25000
Product: Diesel
Install Date: 01/01/2003
Remove Date: Not reported
Tank Release Detection: Manual Tank Gauging, Tank Tightness Testing, Inventory Control, Automatic Tank Gauging, Interstitial Monitoring Double Walled Tank

DDOT SHOEMAKER GARAGE (Continued) **U004159125**

Pipe Realease Detection: Automatic Line Leak Detectors, Interstitial Monitoring Double Walled Piping, Interstitial Monitoring/Second Containment, Line Tightness Testing
Piping Material: Fiberglass Reinforced Plastic, Double Walled
Piping Type: Pressure
Construction Material: Composite (Steel with Fiberglass), Double Walled
Impressed Device: No

Tank ID: 20
Tank Status: Currently In Use
Capacity: 12000
Product: Gasoline
Install Date: 01/01/2003
Remove Date: Not reported
Tank Release Detection: Manual Tank Gauging, Tank Tightness Testing, Inventory Control, Automatic Tank Gauging, Interstitial Monitoring Double Walled Tank
Pipe Realease Detection: method allowed by BFS, Automatic Line Leak Detectors, Interstitial Monitoring Double Walled Piping, Interstitial Monitoring/Second Containment, Line Tightness Testing
Piping Material: Fiberglass Reinforced Plastic, Double Walled
Piping Type: Pressure
Construction Material: Composite (Steel with Fiberglass), Double Walled
Impressed Device: No

Tank ID: 21
Tank Status: Currently In Use
Capacity: 25000
Product: Diesel
Install Date: 05/09/2009
Remove Date: Not reported
Tank Release Detection: Manual Tank Gauging, Tank Tightness Testing, Inventory Control, Automatic Tank Gauging, Interstitial Monitoring Double Walled Tank
Pipe Realease Detection: Automatic Line Leak Detectors, Interstitial Monitoring Double Walled Piping, Interstitial Monitoring/Second Containment, Line Tightness Testing
Piping Material: Fiberglass Reinforced Plastic, Double Walled
Piping Type: Pressure
Construction Material: Fiberglass Reinforced Plastic
Impressed Device: No

Tank ID: 22
Tank Status: Currently In Use
Capacity: 10000
Product: Diesel
Install Date: 10/24/2011
Remove Date: Not reported
Tank Release Detection: Automatic Tank Gauging, Interstitial Monitoring Double Walled Tank
Pipe Realease Detection: Automatic Line Leak Detectors, Interstitial Monitoring Double Walled Piping
Piping Material: Fiberglass Reinforced Plastic
Piping Type: Pressure
Construction Material: Fiberglass Reinforced Plastic
Impressed Device: No

DDOT SHOEMAKER GARAGE (Continued) **U004159125**

RGA LUST:

2012	DDOT SHOEMAKER GARAGE	5149 ST JEAN AVE
2011	DEPT OF TRANSPORTATION	5149 ST JEAN AVE
2010	DEPT OF TRANSPORTATION	5149 ST JEAN AVE

C17 **HURRICANE INDUSTRIES LLC** **MI LUST** **U000268646**
WNW **5640 ST JEAN AVE** **MI UST** **N/A**
1/4-1/2 **DETROIT, MI 48213** **MI AIRS**
0.403 mi. **MI RGA LUST**
2129 ft. **Site 1 of 2 in cluster C**

Relative:
Higher

Actual:
600 ft.

LUST:

Facility ID:	00034880
Source:	STATE OF MICHIGAN
Owner Name:	Hurricane Industries LLC
Owner Address:	5640 St Jean Ave
Owner City,St,Zip:	Detroit, MI 48213
Owner Contact:	Not reported
Owner Phone:	(313) 361-1000
Country:	USA
District:	SE Michigan District Office
Site Name:	City Wide Transportation
Latitude:	42.39343
Longitude:	-82.98793
Date of Collection:	01/11/2001
Method of Collection:	Address Matching-House Number
Accuracy:	100
Accuracy Value Unit:	FEET
Horizontal Data:	NAD83
Point Line Area:	POINT
Desc Category:	Plant Entrance (Freight)
Leak Number:	C-1368-92
Release Date:	08/13/1992
Substance Released:	Diesel
Release Status:	Closed
Release Closed Date:	12/14/1992

UST:

Facility ID:	00034880
Facility Type:	ACTIVE
Owner Name:	HURRICANE INDUSTRIES LLC
Owner Address:	5640 ST JEAN AVE
Owner City,St,Zip:	DETROIT, MI 48213
Owner Country:	USA
Owner Contact:	Not reported
Owner Phone:	(313) 361-1000
Contact:	Robert Nast
Contact Phone:	(313) 361-1000
Date of Collection:	01/11/2001
Accuracy:	100
Accuracy Value Unit:	FEET
Horizontal Datum:	NAD83
Source:	STATE OF MICHIGAN
Point Line Area:	POINT
Desc Category:	Plant Entrance (Freight)
Method of Collection:	Address Matching-House Number
Latitude:	42.39343
Longitude:	-82.98793

HURRICANE INDUSTRIES LLC (Continued) **U000268646**

Tank ID:	1
Tank Status:	**Removed from Ground**
Capacity:	10000
Product:	Gasoline
Install Date:	Not reported
Remove Date:	08/01/1992
Tank Release Detection:	Not reported
Pipe Realease Detection:	Not reported
Piping Material:	Bare Steel
Piping Type:	Suction: No Valve At Tank
Construction Material:	Asphalt Coated or Bare Steel
Impressed Device:	No

Tank ID:	2
Tank Status:	**Temporarily out of Use**
Capacity:	10000
Product:	Diesel
Install Date:	08/30/1992
Remove Date:	Not reported
Tank Release Detection:	Inventory Control, Automatic Tank Gauging, Interstitial Monitoring Double Walled Tank
Pipe Realease Detection:	Automatic Line Leak Detectors, Interstitial Monitoring Double Walled Piping
Piping Material:	Fiberglass Reinforced Plastic, Double Walled
Piping Type:	Pressure
Construction Material:	Composite (Steel with Fiberglass), Double Walled
Impressed Device:	No

Tank ID:	3
Tank Status:	**Temporarily out of Use**
Capacity:	6000
Product:	Gasoline
Install Date:	08/30/1992
Remove Date:	Not reported
Tank Release Detection:	Inventory Control, Automatic Tank Gauging, Interstitial Monitoring Double Walled Tank
Pipe Realease Detection:	Automatic Line Leak Detectors, Interstitial Monitoring Double Walled Piping
Piping Material:	Fiberglass Reinforced Plastic, Double Walled
Piping Type:	Pressure
Construction Material:	Composite (Steel with Fiberglass), Double Walled
Impressed Device:	No

AIRS:

EI Year:	1994
State Registration Number:	K8640
Naics Code:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
Contact Address:	Not reported
Contact City,St,Zip:	Not reported
Permit Number:	Not reported
Date Received:	Not reported
State Registration Number:	K8640
Country:	Not reported

HURRICANE INDUSTRIES LLC (Continued) **U000268646**

Application Reason:	Not reported
Record Type:	Not reported
State County FIPS:	Not reported
Facility Category:	Not reported
SIC Primary:	4811
Tribal Code:	Not reported
Supplemental Location Text:	Not reported
Dun & Brad Street Number:	Not reported
Business Name:	MICHIGAN BELL TELEPHONE CO
Principal Product:	Not reported
Principal Product Description:	GARAGE
UTM Zone (Geo Coordinates Universal Transverse Mercator System):	17
UTM Horizontal Coord:	Not reported
UTM Vertical Coord:	Not reported
Mailing Name:	Not reported
Mailing Contact Person:	Not reported
Mailing Street:	Not reported
Mailing City:	Not reported
Mailing State:	Not reported
Mailing Zip:	Not reported
Mailing Zip 4 Extension:	Not reported
Compliance Person:	R H BECKER
Compliance Area Code:	313
Compliance Phone Number:	1000000
Emission Inventory Contact Person:	R H BECKER
EI Contact Area Code:	313
EI Contact Phone Number:	1000000
Permit Contact Person:	R H BECKER
Permit Contact Person Area Code:	313
Permit Contact Person Phone Number:	1000000
Federal Employer Id Number:	0
# Of Employees:	0
Reporting Year:	1995
Date Record Was Created:	Not reported

RGA LUST:

2012	HURRICANE INDUSTRIES LLC	5640 ST JEAN AVE
2011	HURRICANE INDUSTRIES LLC	5640 ST JEAN AVE
2010	HURRICANE INDUSTRIES LLC	5640 ST JEAN AVE
2009	HURRICANE INDUSTRIES LLC	5640 ST JEAN AVE
2008	HURRICANE INDUSTRIES LLC	5640 ST JEAN AVE
2001	CITY WIDE TRANSPORTATION INC	5640 ST JEAN
2000	CITY WIDE TRANSPORTATION INC	5640 ST JEAN

C18 **ST JEAN 5664 BURIED DRUMS** **MI SHWS S105144835**
WNW **5664 ST. JEAN** **MI RGA HWS N/A**
1/4-1/2 **DETROIT, MI 48237**
0.418 mi.
2208 ft. **Site 2 of 2 in cluster C**

Relative:
Higher

Actual:
600 ft.

SHWS:

Facility ID:	82001497
Facility Status:	**Interim Response in progress**
Source:	Electronic Equip & Components
SAM Score:	31
SAM Score Date:	08/18/1993
Township:	01S
Range:	12E

ST JEAN 5664 BURIED DRUMS (Continued) **S105144835**

Section: 23
Quarter: SE
Quarter/Quarter: SE
Pollutants: Anthracene; Chrysene; Fluoranthene

RGA HWS:

2012	ST JEAN 5664 BURIED DRUMS	5664 ST. JEAN
2011	ST JEAN 5664 BURIED DRUMS	5664 ST. JEAN
2010	ST JEAN 5664 BURIED DRUMS	5664 ST. JEAN
2009	ST JEAN 5664 BURIED DRUMS	5664 ST. JEAN
2008	ST JEAN 5664 BURIED DRUMS	5664 ST. JEAN
2007	ST JEAN 5664 BURIED DRUMS	5664 ST. JEAN
2006	ST JEAN 5664 BURIED DRUMS	5664 ST. JEAN
2005	ST JEAN 5664 BURIED DRUMS	5664 ST. JEAN
2004	ST JEAN 5664 BURIED DRUMS	5664 ST. JEAN
2003	ST JEAN 5664 BURIED DRUMS	5664 ST. JEAN
2002	ST JEAN 5664 BURIED DRUMS	5664 ST. JEAN
2001	ST JEAN 5664 BURIED DRUMS	5664 ST. JEAN
2000	ST JEAN 5664 BURIED DRUMS	5664 ST. JEAN
1999	ST JEAN 5664 BURIED DRUMS	5664 ST. JEAN
1998	ST JEAN 5664 BURIED DRUMS	5664 ST. JEAN
1997	ST JEAN 5664 BURIED DRUMS	5664 ST. JEAN
1996	ST JEAN 5664 BURIED DRUMS	5664 ST. JEAN
1995	ST JEAN 5664 BURIED DRUMS	5664 ST. JEAN
1994	ST JEAN 5664 BURIED DRUMS	5664 ST. JEAN
1993	ST JEAN 5664 BURIED DRUMS	5664 ST. JEAN

19
East
1/4-1/2
0.424 mi.
2238 ft.

Relative:
Higher

Actual:
600 ft.

WARREN E FUEL
12620 E WARREN
DETROIT, MI 48215

MI LUST **U003319733**
MI UST **N/A**
MI WDS
MI RGA LUST

LUST:

Facility ID:	00002295
Source:	STATE OF MICHIGAN
Owner Name:	Warren E Fuel Inc
Owner Address:	12620 E Warren Ave
Owner City,St,Zip:	Detroit, MI 48215
Owner Contact:	Not reported
Owner Phone:	(313) 331-2800
Country:	USA
District:	SE Michigan District Office
Site Name:	Max Gas Mart
Latitude:	42.39094
Longitude:	-82.97098
Date of Collection:	01/11/2001
Method of Collection:	Address Matching-House Number
Accuracy:	100
Accuracy Value Unit:	FEET
Horizontal Data:	NAD83
Point Line Area:	POINT
Desc Category:	Plant Entrance (Freight)
Leak Number:	C-0797-98
Release Date:	08/29/1998
Substance Released:	Gasoline
Release Status:	Open

WARREN E FUEL (Continued) **U003319733**

Release Closed Date: Not reported

UST:

Facility ID:	00002295
Facility Type:	ACTIVE
Owner Name:	WARREN E FUEL INC
Owner Address:	12620 E WARREN AVE
Owner City,St,Zip:	DETROIT, MI 48215
Owner Country:	USA
Owner Contact:	Not reported
Owner Phone:	(313) 331-2800
Contact:	Armin Shariff
Contact Phone:	(313) 657-3772
Date of Collection:	01/11/2001
Accuracy:	100
Accuracy Value Unit:	FEET
Horizontal Datum:	NAD83
Source:	STATE OF MICHIGAN
Point Line Area:	POINT
Desc Category:	Plant Entrance (Freight)
Method of Collection:	Address Matching-House Number
Latitude:	42.39094
Longitude:	-82.97098

Tank ID:	1
Tank Status:	**Removed from Ground**
Capacity:	10000
Product:	Gasoline
Install Date:	03/17/1981
Remove Date:	02/15/1999
Tank Release Detection:	Manual Tank Gauging
Pipe Realease Detection:	Automatic Line Leak Detectors
Piping Material:	Cathodically Protected,Galvanized Steel
Piping Type:	Pressure
Construction Material:	Cathodically Protected Steel
Impressed Device:	Yes

Tank ID:	2
Tank Status:	**Removed from Ground**
Capacity:	10000
Product:	Gasoline
Install Date:	03/17/1981
Remove Date:	02/15/1999
Tank Release Detection:	Manual Tank Gauging
Pipe Realease Detection:	Automatic Line Leak Detectors
Piping Material:	Cathodically Protected,Galvanized Steel
Piping Type:	Pressure
Construction Material:	Cathodically Protected Steel
Impressed Device:	Yes

Tank ID:	3
Tank Status:	**Removed from Ground**
Capacity:	4000
Product:	Gasoline
Install Date:	03/17/1985
Remove Date:	07/01/2013

WARREN E FUEL (Continued) **U003319733**

Tank Release Detection: Inventory Control, Automatic Tank Gauging
Pipe Realease Detection: Automatic Line Leak Detectors, Line Tightness Testing
Piping Material: Double Walled, Flexible Piping
Piping Type: Pressure
Construction Material: Cathodically Protected Steel
Impressed Device: Yes

Tank ID: 4
Tank Status: Removed from Ground
Capacity: 8000
Product: Gasoline
Install Date: Not reported
Remove Date: 07/09/2013
Tank Release Detection: Inventory Control, Automatic Tank Gauging
Pipe Realease Detection: Automatic Line Leak Detectors, Line Tightness Testing
Piping Material: Double Walled, Flexible Piping
Piping Type: Pressure
Construction Material: Cathodically Protected Steel
Impressed Device: Yes

Tank ID: 5
Tank Status: Currently In Use
Capacity: 10000
Product: UNK
Install Date: 02/15/1999
Remove Date: Not reported
Tank Release Detection: Inventory Control, Automatic Tank Gauging
Pipe Realease Detection: Automatic Line Leak Detectors, Line Tightness Testing
Piping Material: Double Walled, Flexible Piping
Piping Type: Pressure
Construction Material: Fiberglass Reinforced Plastic
Impressed Device: No

WDS:
Site Id: MIG000054767
WMD Id: 429418
Site Specific Name: CITGO PETROLEUM
Mailing Address: 12620 E WARREN AVE
Mailing City/State/Zip: 48215
Mailing County: WAYNE

RGA LUST:

2012	WARREN E FUEL	12620 E WARREN
2011	WARREN E FUEL	12620 E WARREN
2010	WARREN E FUEL	12620 E WARREN
2009	TEMP FUELS MANAGEMENT - E WARREN	12620 E WARREN
2001	MAX GAS	12620 E WARREN
2000	MAX GAS	12620 E WARREN
1999	MAX GAS	12620 E WARREN
1998	MAX GAS MART INC	12620 E WARREN

20
ESE
1/4-1/2
0.426 mi.
2248 ft.

CONNER-CHENE PROPERTIES LLC
4737 CONNER AVENUE
DETROIT, MI 48215

MI BEA **S109569534**
N/A

Relative:
Lower

Actual:
595 ft.

BEA:

Secondary Address:	Not reported
BEA Number:	4163
District:	Southeast MI
Date Received:	04/23/2009
Submitter Name:	Conner-Chene Properties LLC
Petition Determination:	No Request
Petition Disclosure:	0
Category:	No Hazardous Substance(s)
Determination 20107A:	No Request
Reviewer:	thorntop
Division Assigned:	RRD

21
SSE
1/4-1/2
0.429 mi.
2267 ft.

4749 (AKA 4705) CONNER AVENUE
4749 CONNER
DETROIT, MI 48214

MI BEA **S105966661**
N/A

Relative:
Lower

Actual:
598 ft.

BEA:

Secondary Address:	Not reported
BEA Number:	2128
District:	Southeast MI
Date Received:	09/11/2003
Submitter Name:	Wendy's International Inc.
Petition Determination:	No Request
Petition Disclosure:	0
Category:	No Hazardous Substance(s)
Determination 20107A:	No Request
Reviewer:	novake
Division Assigned:	Environmental Response Division

22
ESE
1/4-1/2
0.468 mi.
2472 ft.

SUPERAMERICA PROPERTY NO. 391
4700 CONNER
DETROIT, MI 48215

MI LUST **S101701839**
MI BEA **N/A**
MI WDS
MI RGA LUST

Relative:
Lower

Actual:
595 ft.

LUST:

Facility ID:	50001750
Source:	STATE OF MICHIGAN
Owner Name:	Nrt Owner
Owner Address:	Unknown
Owner City,St,Zip:	Unknown, MI 99999
Owner Contact:	Not reported
Owner Phone:	Not reported
Country:	USA
District:	SE Michigan District Office
Site Name:	Unocal Statuib (former)
Latitude:	42.38772
Longitude:	-82.97141
Date of Collection:	01/11/2001

SUPERAMERICA PROPERTY NO. 391 (Continued) **S101701839**

Method of Collection: Address Matching-House Number
Accuracy: 100
Accuracy Value Unit: FEET
Horizontal Data: NAD83
Point Line Area: POINT
Desc Category: Plant Entrance (Freight)

Leak Number: C-1455-85
Release Date: 01/01/1989
Substance Released: Not reported
Release Status: Open
Release Closed Date: Not reported

Leak Number: C-4064-85
Release Date: 07/07/1977
Substance Released: Not reported
Release Status: Closed
Release Closed Date: 05/17/1994

BEA:
Secondary Address: Not reported
BEA Number: 264
District: Southeast MI
Date Received: 02/07/1997
Submitter Name: MR. ROGERS CLARK
Petition Determination: No Request
Petition Disclosure: 0
Category: No Hazardous Substance(s)
Determination 20107A: No Request
Reviewer: temppm
Division Assigned: Storage Tank Division

Secondary Address: Not reported
BEA Number: 3911
District: Southeast MI
Date Received: 05/28/2008
Submitter Name: Conner Spin Cycle, LLC
Petition Determination: No Request
Petition Disclosure: 0
Category: No Hazardous Substance(s)
Determination 20107A: No Request
Reviewer: schlaufj
Division Assigned: Storage Tank Division

Secondary Address: Not reported
BEA Number: 3912
District: Southeast MI
Date Received: 05/28/2008
Submitter Name: CSC Holdings, LLC
Petition Determination: No Request
Petition Disclosure: 0
Category: No Hazardous Substance(s)
Determination 20107A: No Request
Reviewer: schlaufj
Division Assigned: Storage Tank Division

WDS:

SUPERAMERICA PROPERTY NO. 391 (Continued) **S101701839**

Site Id: MIG000034326
WMD Id: 446297
Site Specific Name: SUPERAMERICA
Mailing Address: 4700 CONNER ST
Mailing City/State/Zip: 48215
Mailing County: WAYNE

RGA LUST:

2012	SUPERAMERICA PROPERTY NO. 391	4700 CONNER
2011	SUPERAMERICA PROPERTY NO. 391	4700 CONNER
2010	SUPERAMERICA PROPERTY NO. 391	4700 CONNER
2009	SUPERAMERICA PROPERTY NO. 391	4700 CONNER
2008	SUPERAMERICA PROPERTY NO. 391	4700 CONNER
2007	SUPERAMERICA PROPERTY NO. 391	4700 CONNER
2006	SUPERAMERICA PROPERTY NO. 391	4700 CONNER
2005	SUPERAMERICA PROPERTY NO. 391	4700 CONNER
2004	SUPERAMERICA PROPERTY NO. 391	4700 CONNER
2003	SUPERAMERICA PROPERTY NO. 391	4700 CONNER
2001	SUPERAMERICA PROPERTY NO. 391	4700 CONNER
2000	SUPERAMERICA PROPERTY NO. 391	4700 CONNER
1999	SUPERAMERICA PROPERTY NO. 391	4700 CONNER
1998	SUPERAMERICA PROPERTY NO. 391	4700 CONNER
1997	SUPERAMERICA PROPERTY NO. 391	4700 CONNER

D23 **CITY OF DETROIT** **MI LUST** **U003975310**
West **11031 SHOEMAKER** **MI UST** **N/A**
1/4-1/2 **DETROIT, MI 48226** **MI RGA LUST**
0.494 mi.
2607 ft. **Site 1 of 4 in cluster D**

Relative:
Higher

Actual:
604 ft.

LUST:
Facility ID: 00041622
Source: STATE OF MICHIGAN
Owner Name: City of Detroit/Dept of Environmental Affairs
Owner Address: 660 Woodward Ave Suite 1800
Owner City,St,Zip: Detroit, MI 48226-3524
Owner Contact: Not reported
Owner Phone: (313) 471-5108
Country: USA
District: SE Michigan District Office
Site Name: City of Detroit /Former Federal-Mogul Facility
Latitude: 42.38947
Longitude: -82.98854
Date of Collection: Not reported
Method of Collection: Interpolation-Map
Accuracy: 15
Accuracy Value Unit: METERS
Horizontal Data: NAD83
Point Line Area: POINT
Desc Category: Not reported

Leak Number: C-0376-04
Release Date: 06/01/2005
Substance Released: Used Oil,Other,Other,Other,Other,Other,Other,Other,Other,Other
Release Status: Open
Release Closed Date: Not reported

UST:
Facility ID: 00041622

CITY OF DETROIT (Continued) **U003975310**

Facility Type:	CLOSED
Owner Name:	CITY OF DETROIT/DEPT OF ENVIRONMENTAL AFFAIRS
Owner Address:	660 WOODWARD AVE SUITE 1800
Owner City,St,Zip:	DETROIT, MI 48226-3524
Owner Country:	USA
Owner Contact:	Not reported
Owner Phone:	(313) 471-5108
Contact:	Mr Bruce King
Contact Phone:	(313) 471-5103
Date of Collection:	Not reported
Accuracy:	15
Accuracy Value Unit:	METERS
Horizontal Datum:	NAD83
Source:	STATE OF MICHIGAN
Point Line Area:	POINT
Desc Category:	Not reported
Method of Collection:	Interpolation-Map
Latitude:	42.38947
Longitude:	-82.98854

Tank ID:	1
Tank Status:	**Removed from Ground**
Capacity:	12000
Product:	Used Oil
Install Date:	01/01/1960
Remove Date:	06/06/2005
Tank Release Detection:	Not reported
Pipe Realease Detection:	Not reported
Piping Material:	Bare Steel
Piping Type:	Suction: Valve at Tank
Construction Material:	Unknown
Impressed Device:	No

Tank ID:	2
Tank Status:	**Removed from Ground**
Capacity:	12000
Product:	Hydraulic Oil
Install Date:	01/01/1960
Remove Date:	06/06/2005
Tank Release Detection:	Not reported
Pipe Realease Detection:	Not reported
Piping Material:	Unknown
Piping Type:	Not reported
Construction Material:	Asphalt Coated or Bare Steel
Impressed Device:	No

Tank ID:	3
Tank Status:	**Removed from Ground**
Capacity:	12000
Product:	Quench Oil
Install Date:	01/01/1960
Remove Date:	06/08/2005
Tank Release Detection:	Not reported
Pipe Realease Detection:	Not reported
Piping Material:	Unknown

CITY OF DETROIT (Continued) **U003975310**

Piping Type: Not reported
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

Tank ID: 4
Tank Status: Removed from Ground
Capacity: 12000
Product: Quench Oil
Install Date: 01/01/1960
Remove Date: 06/08/2005
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Unknown
Piping Type: Not reported
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

Tank ID: 5
Tank Status: Removed from Ground
Capacity: 12000
Product: Quench Oil
Install Date: 01/01/1960
Remove Date: 06/08/2005
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Unknown
Piping Type: Not reported
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

Tank ID: 6
Tank Status: Removed from Ground
Capacity: 12000
Product: Quench Oil
Install Date: 01/01/1960
Remove Date: 06/09/2005
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Unknown
Piping Type: Not reported
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

Tank ID: 7
Tank Status: Removed from Ground
Capacity: 12000
Product: Quench Oil
Install Date: 01/01/1960
Remove Date: 06/09/2005
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Unknown
Piping Type: Not reported

CITY OF DETROIT (Continued) **U003975310**

Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

Tank ID: 8
Tank Status: Removed from Ground
Capacity: 12000
Product: Quench Oil
Install Date: 01/01/1960
Remove Date: 06/13/2005
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Unknown
Piping Type: Not reported
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

Tank ID: 9
Tank Status: Removed from Ground
Capacity: 12000
Product: Honing Oil
Install Date: 01/01/1960
Remove Date: 06/13/2005
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Unknown
Piping Type: Not reported
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

Tank ID: 10
Tank Status: Removed from Ground
Capacity: 12000
Product: Not reported
Install Date: 01/01/1960
Remove Date: 06/13/2005
Tank Release Detection: Not reported
Pipe Realease Detection: Not reported
Piping Material: Unknown
Piping Type: Not reported
Construction Material: Asphalt Coated or Bare Steel
Impressed Device: No

RGA LUST:

2012	CITY OF DETROIT	11031 SHOEMAKER
2011	CITY OF DETROIT	11031 SHOEMAKER
2010	CITY OF DETROIT	11031 SHOEMAKER
2009	CITY OF DETROIT	11031 SHOEMAKER
2008	CITY OF DETROIT	11031 SHOEMAKER
2007	CITY OF DETROIT	11031 SHOEMAKER
2006	CITY OF DETROIT	11031 SHOEMAKER
2005	CITY OF DETROIT	11031 SHOEMAKER

D24
West
1/4-1/2
0.494 mi.
2607 ft.

CITY OF DETROIT
11031 SHOEMAKER ST
DETROIT, MI 48213

Site 2 of 4 in cluster D

MI AUL **S108417568**
MI BROWNFIELDS **N/A**
MI WDS

Relative:
Higher

Actual:
604 ft.

AUL:

Status:	Pending	
Site Name:	Not reported	
Property:	on-site	
Land Use Restriction Type:	RC	
Program Type:	Part 213	
Program Support Assigned User:	Not reported	
Program Support Assigned Date:	Not reported	
Legal Description Of Property:	Not reported	
Based On The Deq Ref #:	11421312009	
MDEQ Reference Number:	RC-RD-213-12-009	
Property Or Description Restricted Area:	Not reported	
Lead Division:	RD	
File Name Of Hyperlinked Legal Doc:	Not reported	
Mapped Polygons Area In Acres:	Not reported	
Mapped Polygons Area In Square Miles:	Not reported	
Date Data Entry Started:	Not reported	
Date Data Entry Finished:	Not reported	
Individual Or Staff Assoc With The Mapping:		Not reported
Program Used To Map Restricted Features:		Not reported
Map Comments:		Not reported
Comment:		January 24, 2012 consultant requested DEQ reference #.
Date Legal Paperwork Stamped/Filed/Register Of Deeds:		Not reported
Commercial I Land Use Restriction:	0	
Commercial Ii Land Use Restriction:	0	
Commercial Iii Land Use Restriction:	0	
Commercial Iv Land Use Restriction:	0	
Industrial Land Use Restriction:	0	
Residential Land Use Restriction:	0	
Recreational Land Use Restriction:	0	
Multiple Land-Use Restrictions:	0	
Site Specific Restrictions:	0	
Groundwater Consumption Restrictions:	0	
Groundwater Contact Restrictions:	0	
Special Well Construction Requirements:	0	
Special Building Restrictions:	0	
Excavation And Soil Movement Restrictions:		0
Soil Movement Requirements:		0
There Is A Restriction On All Construction:		0
Monitoring Well Protected, No Tampering Or Removal:		0
There Is An Exposure Barrier In Place:		0
There Is A Health And Safety Plan:		0
There Is A Permanent Marker On The Site:		0

BROWNFIELD:

Facility ID:	50005118
Region:	1
Status:	Not reported
Properry Use:	Not reported
Use at Time of Listing:	Not reported
BEA:	No
Ernie Id Number:	82001891

CITY OF DETROIT (Continued) **S108417568**

WDS:

Site Id:	MIG000022050
WMD Id:	452075
Site Specific Name:	CITY OF DETROIT
Mailing Address:	11031 SHOEMAKER ST
Mailing City/State/Zip:	48213
Mailing County:	WAYNE

D25 **FORMER FEDERAL MOGUL (CITY OF DETROIT)** **MI AUL** **S109846118**
West **11031 SHOEMAKER,** **N/A**
1/4-1/2 **DETROIT, MI 48213**
0.494 mi.
2607 ft. **Site 3 of 4 in cluster D**

Relative:
Higher

Actual:
604 ft.

AUL:

Status:	Pending	
Site Name:	Not reported	
Property:	11031 Shoemaker, Detroit	
Land Use Restriction Type:	NCA	
Program Type:	Part 213	
Program Support Assigned User:	Not reported	
Program Support Assigned Date:	Not reported	
Legal Description Of Property:	Not reported	
Based On The Deq Ref #:	12121308003	
MDEQ Reference Number:	NCA-RRD-213-08-003	
Property Or Description Restricted Area:	Not reported	
Lead Division:	RRD	
File Name Of Hyperlinked Legal Doc:	Not reported	
Mapped Polygons Area In Acres:	Not reported	
Mapped Polygons Area In Square Miles:	Not reported	
Date Data Entry Started:	Not reported	
Date Data Entry Finished:	Not reported	
Individual Or Staff Assoc With The Mapping:		Not reported
Program Used To Map Restricted Features:		Not reported
Map Comments:		Not reported
Comment:		3/5/08, QC requested reference number.
Date Legal Paperwork Stamped/Filed/Register Of Deeds:		Not reported
Commercial I Land Use Restriction:	0	
Commercial Ii Land Use Restriction:	0	
Commercial Iii Land Use Restriction:	0	
Commercial Iv Land Use Restriction:	0	
Industrial Land Use Restriction:	0	
Residential Land Use Restriction:	0	
Recreational Land Use Restriction:	0	
Multiple Land-Use Restrictions:	0	
Site Specific Restrictions:	0	
Groundwater Consumption Restrictions:	0	
Groundwater Contact Restrictions:	0	
Special Well Construction Requirements:	0	
Special Building Restrictions:	0	
Excavation And Soil Movement Restrictions:		0
Soil Movement Requirements:		0
There Is A Restriction On All Construction:		0
Monitoring Well Protected, No Tampering Or Removal:		0
There Is An Exposure Barrier In Place:		0
There Is A Health And Safety Plan:		0
There Is A Permanent Marker On The Site:		0

D26 West 1/4-1/2 0.494 mi. 2607 ft. **FEDERAL-MOGUL SITE**
11031 SHOEMAKER ST
DETROIT, MI 48213

Database(s): **CERCLIS**
EDR ID Number: **1015731346**
EPA ID Number: **MIN000510764**

Site 4 of 4 in cluster D

Relative: Higher

Actual: 604 ft.

CERCLIS:

Site ID:	0510764
EPA ID:	MIN000510764
Facility County:	WAYNE
Short Name:	FEDERAL-MOGUL SITE
Congressional District:	13
IFMS ID:	C5G8
SMSA Number:	Not reported
USGC Hydro Unit:	Not reported
Federal Facility:	Not a Federal Facility
DMNSN Number:	0.00000
Site Orphan Flag:	Not reported
RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	S
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	05
Classification:	Not reported
Site Settings Code:	Not reported
NPL Status:	Not on the NPL
DMNSN Unit Code:	Not reported
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	Referred to Removal - NFRAP
Non NPL Status Date:	06/19/13
Site Fips Code:	26163
CC Concurrence Date:	/ /
CC Concurrence FY:	Not reported
Alias EPA ID:	Not reported
Site FUDS Flag:	Not reported

CERCLIS Site Contact Name(s):

Contact ID:	5272313.00000
Contact Name:	BRIAN KELLY
Contact Tel:	(734) 692-7684
Contact Title:	On-Scene Coordinator (OSC)
Contact Email:	Not reported
Contact ID:	5271043.00000
Contact Name:	DON DE BLASIO
Contact Tel:	(312) 886-4360
Contact Title:	Community Involvement Coordinator
Contact Email:	Not reported

CERCLIS Site Alias Name(s):

Alias ID:	101
Alias Name:	FEDERAL MOGUL SITE
Alias Address:	11031 SHOEMAKER ST DETROIT, MI 482133167
Alias ID:	102

FEDERAL-MOGUL SITE (Continued) **1015731346**

Alias Name: FEDERAL- MOGUL SITE
Alias Address: 11031 SHOEMAKER ST
DETROIT, MI 482133167
Alias Comments: Not reported
Site Description: Formal petion for preliminary assessment describes improper disposal, storage or practices associated with contaminants including solvents and heavy metals among those listed are TCE and hex Chromium. Photographic evidence of discolored water to Rogue River Watershed contaminats may be leaching to watertable and surface water.

CERCLIS Assessment History:

Action Code: 001
Action: DISCOVERY
Date Started: / /
Date Completed: 05/23/11
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: PRE-CERCLIS SCREENING
Date Started: / /
Date Completed: 06/27/12
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: ISSUE REQUEST LETTERS (104E)
Date Started: / /
Date Completed: 11/28/12
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: PRELIMINARY ASSESSMENT
Date Started: 05/29/12
Date Completed: 05/22/13
Priority Level: Referred to Removal, no further Rmdl Asmt

FEDERAL-MOGUL SITE (Continued) **1015731346**

Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	REMOVAL
Date Started:	04/15/13
Date Completed:	08/05/13
Priority Level:	Stabilized
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Primary
Urgency Indicator:	Time Critical
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Click this hyperlink while viewing on your computer to access
55 additional US CERCLIS Financial: record(s) in the EDR Site Report.

27
ENE
1/2-1
0.992 mi.
5238 ft.

Relative:
Lower

Actual:
599 ft.

MI DEPT/NATURAL RESOURCES AND ENVIRONMENT
14241 E WARREN AVE
DETROIT, MI 48215

MI SHWS **S107136045**
MI LUST **N/A**
MI BROWNFIELDS
MI RGA HWS
MI RGA LUST
MI WDS

SHWS:

Facility ID:	82001832
Facility Status:	**See Leaking Underground Storage Tank Site Database**
Source:	Petroleum Products
SAM Score:	17
SAM Score Date:	11/13/2009
Township:	Not reported
Range:	Not reported
Section:	Not reported
Quarter:	Not reported
Quarter/Quarter:	Not reported
Pollutants:	Not reported

LUST:

Facility ID:	00033239
Source:	STATE OF MICHIGAN
Owner Name:	OWNER ADDRESS UNKNOWN
Owner Address:	Not Recorded
Owner City,St,Zip:	Not Recorded, XX 99999
Owner Contact:	Not reported
Owner Phone:	Not reported
Country:	USA
District:	SE Michigan District Office
Site Name:	Warren & Lakewood Service
Latitude:	42.39490
Longitude:	-82.96095
Date of Collection:	01/11/2001

MI DEPT/NATURAL RESOURCES AND ENVIRONMENT (Continued) **S107136045**

Method of Collection: Address Matching-House Number
Accuracy: 100
Accuracy Value Unit: FEET
Horizontal Data: NAD83
Point Line Area: POINT
Desc Category: Plant Entrance (Freight)

Leak Number: C-0166-07
Release Date: 05/31/2007
Substance Released: Used Oil,Gasoline,Gasoline,Gasoline
Release Status: Open
Release Closed Date: Not reported

BROWNFIELD:
Facility ID: 00033239
Region: 1
Status: Not reported
Properry Use: Not reported
Use at Time of Listing: Not reported
BEA: No
Ernie Id Number: 82001832

RGA HWS:

2012	WARREN & LAKEWOOD SERVICE	14241 E. WARREN AVENUE
2011	WARREN & LAKEWOOD SERVICE	14241 E. WARREN AVENUE
2010	WARREN & LAKEWOOD SERVICE	14241 E. WARREN AVENUE

RGA LUST:

2012	WARREN & LAKEWOOD SERVICE	14241 E WARREN AVE
2011	WARREN & LAKEWOOD SERVICE	14241 E WARREN AVE
2010	WARREN & LAKEWOOD SERVICE	14241 E WARREN AVE
2009	WARREN & LAKEWOOD SERVICE	14241 E WARREN AVE
2008	WARREN & LAKEWOOD SERVICE	14241 E WARREN AVE
2007	WARREN & LAKEWOOD SERVICE	14241 E WARREN AVE

WDS:
Site Id: MID000806240
WMD Id: 392803
Site Specific Name: WARREN & LAKEWOOD SUNOCO SVC STATION
Mailing Address: 2770 DONALD CT
Mailing City/State/Zip: 48092
Mailing County: MACOMB

ORPHAN SUMMARY

Site Name	Site Address	Zip	Database(s)
MI [illegible]/TRANSPORTATION	I 75 SB RMP OVER I 75 NB RAMP		RCRA NonGen / NLR, FINDS
MI TRANSPORTATION	I 75 EXIT RAMP OVER GR RIV AV		RCRA NonGen / NLR, FINDS
MI DEPT/TRANSPORTATION	I 75 RAMP TO DEQUINDRE		RCRA NonGen / NLR, FINDS
MI DEPT/TRANSPORTATION	I 75 UNDER DAVISON RAMP		RCRA NonGen / NLR, FINDS
MI DEPT/TRANSPORTATION	I 94 UNDER CONNER AVE NB & SB		RCRA NonGen / NLR, FINDS
CITY OF DETROIT/FIRE DEPARTMENT	CAOLIN & WAVERLY		FINDS
DETROIT CITY OF	1126 CITY COUNTY BLDG		FTTS, HIST FTTS, FINDS
CITY OF DETROIT	1010 CITY-CNTY BLDG.		FINDS, US AIRS
CITY OF DETROIT FIRE DEPARTMENT	4480 E DAVISON		FINDS
CITY OF DETROIT FIRE DEPARTMENT	NB I 94 WEST OF LODGE		FINDS
CITY OF DETROIT FIRE DEPARTMENT	NEAR 15445 HARPER		FINDS
DETROIT BLDG TRADES	10800 PURITAN		FINDS, US AIRS
DETROIT EDISON CO	6434 RIOPELLE		FINDS
DETROIT RESOURCE RECOVERY FACI	RUSSELL & FERRY STS		FINDS
DETROIT SCHOOLS	EAST SIDE BUS GARAGE	48214	RCRA NonGen / NLR
DETROIT PUB SCHOOLS	SOUTHEASTERN-FOCH		FINDS, US AIRS
DETROIT DEPT OF PUBLIC WORKS	12339 SOUTHFIELD RD		FINDS
KING SCRAP IRON & METAL CO	11874 E VERNOR HWY	48214	MI UST
MI DEPT/TRANSPORTATION	WARREN ENTRY TO I 75		RCRA NonGen / NLR, FINDS
DETROIT WATER AND SEWAGE DEPT	WATER WORKS PART II WTP		FINDS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List
National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 78

Source: EPA
Telephone: N/A
Last EDR Contact: 01/21/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites
A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 78

Source: EPA
Telephone: N/A
Last EDR Contact: 01/09/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens
Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 78

Source: EPA
Telephone: N/A
Last EDR Contact: 01/09/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 94

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 11/11/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 05/31/2013
Date Data Arrived at EDR: 07/08/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 151

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 01/10/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 94

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 11/11/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 11/20/2013
Date Data Arrived at EDR: 11/21/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 95

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/30/2013
Date Data Arrived at EDR: 10/01/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 66

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 02/07/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

SHWS: Contaminated Sites

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 10/01/2013
Date Data Arrived at EDR: 10/31/2013
Date Made Active in Reports: 11/20/2013
Number of Days to Update: 20

Source: Dept of Environmental Quality
Telephone: 517-373-9541
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: No Update Planned

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Facilities Database

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 01/02/2014
Date Data Arrived at EDR: 01/03/2014
Date Made Active in Reports: 02/17/2014
Number of Days to Update: 45

Source: Dept of Environmental Quality
Telephone: 517-335-4035
Last EDR Contact: 01/03/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Semi-Annually

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank Sites

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 11/01/2013
Date Data Arrived at EDR: 11/21/2013
Date Made Active in Reports: 11/26/2013
Number of Days to Update: 5

Source: Dept of Environmental Quality
Telephone: 517-373-9837
Last EDR Contact: 02/19/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Annually

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013
Date Data Arrived at EDR: 03/01/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 08/27/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 66

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/06/2013
Date Data Arrived at EDR: 11/07/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 29

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Quarterly

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/13/2014
Date Data Arrived at EDR: 02/14/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 10

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/01/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 184

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 11/21/2013
Date Data Arrived at EDR: 11/26/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Semi-Annually

State and tribal registered storage tank lists

UST 2: Underground Storage Tank Listing
A listing of underground storage tank site locations that have unknown owner information.

Date of Government Version: 10/28/2013
Date Data Arrived at EDR: 10/31/2013
Date Made Active in Reports: 11/20/2013
Number of Days to Update: 20

Source: Dept of Environmental Quality
Telephone: 517-335-7211
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Annually

UST: Underground Storage Tank Facility List
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 01/06/2014
Date Data Arrived at EDR: 01/10/2014
Date Made Active in Reports: 02/17/2014
Number of Days to Update: 38

Source: Dept of Environmental Quality
Telephone: 517-335-4035
Last EDR Contact: 02/19/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Annually

AST: Aboveground Tanks
Registered Aboveground Storage Tanks.

Date of Government Version: 11/27/2013
Date Data Arrived at EDR: 12/04/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 12

Source: Dept of Environmental Quality
Telephone: 517-373-8168
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: No Update Planned

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/01/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 01/27/2014
Number of Days to Update: 271

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 11/21/2013
Date Data Arrived at EDR: 11/26/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 02/13/2014
Date Data Arrived at EDR: 02/14/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 10

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 07/29/2013
Date Data Arrived at EDR: 08/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 92

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 07/29/2013
Date Data Arrived at EDR: 07/30/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 129

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Quarterly

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 01/13/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

AUL: Engineering and Institutional Controls
A listing of sites with institutional and/or engineering controls in place.

Date of Government Version: 03/26/2013
Date Data Arrived at EDR: 03/29/2013
Date Made Active in Reports: 05/09/2013
Number of Days to Update: 41

Source: Dept of Environmental Quality
Telephone: 517-373-4828
Last EDR Contact: 12/02/2013
Next Scheduled EDR Contact: 03/17/2014
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/17/2013
Date Data Arrived at EDR: 10/01/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 66

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 01/03/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Brownfields and USTfield Site Database
All state funded Part 201 and 213 sites, as well as LUST sites that have been redeveloped by private entities using the BEA process. Be aware that this is not a list of all of the potential brownfield sites in Michigan.

Date of Government Version: 07/27/2012
Date Data Arrived at EDR: 07/31/2012
Date Made Active in Reports: 09/20/2012
Number of Days to Update: 51

Source: Dept of Environmental Quality
Telephone: 517-373-4805
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

BROWNFIELDS 2: Brownfields Building and Land Site Locations
A listing of brownfield building and land site locations. The listing is a collaborative effort of Michigan Economic Development Corporation, Michigan Economic Developers Association, Detrot Edison, Detroit Area Commercial Board of Realtors

Date of Government Version: 04/09/2007
Date Data Arrived at EDR: 04/10/2007
Date Made Active in Reports: 05/01/2007
Number of Days to Update: 21

Source: Economic Development Corporation
Telephone: 888-522-0103
Last EDR Contact: 12/02/2013
Next Scheduled EDR Contact: 03/17/2014
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 09/24/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 12/24/2013
Next Scheduled EDR Contact: 04/07/2014
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: No Update Planned

SWRCY: Recycling Facilities

A listing of recycling center locations.

Date of Government Version: 11/24/2009
Date Data Arrived at EDR: 09/30/2010
Date Made Active in Reports: 10/28/2010
Number of Days to Update: 28

Source: Dept of Environmental Quality
Telephone: 517-241-5719
Last EDR Contact: 12/31/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Varies

HIST LF: Inactive Solid Waste Facilities

The database contains historical information and is no longer updated.

Date of Government Version: 03/01/1997
Date Data Arrived at EDR: 02/28/2003
Date Made Active in Reports: 03/06/2003
Number of Days to Update: 6

Source: Dept of Environmental Quality
Telephone: 517-335-4034
Last EDR Contact: 02/28/2003
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 12/04/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 65

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 12/05/2013
Next Scheduled EDR Contact: 03/17/2014
Data Release Frequency: Quarterly

DEL SHWS: Delisted List of Contaminated Sites
Sites that have been delisted or deleted from the List of Contaminated Sites. The available documentation for the site does not support it's listing or the site no longer meets criteria specified in rules.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/01/2013
Date Made Active in Reports: 09/11/2013
Number of Days to Update: 41

Source: Dept of Environmental Quality
Telephone: 517-373-9541
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

CDL: Clandestine Drug Lab Listing
A listing of clandestine drug lab locations.

Date of Government Version: 10/20/2008
Date Data Arrived at EDR: 11/18/2008
Date Made Active in Reports: 11/21/2008
Number of Days to Update: 3

Source: Department of Community Health
Telephone: 517-373-3740
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 04/25/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

LIENS: Lien List

An Environmental Lien is a charge, security, or encumbrance upon title to a property to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of hazardous substances or petroleum products upon a property, including (but not limited to) liens imposed pursuant to CERCLA 42 USC * 9607(1) and similar state or local laws. In other words: a lien placed upon a property's title due to an environmental condition

Date of Government Version: 08/19/2013
Date Data Arrived at EDR: 10/23/2013
Date Made Active in Reports: 11/20/2013
Number of Days to Update: 28

Source: Dept of Environmental Quality
Telephone: 517-241-7603
Last EDR Contact: 01/24/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 01/03/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 52

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 01/03/2014
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

PEAS: Pollution Emergency Alerting System

Environmental pollution emergencies reported to the Department of Environmental Quality such as tanker accidents, pipeline breaks, and release of reportable quantities of hazardous substances.

Date of Government Version: 09/25/2013
Date Data Arrived at EDR: 09/27/2013
Date Made Active in Reports: 10/22/2013
Number of Days to Update: 25

Source: Dept of Environmental Quality
Telephone: 517-373-8427
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Quarterly

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 02/06/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Varies

DOD: Department of Defense Sites
This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 01/15/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites
The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 15

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 12/13/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 01/24/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 31

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 12/26/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Varies

ROD: Records Of Decision
Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 12/12/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites
Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/25/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 28

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 12/06/2013
Next Scheduled EDR Contact: 03/17/2014
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System
Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/31/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 44

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 11/27/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act
Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 12/26/2013
Next Scheduled EDR Contact: 04/07/2014
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/28/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 10/09/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2013
Date Data Arrived at EDR: 07/17/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 107

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 01/28/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/22/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 91

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 09/30/2013
Date Data Arrived at EDR: 10/09/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 23

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 01/10/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 03/08/2013
Date Data Arrived at EDR: 03/21/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 111

Source: EPA
Telephone: (312) 353-2000
Last EDR Contact: 12/10/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/01/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 11/25/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Biennially

UIC: Underground Injection Wells Database
A listing of underground injection well locations. The UIC Program is responsible for regulating the construction, operation, permitting, and closure of injection wells that place fluids underground for storage or disposal.

Date of Government Version: 11/18/2013
Date Data Arrived at EDR: 11/19/2013
Date Made Active in Reports: 11/26/2013
Number of Days to Update: 7

Source: Dept of Environmental Quality
Telephone: 517-241-1515
Last EDR Contact: 11/15/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

DRYCLEANERS: Drycleaning Establishments
A listing of drycleaning facilities in Michigan.

Date of Government Version: 10/29/2013
Date Data Arrived at EDR: 10/31/2013
Date Made Active in Reports: 11/20/2013
Number of Days to Update: 20

Source: Dept of Environmental Quality
Telephone: 517-335-4586
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Annually

NPDES: List of Active NPDES Permits
General information regarding NPDES (National Pollutant Discharge Elimination System) permits and NPDES Storm Water permits.

Date of Government Version: 01/06/2014
Date Data Arrived at EDR: 01/07/2014
Date Made Active in Reports: 02/17/2014
Number of Days to Update: 41

Source: Dept of Environmental Quality
Telephone: 517-241-1300
Last EDR Contact: 01/07/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Varies

AIRS: Permit and Emissions Inventory Data
Permit and emissions inventory data.

Date of Government Version: 09/23/2013
Date Data Arrived at EDR: 09/27/2013
Date Made Active in Reports: 10/23/2013
Number of Days to Update: 26

Source: Dept of Environmental Quality
Telephone: 517-373-7074
Last EDR Contact: 12/17/2013
Next Scheduled EDR Contact: 04/07/2014
Data Release Frequency: Varies

BEA: BASELINE ENVIRONMENTAL ASSESSMENT DATABASE
A Baseline Environmental Assessment (BEA) allows people to purchase or begin operating at a facility without being held liable for existing contamination. BEAs are used to gather enough information about the property being transferred so that existing contamination can be distinguished from any new releases that might occur after the new owner or operator takes over the property.

Date of Government Version: 08/21/2013
Date Data Arrived at EDR: 08/23/2013
Date Made Active in Reports: 09/12/2013
Number of Days to Update: 20

Source: Dept of Environmental Quality
Telephone: 517-373-9541
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Semi-Annually

INDIAN RESERV: Indian Reservations
This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 01/15/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing
The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Varies

2020 COR ACTION: 2020 Corrective Action Program List
The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013
Date Data Arrived at EDR: 02/14/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 01/03/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 07/03/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 72

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 01/15/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: N/A

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/23/2013
Date Data Arrived at EDR: 11/06/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 30

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 12/26/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/23/2013
Date Data Arrived at EDR: 11/06/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 30

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 12/26/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Annually

COAL ASH DOE: Sleam-Electric Plan Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 01/13/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial assurance information.

Date of Government Version: 01/08/2014
Date Data Arrived at EDR: 01/13/2014
Date Made Active in Reports: 02/17/2014
Number of Days to Update: 35

Source: Dept of Environmental Quality
Telephone: 517-335-6610
Last EDR Contact: 01/03/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 01/05/2011
Date Data Arrived at EDR: 01/07/2011
Date Made Active in Reports: 02/14/2011
Number of Days to Update: 38

Source: Dept of Environmental Quality
Telephone: 517-335-4034
Last EDR Contact: 12/26/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 11/20/2013
Date Data Arrived at EDR: 12/03/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Quarterly

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 12/13/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

WDS: Waste Data System

The Waste Data System (WDS) tracks activities at facilities regulated by the Solid Waste, Scrap Tire, Hazardous Waste, and Liquid Industrial Waste programs.

Date of Government Version: 11/28/2013
Date Data Arrived at EDR: 12/05/2013
Date Made Active in Reports: 01/02/2014
Number of Days to Update: 28

Source: Dept of Environmental Quality
Telephone: 517-373-9875
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Quarterly

COAL ASH: Coal Ash Disposal Sites

Coal fired power plants in Southeast Michigan that have coal ash handling on site.

Date of Government Version: 07/12/2013
Date Data Arrived at EDR: 07/12/2013
Date Made Active in Reports: 08/01/2013
Number of Days to Update: 20

Source: Dept of Environmental Quality
Telephone: 586-753-3754
Last EDR Contact: 01/03/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List
The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/24/2013
Number of Days to Update: 176

Source: EDR
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List
The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: EDR
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank
The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/24/2013
Number of Days to Update: 176

Source: EDR
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/21/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 08/28/2012
Number of Days to Update: 40

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 01/17/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 11/01/2013
Date Data Arrived at EDR: 11/07/2013
Date Made Active in Reports: 11/18/2013
Number of Days to Update: 11

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 02/07/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/24/2013
Date Made Active in Reports: 08/19/2013
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Annually

RI MANIFEST: Manifest Information
Hazardous waste manifest information

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 08/05/2013
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 09/27/2013
Number of Days to Update: 49

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 12/11/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Day Care Centers, Group & Family Homes
Source: Bureau of REgulatory Services
Telephone: 517-373-8300

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory
Source: Department of Natural Resources
Telephone: 517-241-2254

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK® - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

5250 CONNER DETROIT
5250 CONNER STREET
DETROIT, MI 48213

TARGET PROPERTY COORDINATES

Latitude (North):	42.3905 - 42° 23' 25.80"
Longitude (West):	82.9793 - 82° 58' 45.48"
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	337077.6
UTM Y (Meters):	4694818.0
Elevation:	600 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	42082-D8 GROSSE POINTE, MI
Most Recent Revision:	1983

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

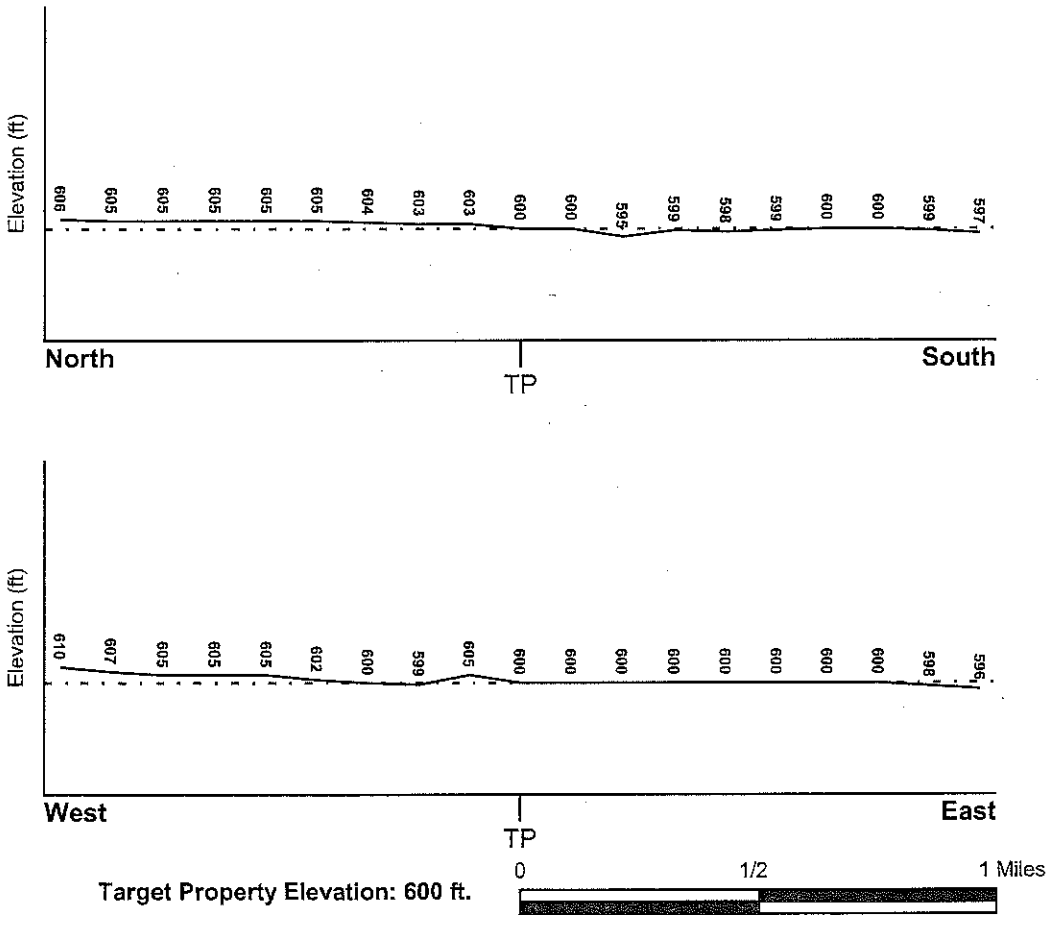
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
WAYNE, MI	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 2602220015B - FEMA Q3 Flood data

Additional Panels in search area: 2602220035B - FEMA Q3 Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
GROSSE POINTE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Location Relative to TP:	1/2 - 1 Mile South
Site Name:	Old Mack Ave Stamping Plant (Chrysle
Site EPA ID Number:	MID005357959
Surficial Aquifer Flow Dir.:	not reported
Inferred Depth to Water:	not available.
Hydraulic Connection:	The site is underlain by glacial deposits that may have small localized sandy lenses that contain ground water. Clay soils that act as a confining layer overlie the bedrock aquifer.
Sole Source Aquifer:	No information about a sole source aquifer is available
Data Quality:	Information is inferred in the CERCLIS investigation report(s)

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
1	1/4 - 1/2 Mile ESE	Varies

* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
2	1/2 - 1 Mile SW	N

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT **GEOLOGIC AGE IDENTIFICATION**

Era:	Paleozoic	Category:	Stratified Sequence
System:	Devonian		
Series:	Middle Devonian		
Code:	D2 *(decoded above as Era, System & Series)*		

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: URBANLAND

Soil Surface Texture: variable

Hydrologic Group: Not reported

Soil Drainage Class: Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Bedrock Max: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	60 inches	variable	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: clay loam
loamy fine sand
loamy sand

Surficial Soil Types: clay loam
loamy fine sand
loamy sand

Shallow Soil Types: sand
silty clay

Deeper Soil Types: silt loam
sand
clay loam
silty clay

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 3865614.2s

- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: 5250 Conner Detroit	CLIENT: MDEQ/ERD/Superfund
ADDRESS: 5250 Conner Street Detroit MI 48213	CONTACT: John Spielberg INQUIRY #: 3865614.2s
LAT/LONG: 42.3905 / 82.9793	DATE: February 25, 2014 7:50 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
1 **ESE** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallowest Water Table Depth: Deepest Water Table Depth: Average Water Table Depth: Date:	821276 Varies 3.39 7.37 Not Reported 01/18/1993	**AQUIFLOW**	**35359**
2 **SW** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallowest Water Table Depth: Deepest Water Table Depth: Average Water Table Depth: Date:	820377 N 3.04 4.63 Not Reported 05/29/1992	**AQUIFLOW**	**34865**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: MI Radon

Radon Test Results

Zipcode	Test Date	LT Sign	Result
48213	11/8/1999		1.4
48213	12/16/2006		1.7
48213	3/1/2008	<	0.3
48213	2/24/2004	<	0.3
48213	7/10/2006	<	0.3
48213	9/3/2009		3.8
48213	11/6/2000	<	0.3
48213	8/3/2009		5.7

Federal EPA Radon Zone for WAYNE County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 48213

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	Not Reported	Not Reported	Not Reported	Not Reported
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.700 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory
Source: Department of Natural Resources
Telephone: 517-241-2254

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Data
Source: Department of Environmental Quality
Telephone: 517-335-9218
The data in this file was obtained from Wellogic, the Michigan Department of Environmental Quality Statewide Groundwater Database (SGWD). Wellogic contains approximately 425,000 water well records found within the State of Michigan, and although it represents the best available data, it cannot be considered a complete database of all the wells or well records in existence.

OTHER STATE DATABASE INFORMATION

Michigan Oil and Gas Wells
Source: Department of Environmental Quality
Telephone: 517-241-1528
Locations of oil and gas wells are compiled from permit records on file at the Geological Survey Division (GSD), Michigan Department of Natural Resources.

RADON

State Database: MI Radon
Source: Department of Environmental Quality
Telephone: 517-335-9551
Radon Test Results

Michigan Radon Test Results
Source: Department of Environmental Quality
Telephone: 517-335-8037
These results are from test kits distributed by the local health departments and used by Michigan residents. There is no way of knowing whether the devices were used properly, whether there are duplicates (or repeat verification) test (i.e., more than one sample per home), etc.

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

STREET AND ADDRESS INFORMATION

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5250 Conner Detroit
5250 Conner Street
Detroit, MI 48213

Inquiry Number: 3865614.4
February 26, 2014

EDR Historical Topographic Map Report

6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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Historical Topographic Map

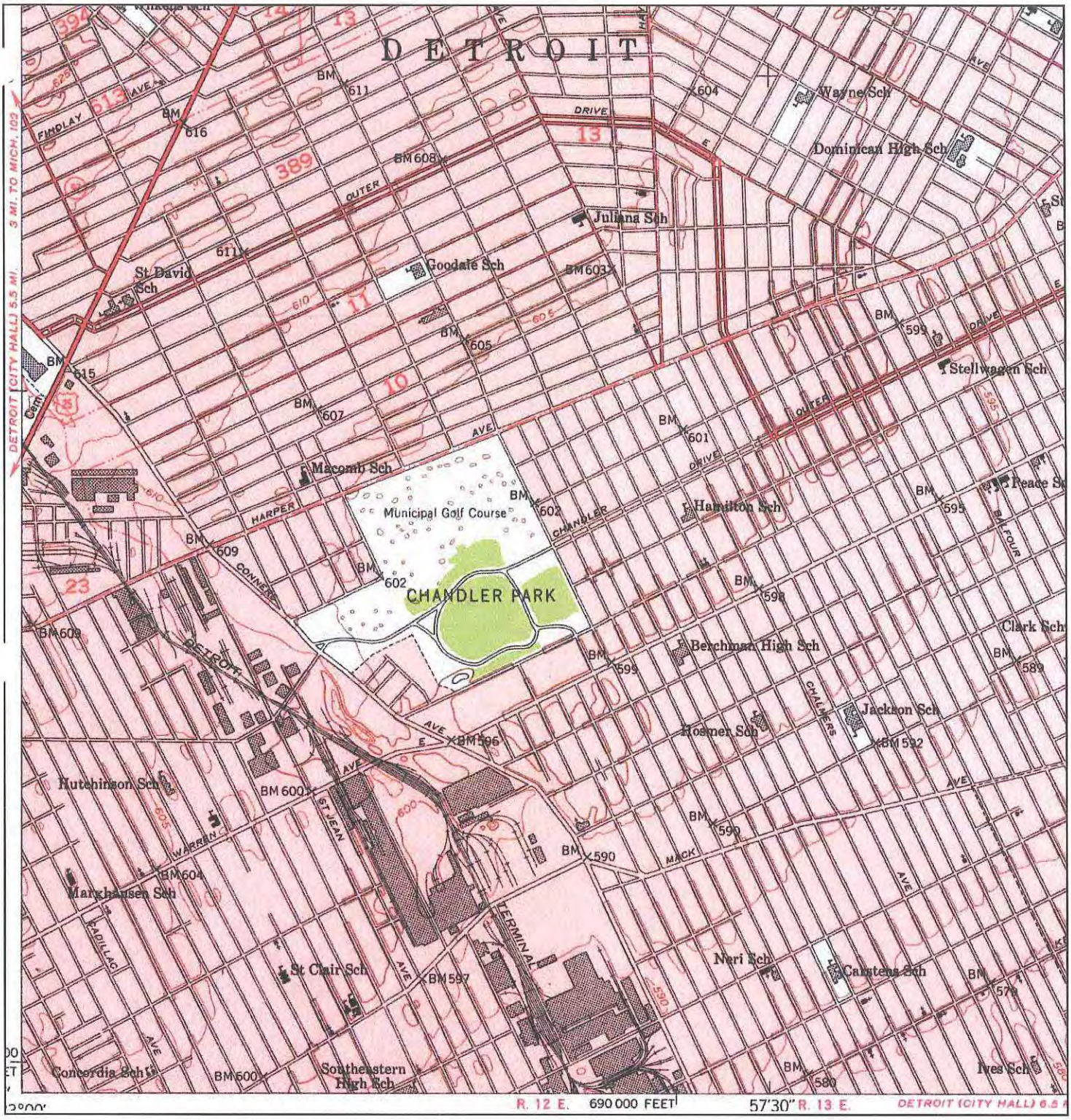
N	TARGET QUAD NAME: GROSSE POINTE MAP YEAR: 1905 SERIES: 15 SCALE: 1:62500	SITE NAME: 5250 Conner Detroit ADDRESS: 5250 Conner Street Detroit, MI 48213 LAT/LONG: 42.3905 / -82.9793	CLIENT: MDEQ/ERD/Superfund CONTACT: John Spielberg INQUIRY#: 3865614.4 RESEARCH DATE: 02/26/2014

Historical Topographic Map

Unsurveyed Area on the Topographic Map

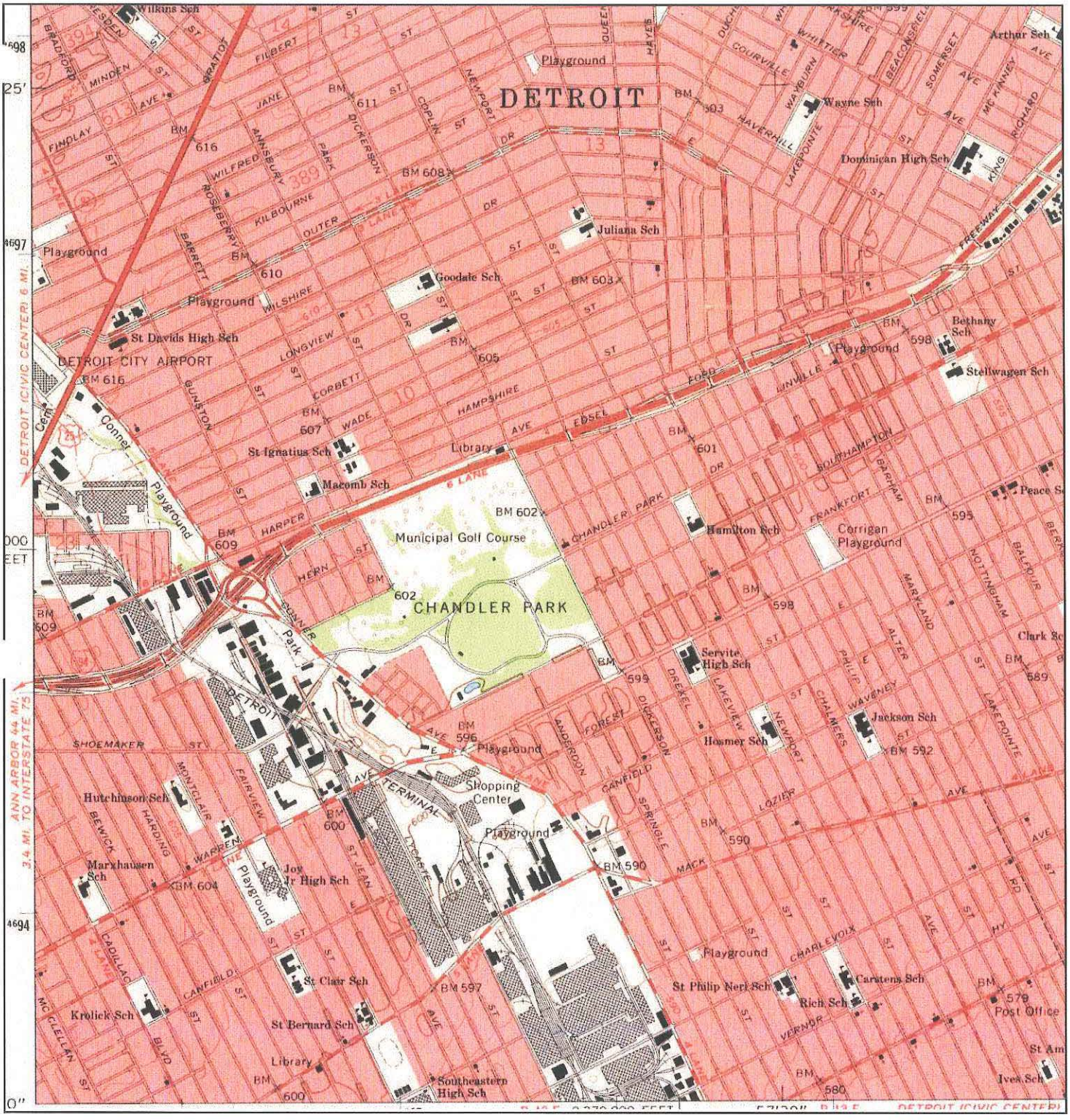
N	TARGET QUAD NAME: GROSSE POINTE MAP YEAR: 1918 SERIES: 15 SCALE: 1:62500	SITE NAME: 5250 Conner Detroit ADDRESS: 5250 Conner Street Detroit, MI 48213 LAT/LONG: 42.3905 / -82.9793	CLIENT: MDEQ/ERD/Superfund CONTACT: John Spielberg INQUIRY#: 3865614.4 RESEARCH DATE: 02/26/2014

Historical Topographic Map



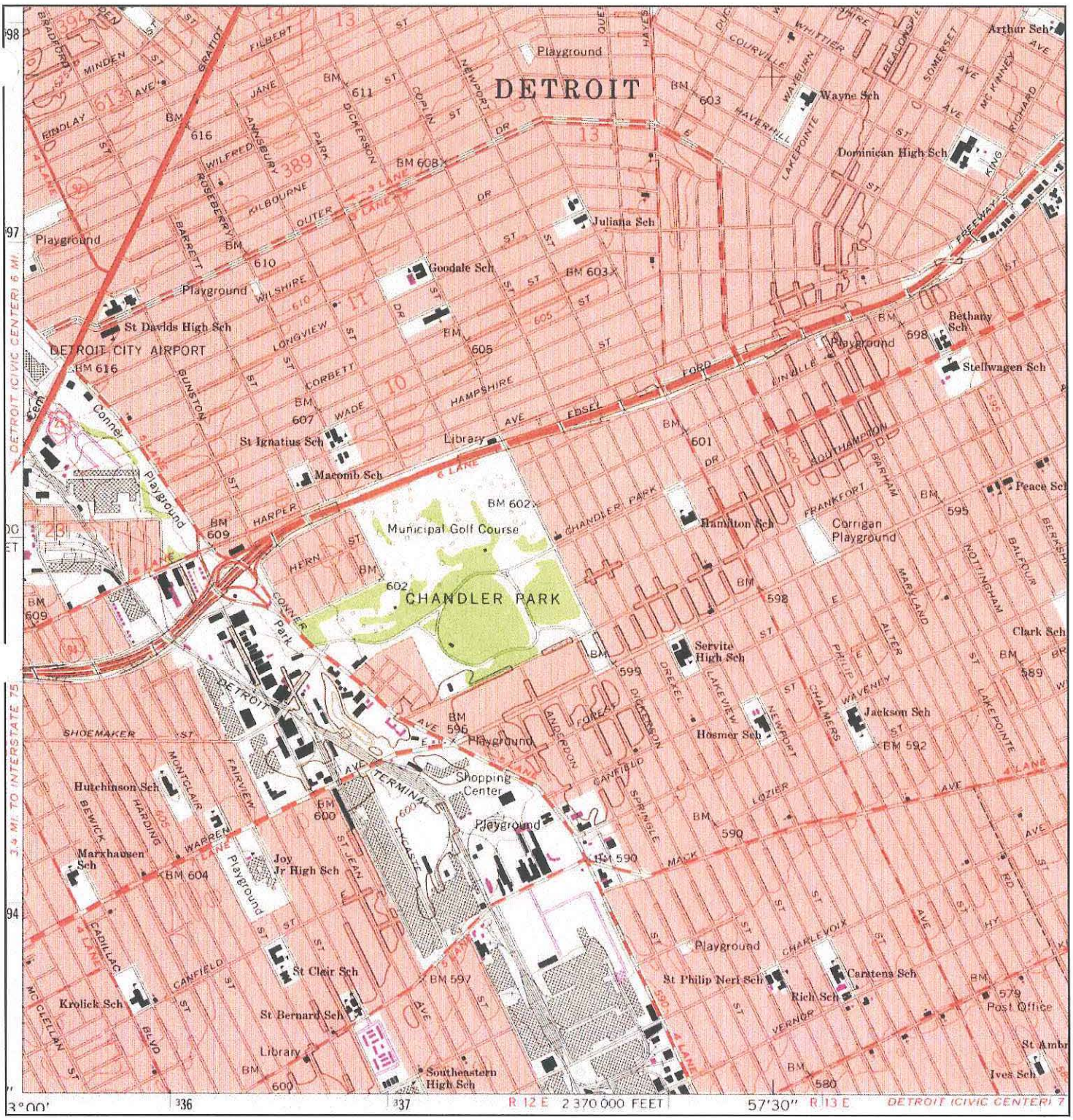
N	TARGET QUAD NAME: GROSSE POINTE MAP YEAR: 1952 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 5250 Conner Detroit ADDRESS: 5250 Conner Street Detroit, MI 48213 LAT/LONG: 42.3905 / -82.9793	CLIENT: MDEQ/ERD/Superfund CONTACT: John Spielberg INQUIRY#: 3865614.4 RESEARCH DATE: 02/26/2014

Historical Topographic Map



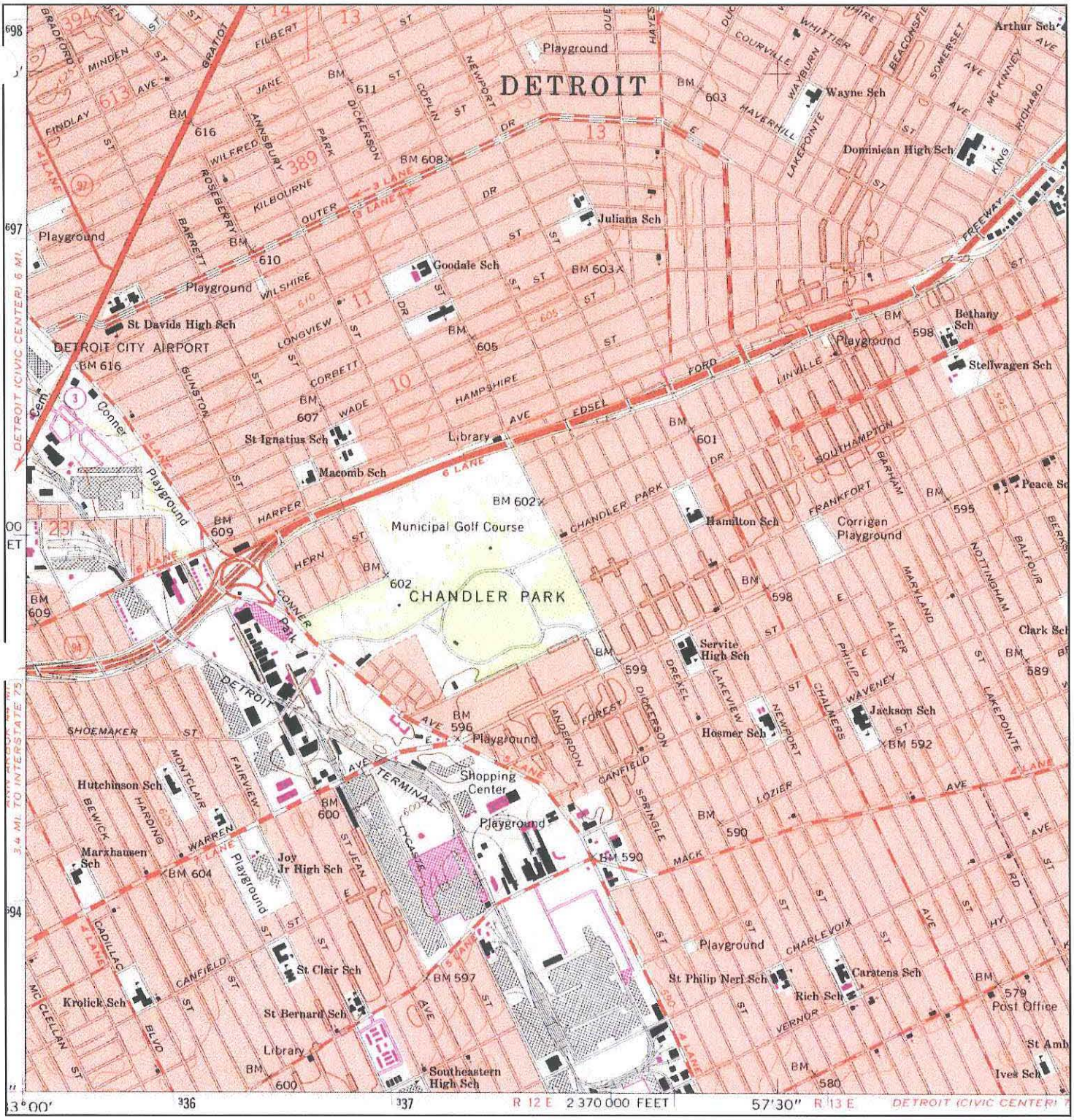
N	TARGET QUAD NAME: GROSSE POINTE MAP YEAR: 1968 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 5250 Conner Detroit ADDRESS: 5250 Conner Street Detroit, MI 48213 LAT/LONG: 42.3905 / -82.9793	CLIENT: MDEQ/ERD/Superfund CONTACT: John Spielberg INQUIRY#: 3865614.4 RESEARCH DATE: 02/26/2014

Historical Topographic Map



N	TARGET QUAD NAME: GROSSE POINTE MAP YEAR: 1973 PHOTOREVISED FROM :1968 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 5250 Conner Detroit ADDRESS: 5250 Conner Street Detroit, MI 48213 LAT/LONG: 42.3905 / -82.9793	CLIENT: MDEQ/ERD/Superfund CONTACT: John Spielberg INQUIRY#: 3865614.4 RESEARCH DATE: 02/26/2014

Historical Topographic Map



N			
	TARGET QUAD NAME: GROSSE POINTE MAP YEAR: 1983 PHOTOREVISED FROM :1968 SERIES: 7.5 SCALE: 1:24000	SITE NAME: 5250 Conner Detroit ADDRESS: 5250 Conner Street Detroit, MI 48213 LAT/LONG: 42.3905 / -82.9793	CLIENT: MDEQ/ERD/Superfund CONTACT: John Spielberg INQUIRY#: 3865614.4 RESEARCH DATE: 02/26/2014

5250 Conner Detroit
5250 Conner Street
Detroit, MI 48213

Inquiry Number: 3865614.3
February 27, 2014

Certified Sanborn® Map Report

6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

2/27/14

Site Name:
5250 Conner Detroit
5250 Conner Street
Detroit, MI 48213

Client Name:
MDEQ/ERD/Superfund
PO Box 30426
Lansing, MI 48909

EDR Inquiry # 3865614.3

Contact: John Spielberg

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by MDEQ/ERD/Superfund were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Site Name: 5250 Conner Detroit
Address: 5250 Conner Street
City, State, Zip: Detroit, MI 48213
Cross Street:
P.O. # NA
Project: NA
Certification # C5AC-4581-ABF8

Maps Provided:

2002	1957
1996	1952
1991	1950
1989	1941
1978	
1962	

Sanborn® Library search results
Certification # C5AC-4581-ABF8

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

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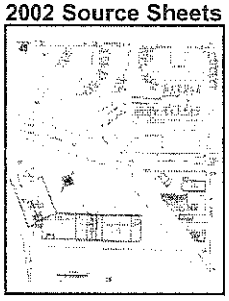
Sanborn Sheet Thumbnails

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

2002 Source Sheets



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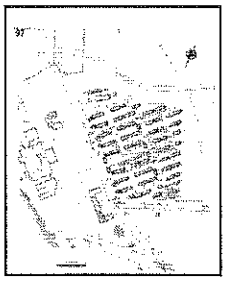

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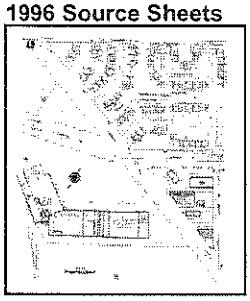

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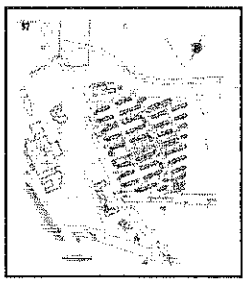

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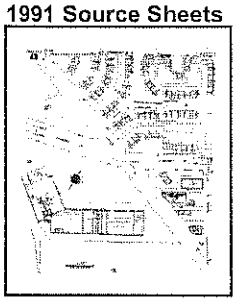

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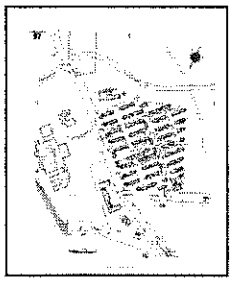

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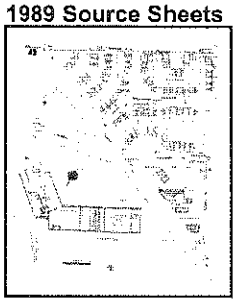

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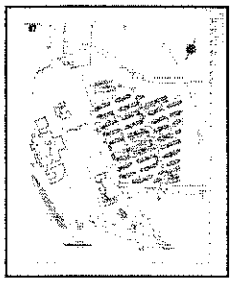

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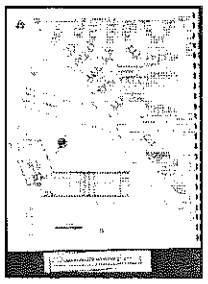

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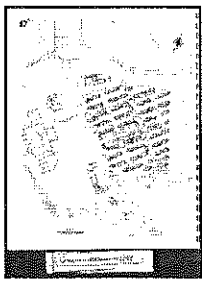

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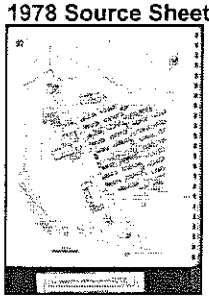

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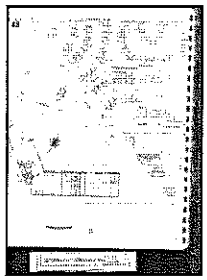

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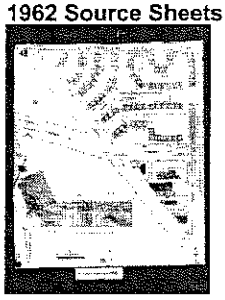

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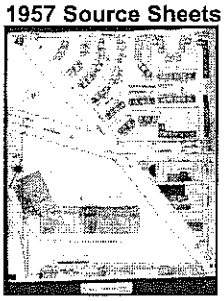

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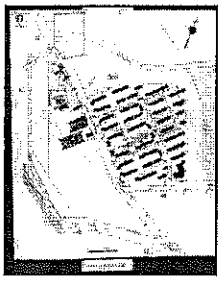

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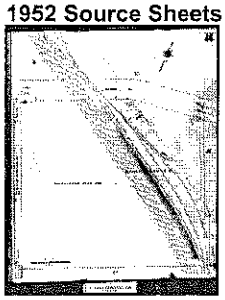

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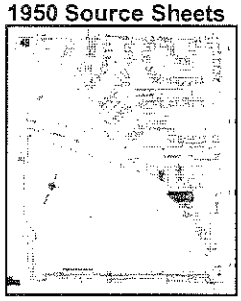
1950 Source Sheets



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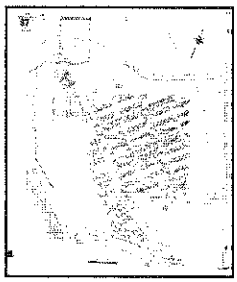

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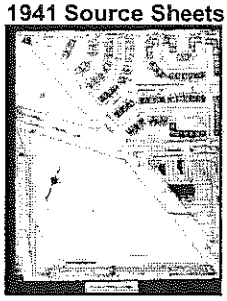

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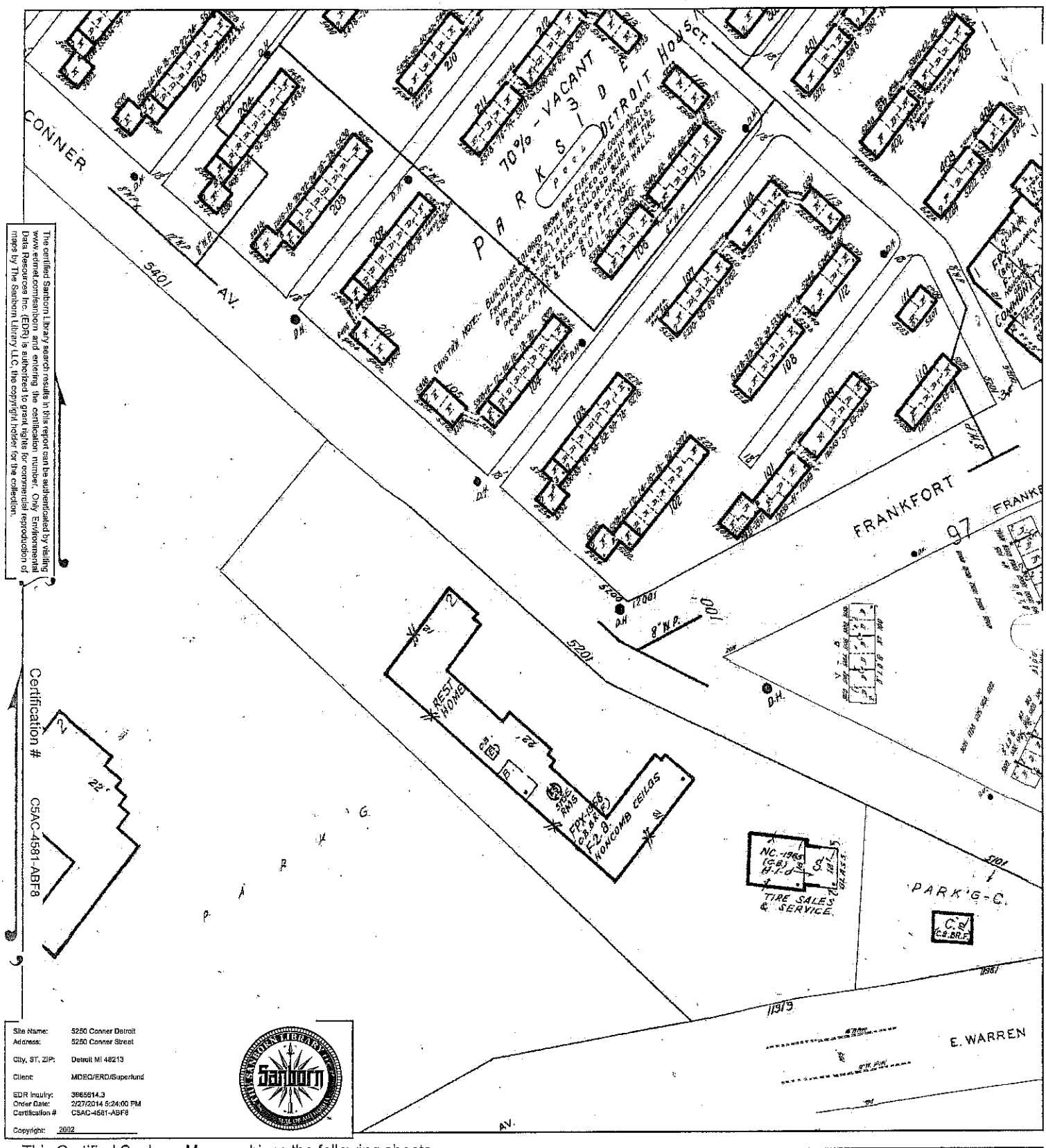
2002 Certified Sanborn Map



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Address:	5250 Conner Street
City, ST, ZIP:	Detroit MI 48213
Client:	MDEQ/ERD/Superfund
EDR Inquiry:	3865614.3
Order Date:	2/27/2014 5:24:00 PM
Certification #	C5AC-4581-ABF8
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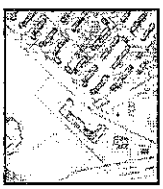

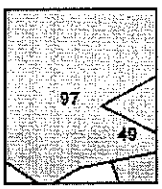

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0 Feet 150 300 600

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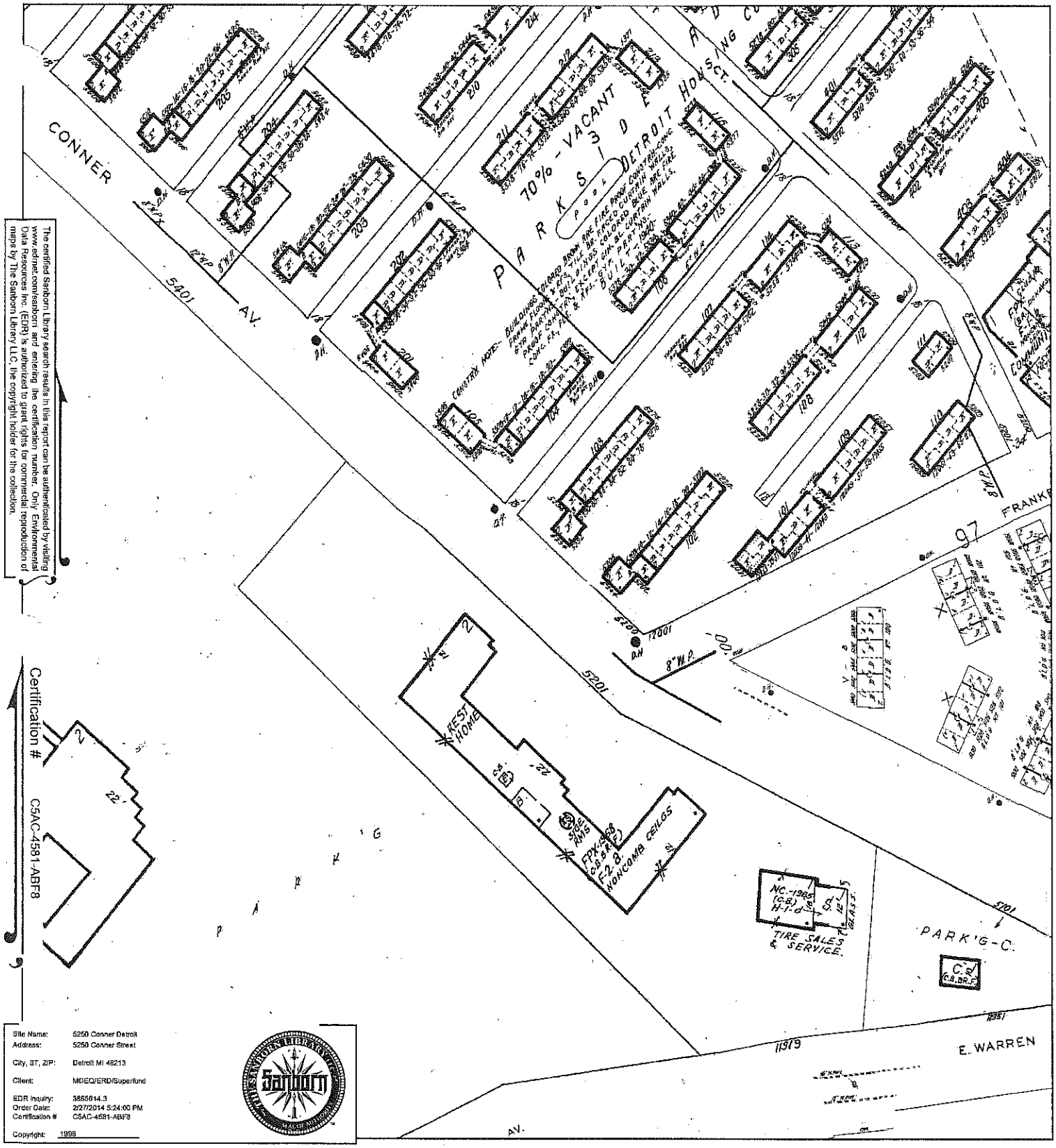

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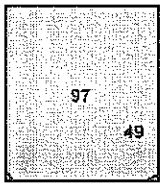

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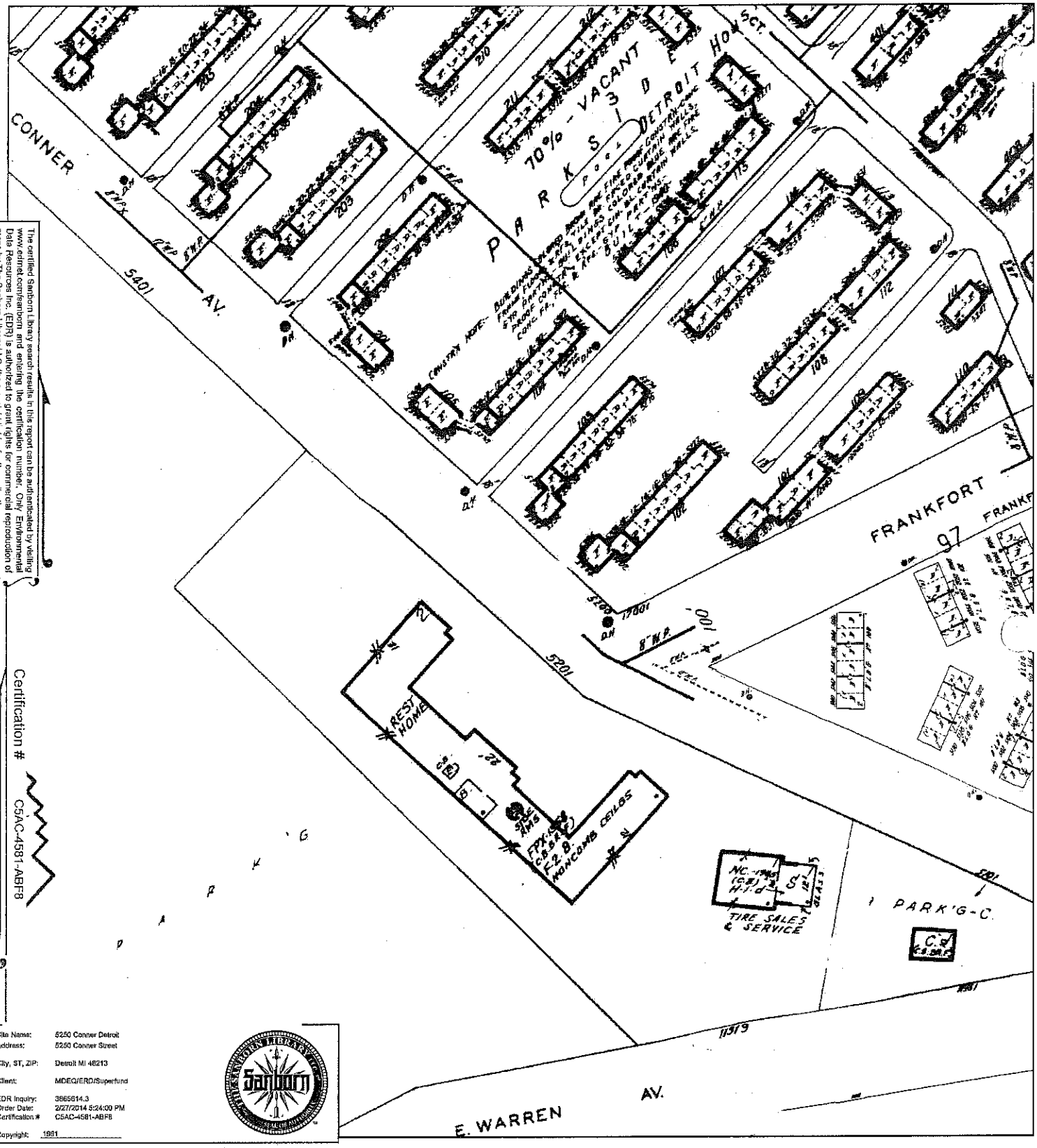
1991 Certified Sanborn Map



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Site Name:	5250 Conner Detroit
Address:	5250 Conner Street
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Client:	MDEQ/ERD/Superfund
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Certification #	C5AC-4581-ABF8
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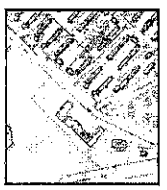

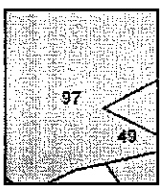

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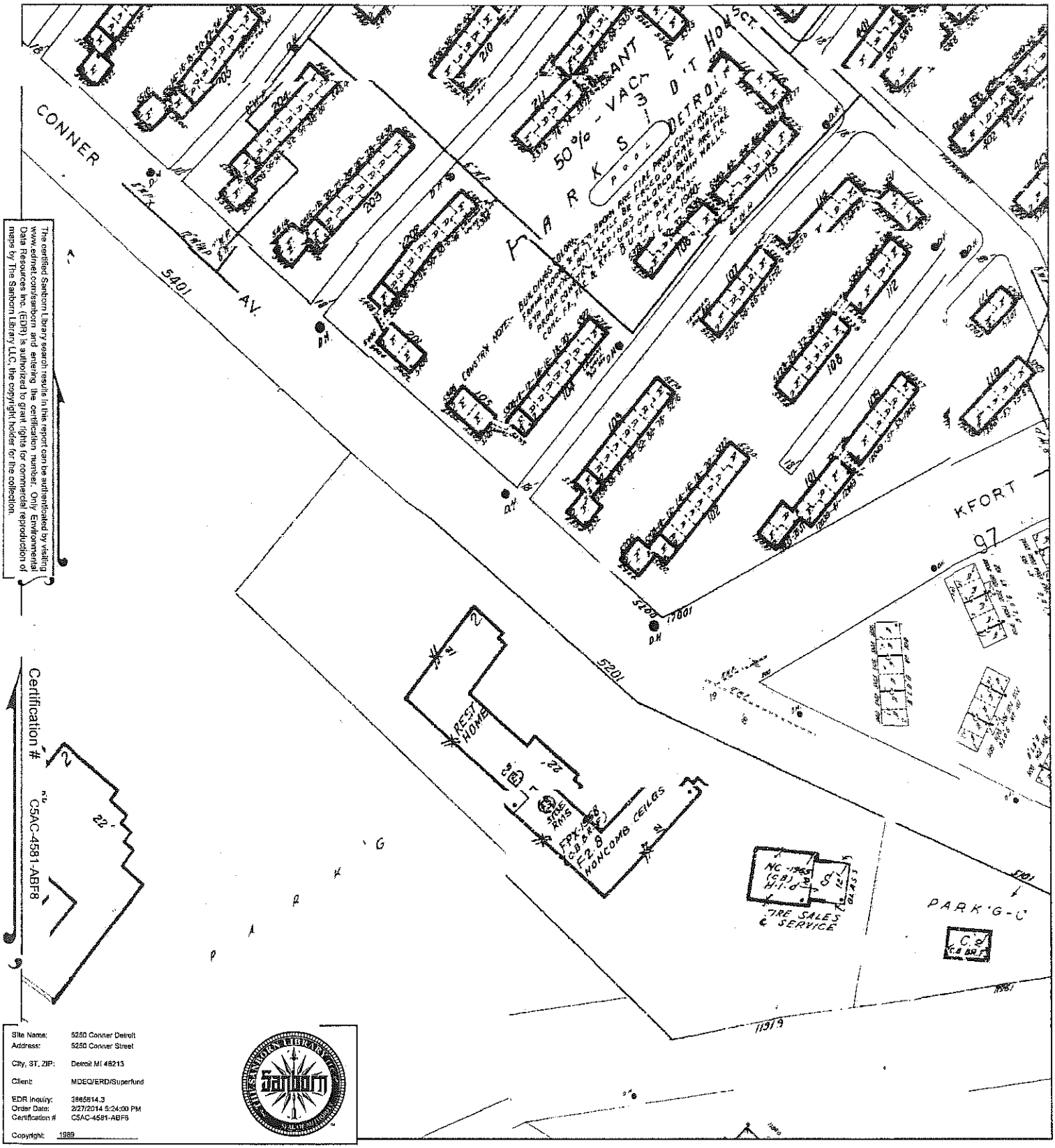

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City, ST, ZIP:	Detroit MI 48213
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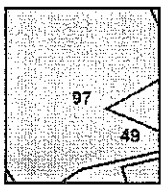

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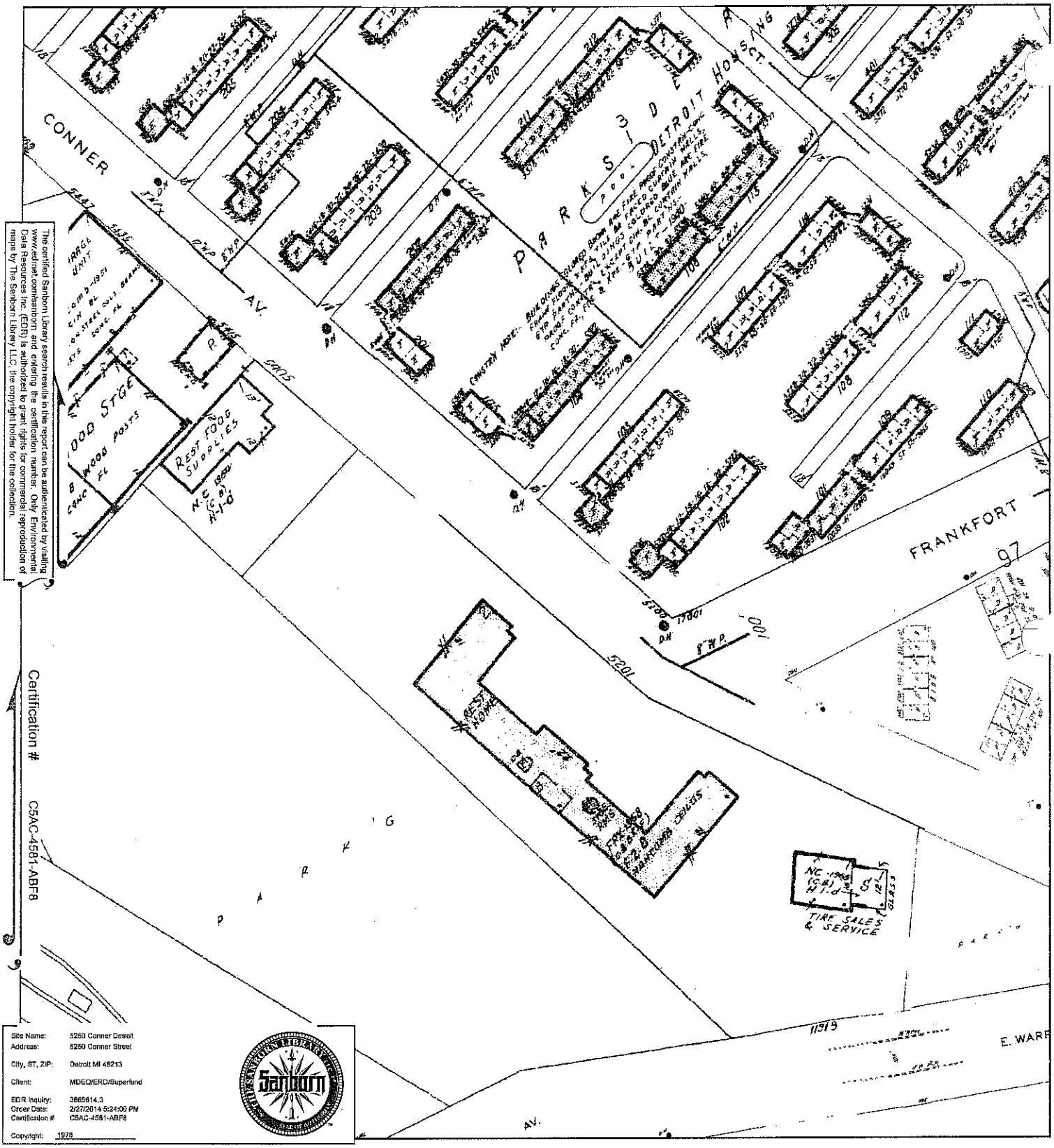

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Site Name:	5250 Conner Detroit
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City, ST, ZIP:	Detroit MI 48213
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Copyright:	1978

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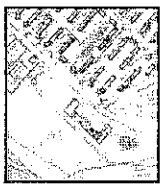

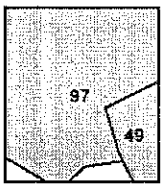

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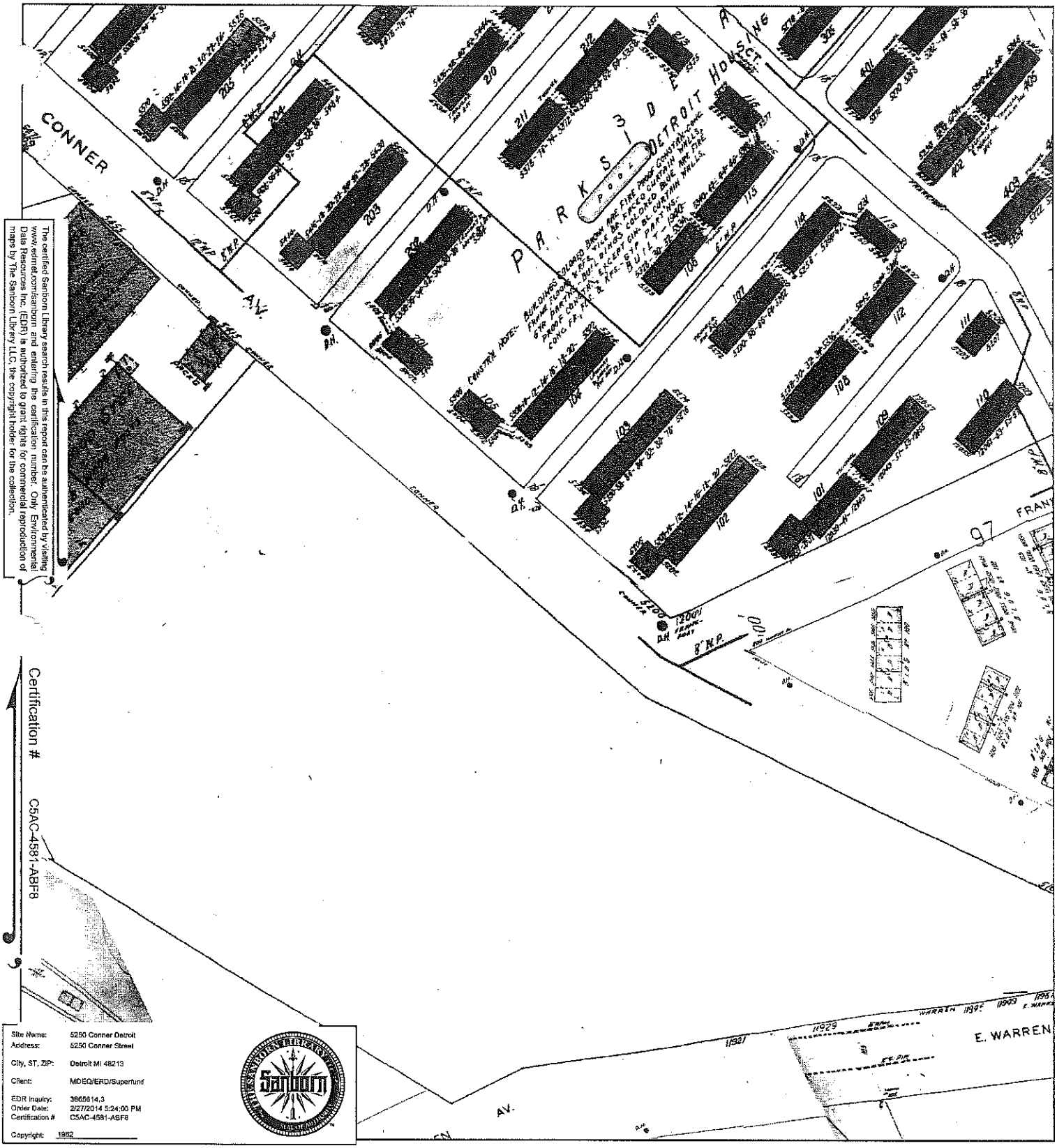
1962 Certified Sanborn Map



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Certification # C5AC-4581-ABF8

Site Name: 5250 Conner Detroit
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Client: MDEQ/ERD/Superfund
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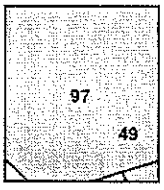

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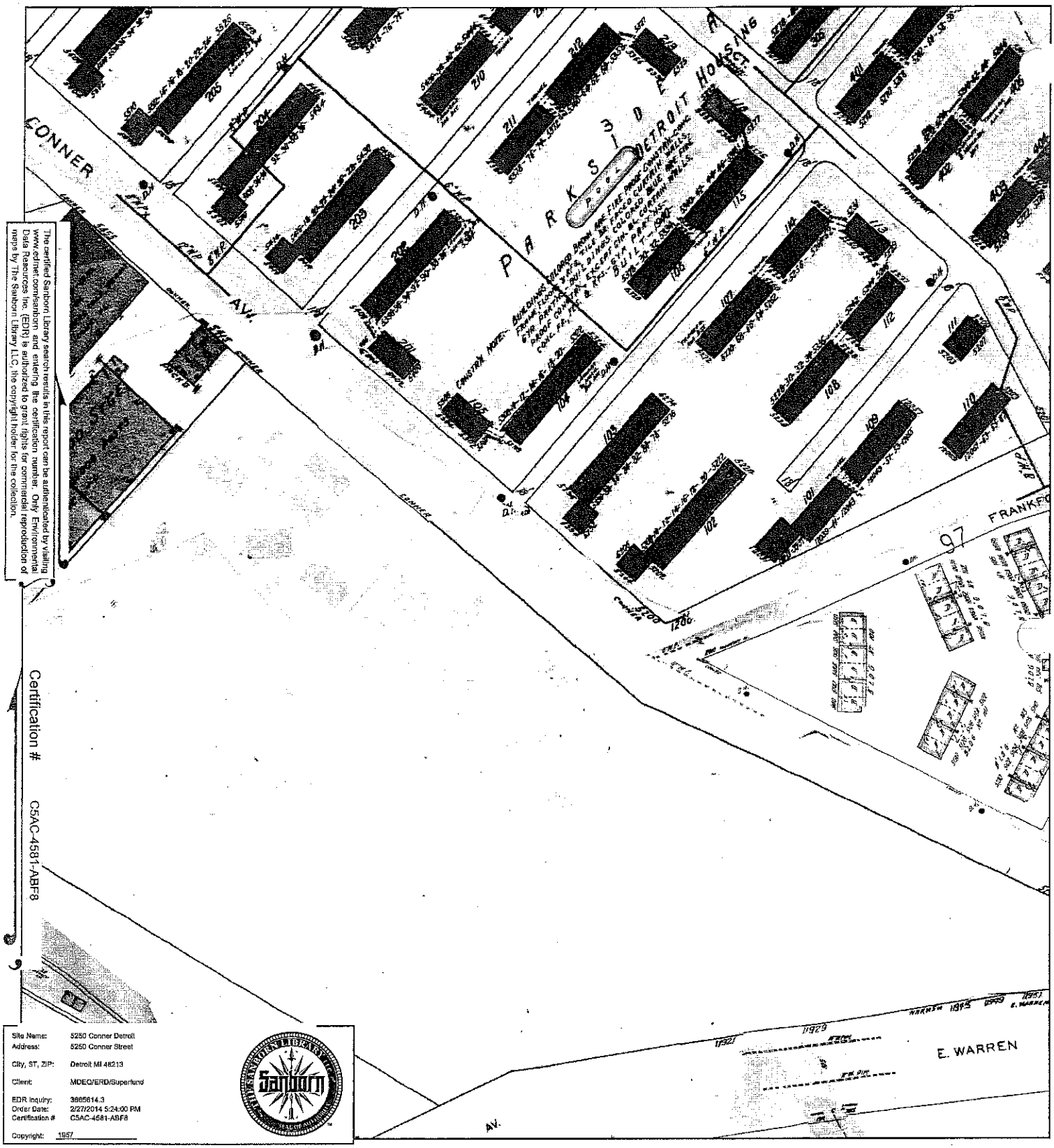

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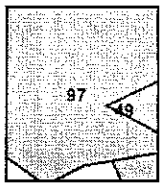

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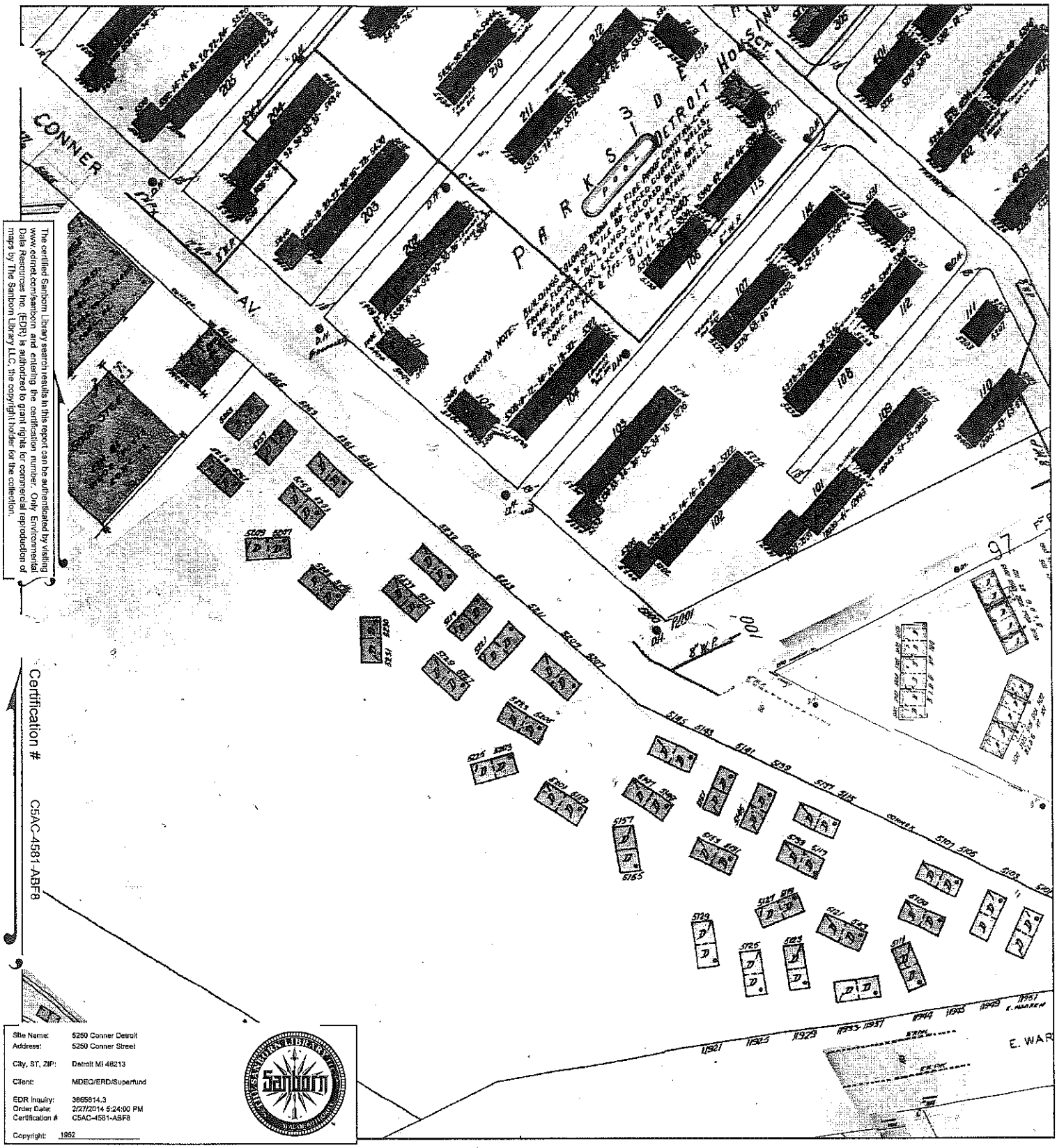
1952 Certified Sanborn Map



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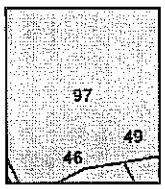

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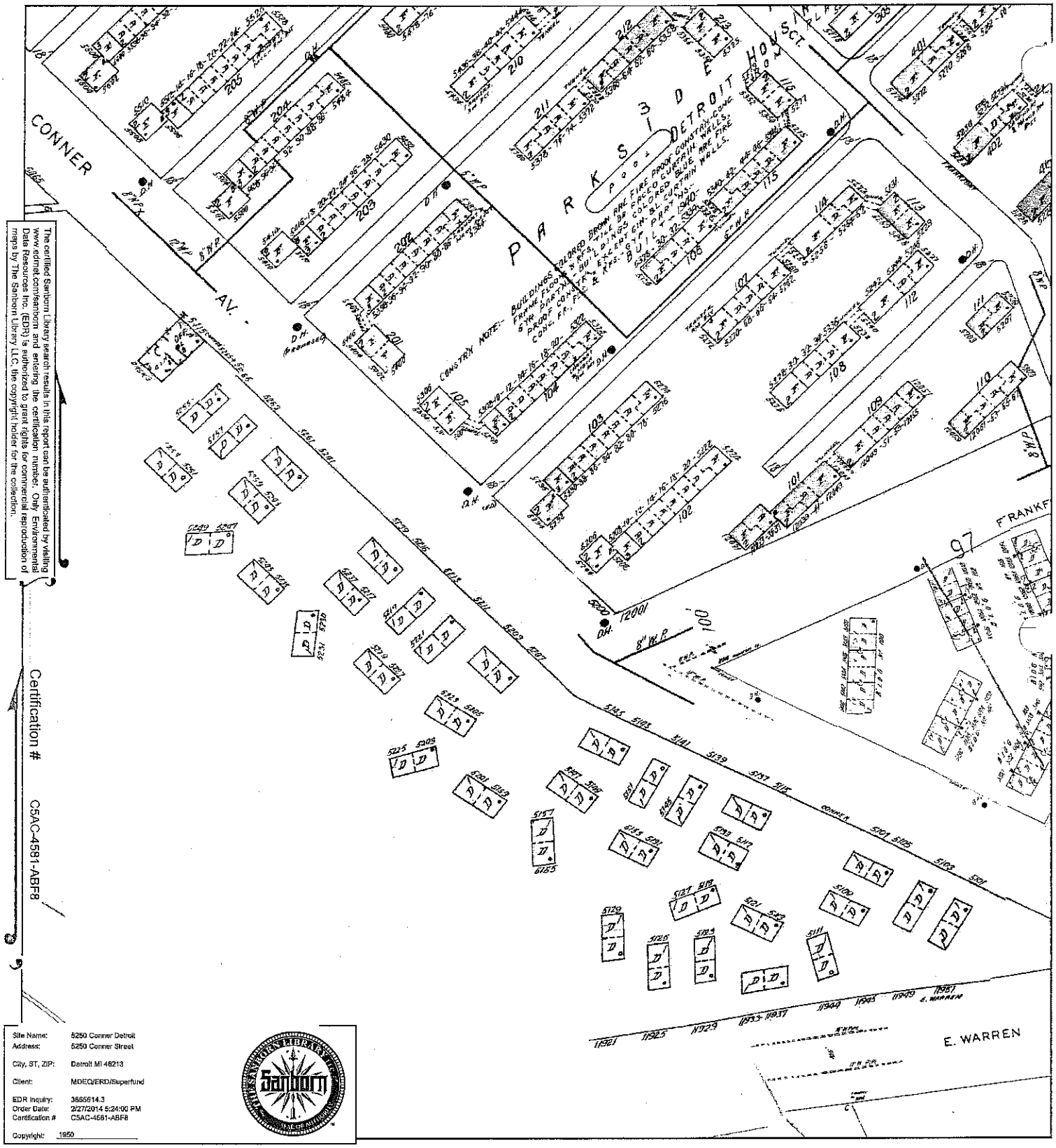
N

1950 Certified Sanborn Map



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Certification # C5AC-4581-ABF8

Site Name:	5250 Conner Detroit
Address:	5250 Conner Street
City, ST, ZIP:	Detroit MI 48213
Client:	MDEQ/ERD/Superfund
EDR Inquiry:	3865614.3
Order Date:	2/27/2014 5:24:00 PM
Certification #:	C5AC-4581-ABF8
Copyright:	1950

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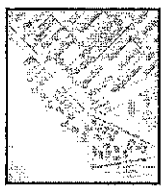
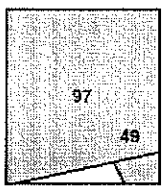
Outlined areas indicate map sheets within the collection.



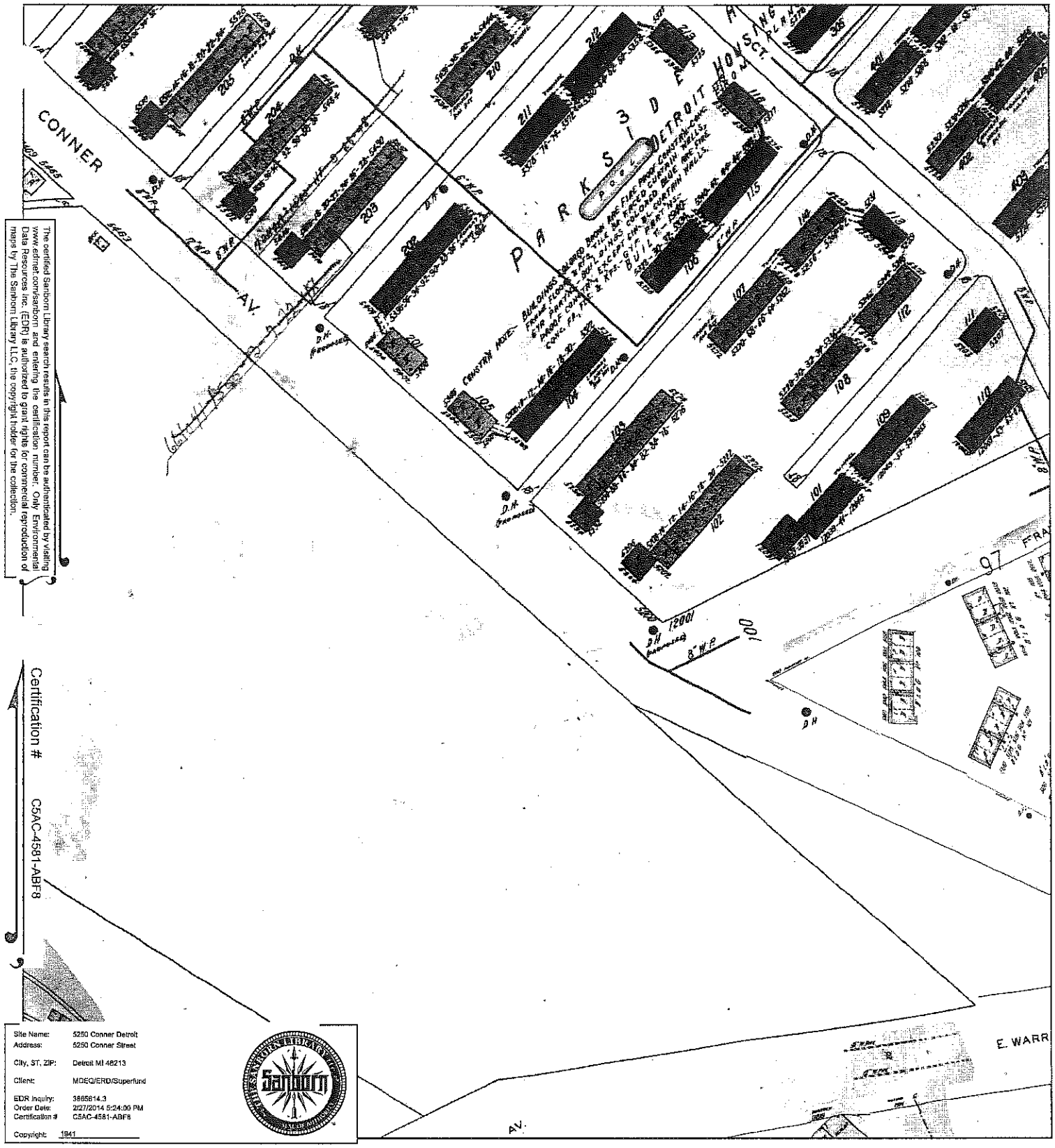


Volume 19, Sheet 49
Volume 19, Sheet 97

0 Feet 150 300 600

N

1941 Certified Sanborn Map



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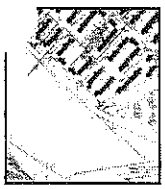
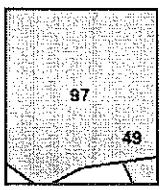
Certification # C5AC-4581-ABF8

Site Name:	5250 Conner Detroit
Address:	5250 Conner Street
City, ST, ZIP:	Detroit MI 48213
Client:	MDEQ/ERD/Superfund
EDR Inquiry:	3865614.3
Order Date:	2/27/2014 5:24:00 PM
Certification #	C5AC-4581-ABF8
Copyright:	1941

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.





Volume 19, Sheet 49
Volume 19, Sheet 97

0 Feet 150 300 600

N

5250 Conner Detroit
5250 Conner Street
Detroit, MI 48213

Inquiry Number: 3865614.8
February 28, 2014

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

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Date EDR Searched Historical Sources:

Aerial Photography February 28, 2014

Target Property:

5250 Conner Street
Detroit, MI 48213

Year	*Scale*	*Details*	*Source*
1937	Aerial Photograph. Scale: 1"=500'	Flight Year: 1937	AAA
1949	Aerial Photograph. Scale: 1"=500'	Flight Year: 1949	DTE
1957	Aerial Photograph. Scale: 1"=500'	Flight Year: 1957	CSS
1961	Aerial Photograph. Scale: 1"=500'	Flight Year: 1961	SEMCOG
1967	Aerial Photograph. Scale: 1"=500'	Flight Year: 1967	SEMCOG
1972	Aerial Photograph. Scale: 1"=600'	Flight Year: 1972	ASCS
1985	Aerial Photograph. Scale: 1"=500'	Flight Year: 1985	SEMCOG
1993	Aerial Photograph. Scale: 1"=600'	Flight Year: 1993	NAPP
1999	Aerial Photograph. Scale: 1"=500'	/DOQQ - acquisition dates: 1999	EDR
2005	Aerial Photograph. Scale: 1"=500'	Flight Year: 2005	EDR
2009	Aerial Photograph. Scale: 1"=500'	Flight Year: 2009	EDR
2010	Aerial Photograph. Scale: 1"=500'	Flight Year: 2010	EDR
2012	Aerial Photograph. Scale: 1"=500'	Flight Year: 2012	EDR

INQUIRY #: 3865614.8
YEAR: 1937
= 500'
N
EDR

INQUIRY #: 3865614.8
YEAR: 1949
= 500'
N
EDR

INQUIRY #: 3865614.8
YEAR: 1957
= 500'
N
EDR

INQUIRY #: 3865614.8
YEAR: 1961
= 500'
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EDR

INQUIRY #: 3865614.8
YEAR: 1967
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EDR

INQUIRY #: 3865614.8
YEAR: 1972
= 600'
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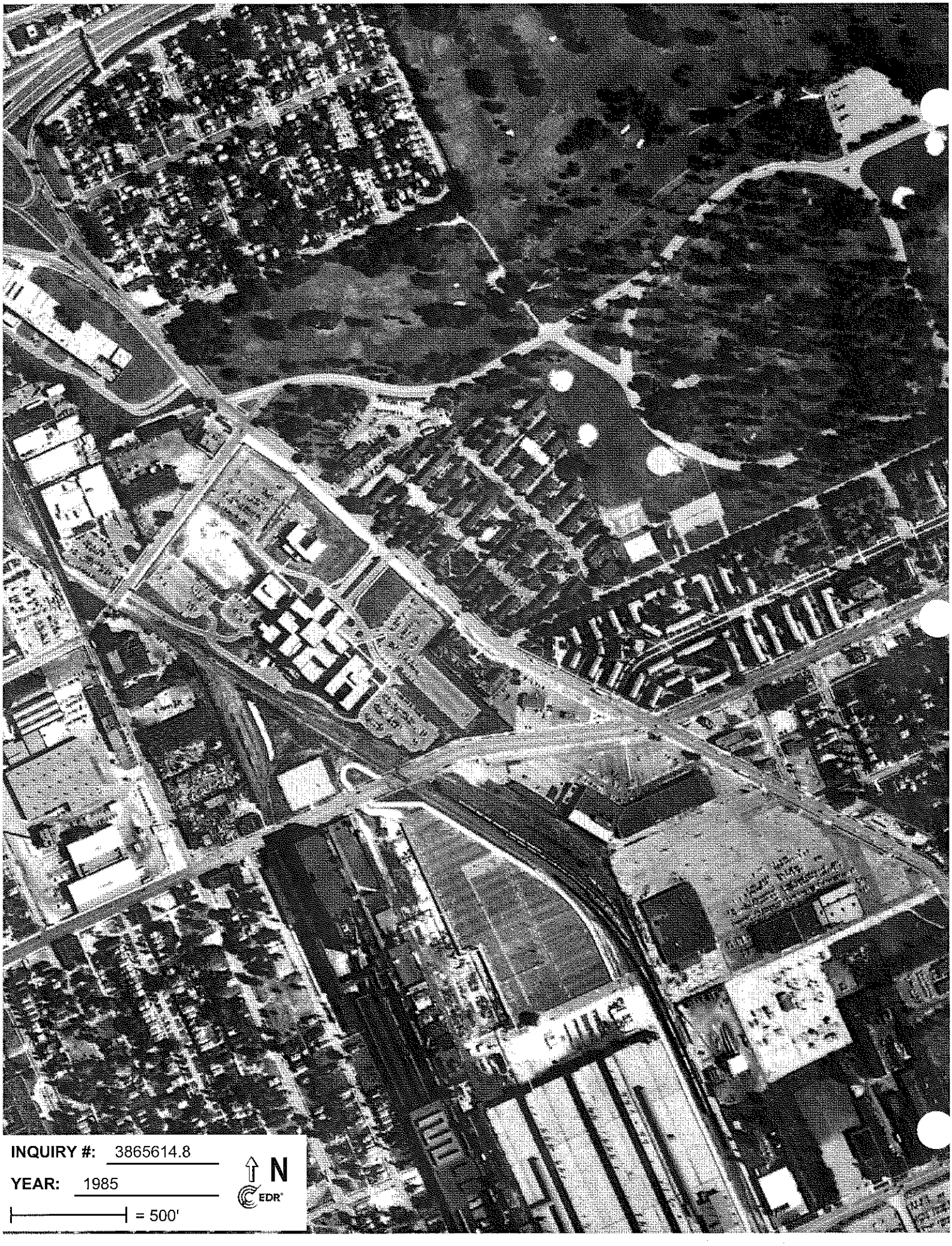
EDR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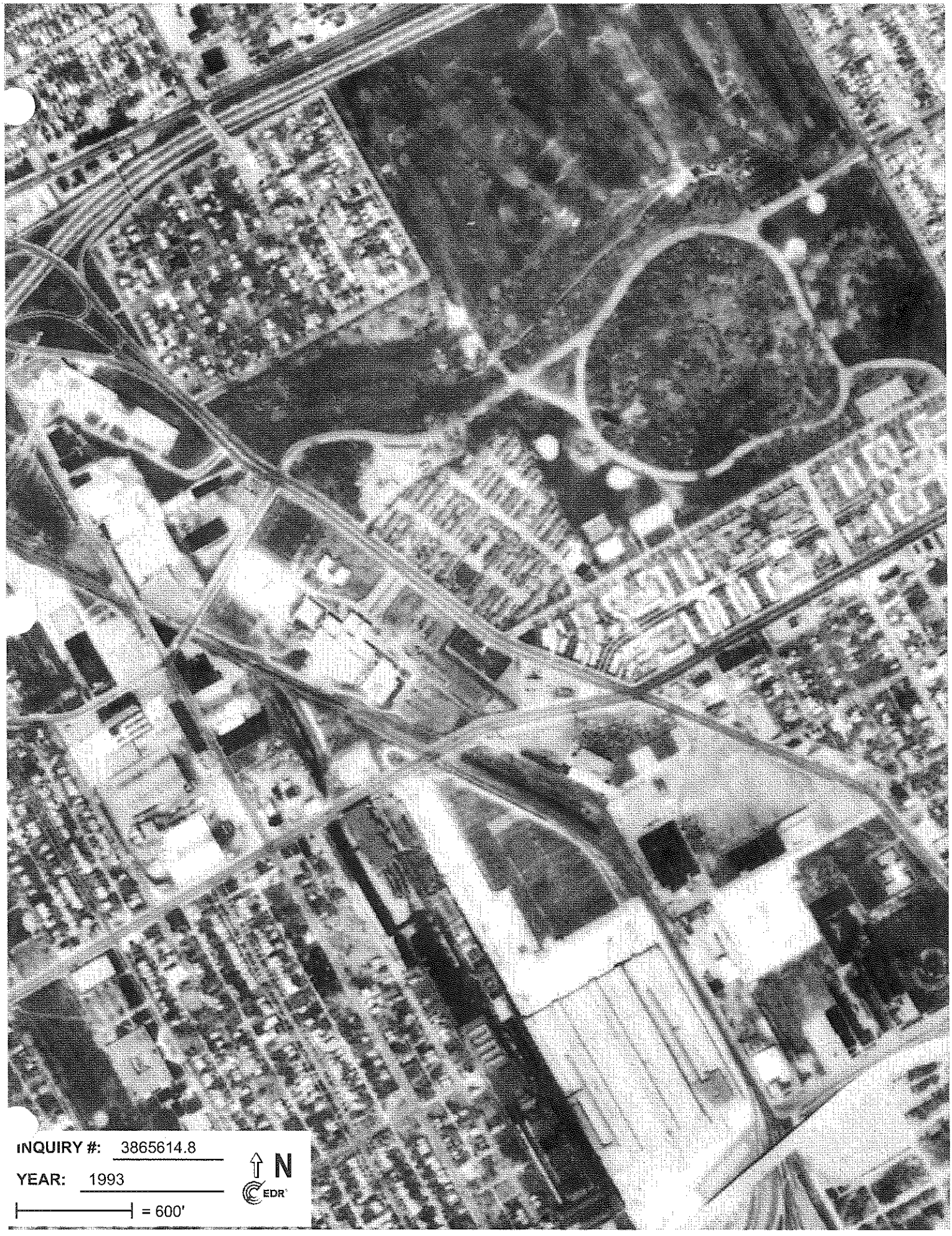
= 500'
N
EDR


INQUIRY #: 3865614.8
YEAR: 1993
= 600'
N
EDR

INQUIRY #: 3865614.8
YEAR: 1999
= 500'
N
EDR

INQUIRY #: 3865614.8
YEAR: 2005
= 500'
N
EDR

INQUIRY #: 3865614.8
YEAR: 2009
= 500'
N
EDR

INQUIRY #: 3865614.8
YEAR: 2010
= 500'
N
EDR

INQUIRY #: 3865614.8
YEAR: 2012
= 500'
N
EDR

5250 Conner Detroit
5250 Conner Street
Detroit, MI 48213

Inquiry Number: 3865614.5
February 28, 2014

The EDR-City Directory Image Report

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2013	☑	☐	Cole Information Services
2008	☑	☐	Cole Information Services
2003	☑	☐	Cole Information Services
1999	☑	☐	Cole Information Services
1994	☑	☐	Bresser's Cross-Index Directory Company
1989	☑	☐	Bresser's Cross-Index Directory Company
1984	☑	☐	Bresser's Cross-Index Directory Company
1979	☑	☐	Bresser's Cross-Index Directory Company
1973	☑	☐	Bresser's Cross-Index Directory Company
1968	☑	☐	Polk's City Directory
1964	☑	☐	Polk's City Directory
1954	☑	☐	Polk's City Directory
1941	☑	☐	Polk's City Directory
1936	☑	☐	Polk's City Directory
1930	☑	☐	Polk's City Directory
1925	☑	☐	Polk's City Directory
1919	☐	☐	Polk's City Directory
1915	☐	☐	Polk's City Directory

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FINDINGS

TARGET PROPERTY STREET

5250 Conner Street
Detroit, MI 48213

Year	*CD Image*	*Source*	
CONNER ST			
2013	pg A1	Cole Information Services	
2008	pg A2	Cole Information Services	
2003	pg A3	Cole Information Services	
1999	pg A4	Cole Information Services	
1994	pg A6	Bresser's Cross-Index Directory Company	
1989	pg A7	Bresser's Cross-Index Directory Company	
1989	pg A8	Bresser's Cross-Index Directory Company	
1984	pg A9	Bresser's Cross-Index Directory Company	
1979	pg A10	Bresser's Cross-Index Directory Company	
1973	pg A11	Bresser's Cross-Index Directory Company	
1968	pg A12	Polk's City Directory	
1964	pg A13	Polk's City Directory	
1954	pg A14	Polk's City Directory	
1954	pg A15	Polk's City Directory	
1941	pg A16	Polk's City Directory	
1936	pg A17	Polk's City Directory	
1930	pg A18	Polk's City Directory	
1925	pg A19	Polk's City Directory	
1919	-	Polk's City Directory	Target and Adjoining not listed in Source
1915	-	Polk's City Directory	Target and Adjoining not listed in Source

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

CONNER ST 2013

4707	NRP GROUP
4749	WENDYS
4801	STITCH BY STITCH NEEDLE ARTS & CRAFT
4899	RAINBOW
4905	DOLLAR & PARTY INC
4907	CITI TRENDS
5000	FRIENDS PARKSIDE
	SOUTH EAST HEAD START
	VILLAGES AT PARKSIDE
5201	OMNI CONVALESCENT CENTER

CONNER ST 2008

4733	FAMILY INDEPENDENCE MICH AGENCY
	THE SMITH ANDERSON GROUP LLC
4749	WENDYS
4899	UNITED MENSWEAR BIG & TALL
4905	RENT A CENTER
5000	CAREER CHILD CARE CENTER INC
	FRIENDS OF PARKSIDE
	SOUTH EAST HEAD START
	VILLAGES AT PARKSIDE II
5201	G & K MANAGEMENT SERVICES INC
	OMNI CONVALESCENT CENTER
5246	LISA WILLEY
5270	A CHAPPEL
5292	BYRON SLOSS
5304	DESSIA BRADLEY
5416	JOHN HITCHCOCK
5436	KENNAN HUGHES

CONNER ST 2003

4729	MCHGN STAT OF CNSMR & INDSTRY
	MCHGN STATE OF UNMPLYMNT AGNCY
4733	CHILD CARE CRDNTNG CNCL
	MCHGN STATE OF WAYNE CNTY FIA
4801	7 DAYS MENS WEAR
	B & B BEAUTY SUPPLY
	BEAUTY EXPRESS
	BEST BEAUTY
	BOSHIRLINS GIFT SHOP
	BOSHIRLINS NOVELTIES
	CHOICE FASHION INC
	CREATIVE EYE DESIGN
	DCS SERVICE
	EAST SIDE MUSIC
	GINA FASHION INC
	J FASHION TOWN
	J YOON CORNER
	KINGS GOLD
	LOVELY NAILS
	MENS WEAR
	MR JAYS WIG SALON
	NAILS & THINGS
	RO L JUN
	SUNGS DEPT STORE
	SUNNY ICE CREAM CAFE
	TIPANY JEWELRY STORE
	TOP 10 COMMUNICATIONS CLLR
	TOP DOG TATTOO PARLOR
	WOOIL TRADING INC
4841	G & P FASHIONS
4850	LULA CLARK
4899	UNITED MENS WEAR
	UNITED MENSWEAR BIG & TALL
4907	DOLLAR STORE
5000	CAREERWORKS CHILD CARE CTR INC
	FRIENDS OF PARKSIDE
	VILLAGES AT PARKSIDE
5201	G & K MANAGEMENT SERVICES INC
	OMNI CONTINUING CARE
5206	KEVIN MOORE
5246	LISA WILLEY
5270	A CHAPPEL
5436	KENNAN HUGHES

CONNER ST 1999

4707	DOLLAR PALACE
4729	MICHIGAN STATE OF
	SERCO INCORPORATED
4733	CHILD CARE COORDINATING CNCL OF DETROIT WAYNE CNT
	MICHIGAN STATE OF
4801	B & B BEAUTY SUPPLY
	BEAUTY EXPRESS
	BOSHIRLINS ELECTRONICS
	CHOICE FASHION INCORPORATED
	EAST SIDE MUSIC
	FAZAZ
	GINAS FASHIONS
	J FASHION TOWN
	J YOON CORNER
	K C SPORTS
	KIDS ANGELS
	KINGS FASHION
	KINGS GOLD
	LOVELY NAILS
	MCHANDBAG
	MENS WEAR
	MR JAYS WIG SALON
	PHALANGES
	STITCH BY STITCH NEEDLE ARTS & CRAFTS
	SUNGS DEPARTMENT STORE
	SUNNY ICE CREAM
	SUNS DESIGNER HANDBAGS
	SUTTON HYO
	TIPANY JEWELRY STORE
	TOP OF THE LINE KINGPEN NAILS
	WOO II TRADING
	YOO SUNG HUANG
4899	SIXTEEN PLUS
	UNITED MENSWEAR BIG & TALL
5201	OMNI CONVALESCENT CENTER
5202	BURNELL DAVIS
5204	EUNICE STARNES
5228	CAROLYN ISABELL
5246	CAROL SHELTON
5268	JAMMICA WILLIAMS
5272	G MARTIN
5278	JAMES SMITH
5280	MARY HERRELL
5340	IRENE NEAL
5342	DELOIS KELLEY
5360	SALINA FRANKLIN
5362	PHILLIP MCCREERY
5402	JAMES NAMACK
5438	LEILANI SMITH
5454	EDWARD SPAN

CONNER ST 1999 (Cont'd)

5536 V FRANKS

CONNER ST 1994

4899	**Warren&Conner Shopping Center**		
	★ **Sixteen Plus**	92	822-7467
	★ **Untd Mnwr Big&Tall**	87	331-7676
4901	★ **Xtra Foods**	86	822-4600
			48213
5100	5102 5104 5106	NP	
5108	5110 5112 5116	NP	
5118	5122 5124 5126	NP	
5128	5130	NP	
5140	★ **Friends of Parkside**	¤	822-0311
5142	★ **City 5th Precinct**	77	267-6924
5201	Reaba Jackson	89	571-6370
	★ **OMNI Convalescent**	91	571-5555
5202	5204 5206 5208	NP	
5210	Patricia Y Pearson	¤	331-0685
5214	5216 5218 5220	NP	
5222	Annie Buttrom	90	331-2093
5224	Samuel Snyder	89	822-1076
5226	5228 5232 5234	NP	
5236		NP	
5238	Mary E Johnson	90	823-5439
5240	Wesley Carter	■	331-6286
5242	5244	NP	
5246	Erwin Taylor	92	824-8637
5248		NP	
5250	Bonnie Thomas	92	822-5736
5252	5254	NP	
5256	Gloria Weatherby	78	331-5415
5262	5264 5266 5268	NP	
5270	Annie Butler	90	824-0574
5272	5276 5278 5280	NP	
5282	5284 5286 5288	NP	
5290	5292 5296 5298	NP	
5300	5302 5304 5308	NP	
5310	Yvonne Caver	¤	331-1738
5312	Henrietta Hayward	80	823-2767
5314	5316 5318 5320	NP	
5324	5326 5328 5330	NP	
5332	5334 5338 5340	NP	
5342	5352 5356	NP	
5358	Beverly Miller	-	822-6941
5360	5364 5366 5374	NP	
5376	5378	NP	
5384	Curly Peoples	-	822-4285
5386	5388 5390 5392	NP	
5394	5396 5398 5402	NP	
5404	5406 5408 5410	NP	
5412	5414	NP	
5416	John Hitchcock	¤	821-0195
5420	5422 5424 5426	NP	
5428	5432 5434 5438	NP	
5440	5442 5444 5446	NP	
5448		NP	
5450	Eugene Foster	91	822-2899
5452	5454 5458 5462	NP	
5464	5466 5472 5474	NP	
5476	5478 5480 5482	NP	
5484	S Dismute	¤	821-0354
5486	5488 5490 5492	NP	
5494	5496 5498 5500	NP	
5502	Tanisha Williams	¤	822-5732
5504	5508 5510 5514	NP	
5516	Tanya Edward	90	824-0024
5518	Remus Biffle	76	822-8252
5520	5522 5524	NP	
5526	Donna Coats	¤	822-2291

CONNER ST 1989

4729	*ST JOB SRVC EASTSD					8229500
4733	*ST SOC SERV					8237200
4737	*SOCIAL SECRTY ADMN					9631500
	*US CONNER OFFICE					9631500
4801	*HI-WAY AMERICAN					-3313620
4806	*DETROIT EDISON CO					237500
4899	*WARREN&CONNER					
	*SHOPPING CENTER					
	*SIXTEEN PLUS					-3314099
	*UNITED MENS WEAR					3317676
4901	*XTRA FOODS					8224600
	●●●●●●●●●●●●●●●●●●					48213
5100				NP		
5102	ALBURN GILMORE				7	3318656
5104	5106	5108	5110	NP		
5112	5116	5118	5122	NP		
5124				NP		
5126	EDNA HODGES				9	3314642
5128	ANGELA HODGES				5	8246242
5130				NP		
5142	*CTY PLC MINI STATN					2676924
5201	*REGENCY PARK CNTR					5715555
5202	5204	5206	5208	NP		
5210	5214	5218	5220	NP		
5222	5224	5226	5228	NP		
5232	5234	5236	5238	NP		
5242	5244	5246	5248	NP		
5250	JOHN STALLING				3●	8225463
5252	5254			NP		
5256	GLORIA WEATHERBY					3315415
5262	5264	5266	5268	NP		
5270	ROBIN VANLEER					8228084

CONNER ST 1989

	●●●●●●●●●●●●●●●●●●		48213
5272	5276	NP	
5278	DELORES MOSES	6	3314604
5280	5282 5284 5286	NP	
5290	5292 5296 5298	NP	
5300	5302	NP	
5304	B L COLLIER SR		‡3311606
5308	5310	NP	
5312	HENRIETTA HAYWARD	0	8232767
5314	5316 5318 5320	NP	
5324	5326	NP	
5328	ELLIMAE KEYES	6	8231959
5330		NP	
5332	THERESA HUDKINS	7	3314692
5334	5338 5340 5342	NP	
5352	5356 5358 5360	NP	
5364	5366 5374 5376	NP	
5378	5384 5386 5388	NP	
5390		NP	
5392	DEBRA HIGHTOWER		‡3311758
5394	5396 5398 5404	NP	
5406	5408 5410	NP	
5412	HARRY W KUSAK	5	3313283
5414	5420 5422 5424	NP	
5426	5428 5432 5434	NP	
5438	5440 5442 5444	NP	
5446	5448 5450 5452	NP	
5454	5458 5462 5464	NP	
5466	5472 5474 5476	NP	
5478	5480 5482 5486	NP	
5488	5490 5492 5494	NP	
5496	5498 5500 5502	NP	
5504		NP	
5508	DANIEL SHABAZZ	7	8230377
5510		NP	
5514	EDWARD C LOTHROPE		8234025
5516		NP	
5518	REMUS BIFFLE		8228252
5520		NP	
5522	CAROLYN GASTON	5	8223526
5524	5526 5534 5536	NP	
5538	5540 5544 5546	NP	
5548	5552	NP	
5555	*AMICARE HM HLTH		5794470
	*SAMARITAN HLTH CTR		5794000
	*SHC PATIENT INFO		5794007
	*SHC BILLING		5794337
	*SHC INFORMTN BLLNG		5794383
	*SHC EMERGNCY DEPT		‡5794100
	*SHC MEDICAL		5794080
	*SHC PERSONNEL DEPT		5794030
	*SAMARITAN MNTL HLT		5794960

CONNER ST 1984

	*MET RLT CTR PEDAT		8239803
4604	*HANDLONS TRCK&AUTO		8222855
4705	*CONNER SUPERMKT		8246270
4707	*UNITED WIG CO		3318266
4729	*ST JOB SERV-CLAIMS		8229500
4733	*ST SOCIAL SERVICE		8237200
4737	*SOCIAL SECURTY ADM		4931111
	*US HLTH CONNER OFC		4931111
4750	*WEARY FMLY MED CLN		8224600
4899	*FINANCIAL DATA SYS		☎3318147
	*FOOD STANP CENTERS		3318044
	*INTL BEAUTIQUE		3314077
	**********		48213
5012		NP	
5100	BERTIE DESAUTLE		8219018
5104	5106 5108 5110	NP	
5112	5116 5118	NP	
5122	JOE BLANCMARD		☎3314656
5124		NP	
5126	EDNA HODGES	9	3314642
5130		NP	
5142	*CITY PLC MINI STN		2676924
5146	*CTY NGHBRHD SV CTR		2676600
5201	*REGENCY PARK CNTR		5715555
5202	5204	NP	
5206	HUBERT LEETH		8217580
5208	5210 5218 5220	NP	
5222		NP	
5224	MARGARET WITTEN	1	8244429
5226	5228 5232 5234	NP	
5236	MAHASNAH MUHAMMAD	2	8249419
5238	MARY BRADLEY	1	8220278
5242	E BASS	0	8248193
5246		NP	
5248	R TURNER	2	3317229
5250	JOHN STALLING		-8220110
5252	5254	NP	
5256	GLORIA WEATHERBY	8	3315416
5262	ICYLEE WILLIAMS	1	3315501
5264	5268 5270 5272	NP	
5276	LIONEL JOHNSON		☎8240121
5278	5280 5282 5284	NP	
5286	5290 5292 5296	NP	
5298	5300 5302	NP	
5304	HATTIE CARTER		☎8226428
5308	5310	NP	
5312	HENRIETTA HAYWARD	0	8232767
5314	5316 5318 5320	NP	
5326	AMEL SMITH	8	8230946
5330	5332 5335	NP	
5338	JAMES DAVIS		8235237
5340	5352	NP	
5356	WILLIE M SISTRUNK	6	8220202
5358	SILVERINE WOODS	0	8233650
5360	5366 5374	NP	
5376	LESTER KING		☎8224970
5378	EDWARD HOLLY	2	8230993
5384	CEOLA COLLINS	2	8222401
5386	DAVID L BUCKERY	9	8246755
5388		NP	
5390	E BINDER	0	8232216
5392	5394 5396 5398	NP	
5404	5406 5408 5410	NP	
5412	ANGELINE M KUSAK		3313283
5414	5422 5424 5426	NP	
5428		NP	
5432	CASSEY SMOTHERS	5	3315944
5433	*LIMBACH CO		☎9210011
	*MCBRO PLANNG&DVLPT		☎5717128
5434	5438 5440	NP	
5442	C HUGHES	9	3316913
5444	5446 5448 5450	NP	
5452	5454	NP	
5458	DAISY LEE MCGEE	0	8224084
5462	5466 5472 5474	NP	
5476	5478 5480 5482	NP	
5486	N WHITE	1	8247417
5488	5490 5492 5494	NP	
5496	5498 5500	NP	
5504	C L LOWE	8	8223030
5508	5510	NP	
5514	EDWARD C LOTHROPE	8	8234025
5516		NP	
5518	REMUS BIFFLE	6	8228252

CONNER ST 1979

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4707*UNITED WIG CO              3318266
4729*MICH EMPLYMT SCRTY        -8229500
4733*ST SOCIAL SERVICES        ¤8237200
4750*WEAVERS COCKTL LNG        ¤8246382
4801*SPARTAN ATLANTIC           8218685
     *THRIFTY AGCY              8222100
4899*ART VAN FURNITURE          8211800
     *VANART FURNITRE CO        8211800

       ****************          48213
5012                    NP
5100 BERTIE DESAUTLE            8219018
5104 NORMA FIELDS            3  8243186
5106                    NP
5108 CHERYL BESANT             ¤8235216
5112                    NP
5116                    NP
5124                    NP
5126                    NP
5130                    NP
5142*POLICE MINI STA            2240418
5201*CONNER CNVLSNT CTR         5715555
     WILMA JONES               -9234806
     ROSE WARLIX               ¤5710225
5202 DOROTHY ALEXANDER       3  8218660
5204 W A BROWN                 ¤8247629
5206 HUBERT LEETH               8217580
5210 WILLIE ANN BROWN          ¤8221688
5218                    NP
5220                    NP
5222                    NP
5226                    NP
5228                    NP
5232 ISABELL GRAFTON         3  8234331
5234                    NP
5236 OLIVIA KIMBROUGH          ¤3317129
5246 ANNIE KEY                 ¤8240929
5254                    NP
5256 GLORIA WEATHERBY          -3315415
5264                    NP
5266 LORRAINE MANUEL         7  8224271
5270                    NP
5272                    NP
5276                    NP
5278                    NP
5280                    NP
5282                    NP
5284                    NP
5286 HANNAH HARRIS             ¤8231016
5290                    NP
5292 GEORGE LEYH             9  8232012
5296                    NP
5298                    NP
5300 ALBERT THOMAS           7  8234816
5302                    NP
5308                    NP
5312 HENRIETTA HAYWARD       7  3318095
5316 ESTHER HIGHTOWER          ¤8220463
5318                    NP
5320 J HOLTZCLAW             4  8224363
5326 AMEL SMITH                ¤8230946
5330                    NP
5335                    NP
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CONNER ST 1973

```
5110 PATRICIA A SEBESTA¤8236071
5114 LEO E KETT        ¤8219480
5116                NP
5118                NP
5122                NP
5124 S SEBESTA         ¤8220624
5126 LOUISE SHAW         0 8212637
5130                NP
5140                NP
5142*MSU PARKSIDE HOMES¤8247778
5144                NP
5146 MARY ANN BROWNING1  8214337
5148*PARKSIDE HMS SOCL  -8215991
5150                NP
5201 SOPHIE KAMINSKA     2 9232843
    *CONNER CNVLSNT CTR  5715555
    *MACAN PHARMACY INC  9211250
     CHARLOTTE JEWETT    2 9219645
     M STABILE           ¤9220616
5202 DOROTHY ALEXANDER   -8218680
5204 SANTE GUALANO        8216902
5206 L W LOUDY            8230114
5210                NP
5212 M JOHNSON           2 3315604
5214                NP
5216 EUDEAN MCDONALD     0 8214006
5218 M FRANKLIN         ¤8242486
5220                NP
5222 FRANK DE PERNO       8210151
5224                NP
5226                NP
5228                NP
5232 ISABELL GRAFTON    ¤8234331
5234                NP
5236                NP
5238 BEULAH M WILLIAMS2  4998126
5240 M L ESTILL          7 8234623
5242 BERTHA L BURNS      2 3313451
5244 LARRY M BRENT      ¤8232591
5246 TERRANCE BURGESS    -8240660
5250 M B MACCORMICK      4 8236331
5252                NP
5254                NP
5256 JANICE D MAGEE      0 3316087
5258 LAVELL HUDSON       -8247122
5260                NP
5262 ANNE BAKER           8234202
5264 SANDRA ADAMS        ¤3312091
5266                NP
5268                NP
5270 ROBERT WYNN        ¤8241811
5272 MINNIE L BUTLER     5 8234806
5274 JAMES A HOWDEN       VA14748
5276                NP
5278                NP
5282                NP
```

CONNER ST 1968

5122 LAUBERNDS HERMAN
5124 SEBESTA SUZANNE MRS
5126 SALTER ROSE 822-3312
5128 WILLIAMS LULA 821-4069
5130 WELLONS REBECCA MRS
5140 MORGAN CORRINE MRS
5142 DAVIS MARY E 823-3264
5144 HOWARD LEROY
5146 VACANT
5148 CLARK CHARLES 823-5020
5150 GRAVES TERRY J 821-4926
---FRANKFORT AV INTERSECTS
5201 NO RETURN
5202 ALEXANDER DOROTHY MRS
5204 GUALAND SANTE 821-6902
5206 LOUDY MARY MRS 823-0114
5208 HAGER HELEN MRS
5210 PRATHER JIMMIE C
5212 SMITH MORITZ 821-8130
5214 ASHFORD ETHEL MRS
5216 OBERY EDEVE 823-0003
5218 NO RETURN
5220 NO RETURN
5222 DEPERNO FRANK 821-0151
5224 GIPSON ETHEL
5226 BACHMAN ELIZ MRS VA1-4916
5228 WILSON WELLINGTON 821-5164
5230 THOMPSON DONALD 824-2736
5232 CRAFTON ISABELLE
5234 HARRIS BARBARA MRS
5236 BAGLEY MABEL MRS 823-4008
5238 DURAND E MRS
5240 ESTILL M L 823-4623
5242 KUSHELL WINIFRED MRS
823-2740
5244 WALDEN NORMAN 823-4246
5246 FALBO JAMES 823-5002
5248 CANHAM JENNIE MRS 821-8785
5250 MAC CORMICK MARIETTA E
823-0750
5252 CAMPION ROBT H 823-5274
5254 FERGUSON EMERY
5256 MAGEE ELLIS
5258 KLUCKA JOHN T 823-5251
5260 MITCHELL MARY 823-4787
5262 BAKER ANNE M MRS 823-4202
5264 ADAMS SANDRA 823-4537
5266 WEAVER GENEVIEVE MRS
821-1441
5268 YOUNG JESSIE
5270 MC LAREN JAMES 823-4952
5272 BUTLER MINNIE MRS 823-4806
5274 HOWDEN JAMES A VA1-4748
5276 PETERS ALBERT 823-4781
5278 SUMMERFIELD CHARLES A
VA1-3110
5280 CARTWRIGHT PATRICIA MRS
5282 RICHARDSON EVELYN

CONNER ST 1964

5126 Mitchell Leon 821-3140
5128 Larson Theo C 821-2906
5130 Wellons Rebecca Mrs 823-1704
5140 Gabriel Sterling
5142 Davis Emmett
5144 Boussie Margery Mrs
5146 Stimpson Roberta Mrs 823-1833
5148 Johnson Wm F
5150 Graves Terry 821-4926
Frankfort av intersects
5202 Fargo Helen Mrs VA4-9235
5204 Guanago Sante VA1-9634
5206 Loudy Mary Mrs 823-0114
5208 Hager Helen Mrs VA1-5085
5210 Prata Jimmie 823-9601
5212 Vacant
5214 Vacant
5216 Becker Ruth Mrs ED1-0487
5218 Lyons Albert
5220 Vacant
5222 Deperno Frank VA1-4274
5224 Adkins John L
5226 Bachman Wm N VA1-4916
5228 Morley Edna Mrs
5230 Boyd Willie J 821-6908
5232 Means Jas
5234 Harris Barbara Mrs
5236 Damron Lenna 823-2025
5238 Bagby Mamon 822-8604
5240 Rose Edna Mrs 821-6710
5242 Bacon Arth B VA1-3543
5244 Bogedin June Mrs 821-4798
5246 Cofield Jas T 821-3228
5248 Canham Jennie Mrs ED1-3433
5250 McCormack Eliz
5252 Campion Robt H ED1-6584
5254 Gosselie Clarence F
5256 Jasionowski Leon VA1-1581
5258 Klacka John T ED1-5340
5260 Pierce Harry V ED1-6089
5262 Baker Anne M Mrs VA4-7108
5264 Frederick Ida R Mrs ED1-2006
5266 Linier Arth 821-1573
5268 Kutz Wm jr VA1-4213
5270 Ruggles Gerald J 331-8930
5272 Best Carl
5274 Howden Jas A VA1-4748
5276 Peters Albert 824-0428
5278 Summerfield Chas A VA1-3118
5280 Bates Willie 821-6485
5282 Owens David
5284 Hile Rufus
5286 No Return
5288 Fisher Wm O ED1-8475
5290 Diddeus Wm E
5292 Allred Gurney P VA1-1827
5294 Freeman Gordon E 821-0963
5296 Leath Hubert
5298 Vaughn Ronald E ED1-1252
5300 Abate Antonio VA1-7168
5302 Schuman John 331-6521
5304 Keppens Felix H VA1-3558
5306 Parisien Minnie M Mrs
5308 Lyon Euphenia 331-2289

CONNER ST 1954

5203 Dyer Chas A WA 5-7238
5204 Gaines Theresa Mrs VA 1-0391
5205 Lukaschewski Wm WA 5-7752
5206 McGrath Edw VA 3-0216
5207 Denis John W WA 3-5748
5208 Donovan Francis
5209 Harris Ernest L WA 3-5973
5210 No return
5211 Fuson Herbert
5212 Knapp Fred
5213 VanVorst Llewellyn
5214 Hamilton Cath Mrs
5215 Trinkley Roy T WA 3-5411
5216 Rogers Robt C VA 4-6470
5217 Archer John B
5218 Chroninger Andrew VA 1-2752
5219 Blumberg John R
5220 Zanich Jean Mrs VA 1-1170
5221 Riddle Arth E
5222 Olson Harold J VA 4-2547
5223 Sharlett Jas C WA 3-1775
5224 Cunningham Mary J Mrs VA 4-8771
5225 Owens Jas R
5226 Barrett Edw D VA 1-8893
5227 Clark Virgil F
5228 No return
5229 Knight Walter H WA 3-1872
5230 Amon Nicholas F VA 1-3326
5231 Majestic Frank J
5232 Pearson Anna J Mrs VA 1-9309
5233 Malloy Carleton L WA 3-3934
5234 Craft Ivan C VA 1-9424
5235 Garrett Branon L WA 4-4947
5236 DeLuyck Bertha Mrs VA 1-5984
5237 Naler Robt T
5238 Phillips Henry S VA 4-4770
5239 Baenn Harold E WA 3-2496
5240 Dittenber Dorothy H
5241 Lakey Joe E WA 3-8463
5242 Dale Jas A VA 1-3523
5243 Reilly Francis L
5244 Randles June Mrs VA 1-2903
5245 Stowaski Jos A
5246 Carlson Donald R
5247 Coffee Hobert H
5249 Kowalski Walter C WA 2-5160
5250 Verbracken Arth A VA 4-1497
5251 Kusch Harold
5252 No return
5253 Muggelberg Archie E WA 5-3081
5254 Patrick Walter L
5255 Ten Eyck Jas WA 5-7825
5256 Cierpial Walter J VA 1-3181
5257 Dotson Burns M WA 4-4684
5258 Lopiccolo Jos ED 1-7077
5259 Miles Leland E WA 4-4597
5260 Jabensville Doris Mrs
5261 Gray Lloyd C
5262 Baker Anne M VA 4-7108
5263 Simmons Virgil WA 2-1252
5264 No return
5265 Rustick Saml J WA 5-2843

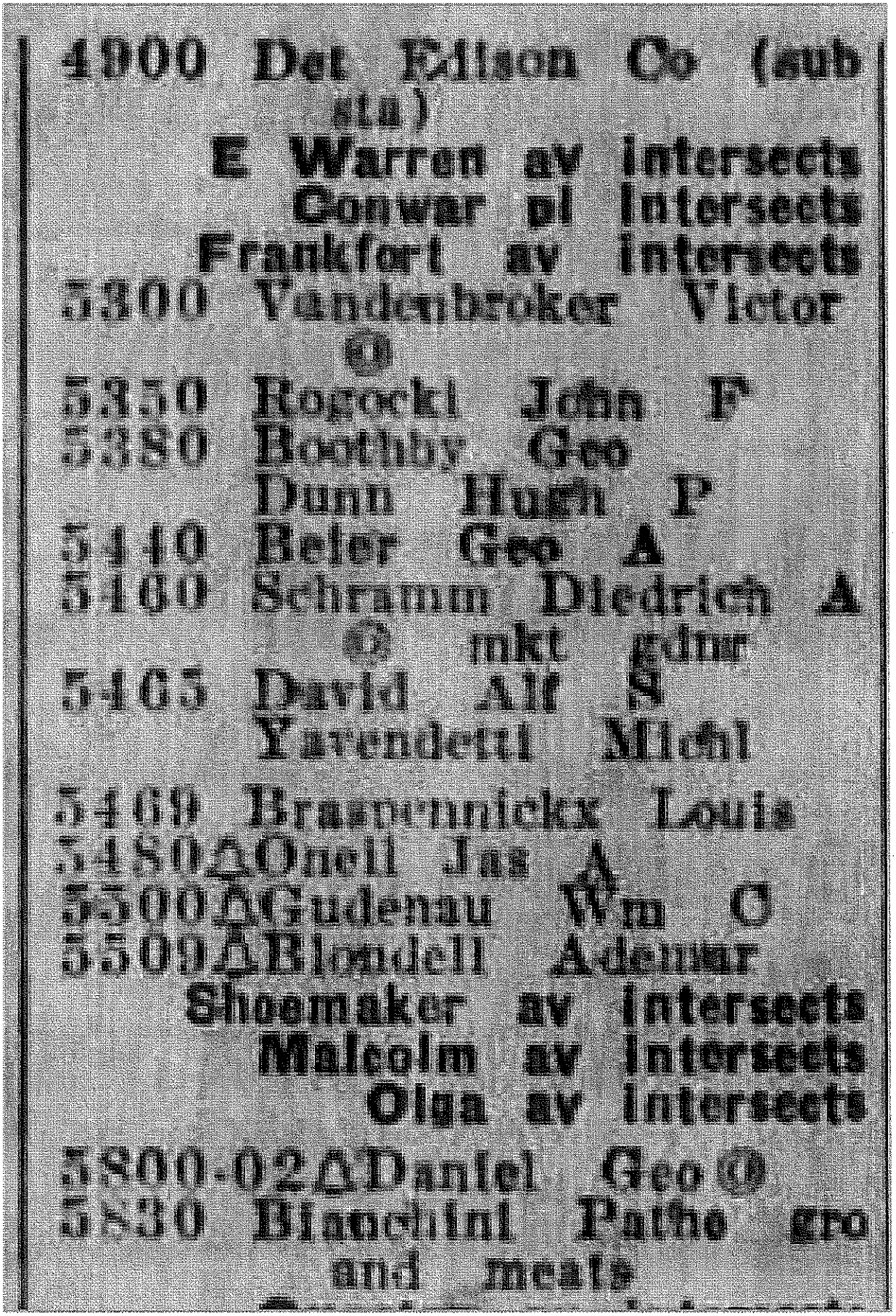
CONNER ST 1954

5266 Hey Robt E
5268 Scruggs Mary K VA 1-4002
5270 Holton Ann Mrs VA 1-5808
5272 Koppy Ruby C Mrs
5274 Howden Jas A
5276 Jakubowski Sighart U
5278 Clarke Ralph A VA 4-1354
5280 No return
5282 Rawlins Shirley ED 1-9007
5284 Coward Jonathan T ED 1-2879
5286 Dopierola Jennie Mrs ED 1-5636
5288 Brorson Robt L
5290 No return
5292 Mascia Anthony
5294 Sandstrom Edna
5296 Benard Iva Mrs
5298 Maron Lucille A ED 1-7001
5300 Matson Michl
5302 Kramer Julia Mrs VA 4-0436
5304 Minne Leopold VA 1-6790
5306 No return
5308 Alexander Julia Mrs ED 1-7193
5310 Horvath Irene Mrs ED 1-5189
5312 No return
5314 Heredia Esquipula Mrs VA 1-5292
5316 Garcia Nicholas VA 1-6086
5318 Manke Marie Mrs VA 1-3670
5320 No return
5322 Draper Myrtle VA 4-8151
5324 Halsch Hulda Mrs VA 1-8282
5326 Gentry Bobbie B VA 1-6356
5328 Koll ————
5330 Gudenau Raymond J VA 1-0711
5332 Healy John S VA 1-3602
5334 No return
5336 Frantz Geo A Jr VA 4-5625
5338 Feerer Dorothy VA 4-3868
5340 Contract John R VA 1-5858
5342 Steiner Fred L Jr VA 1-2758
5344 Robertson Grace Mrs VA 2-8593
5346 Haddad Alex ED 1-1109
5348 Russo Jas VA 4-0077
5350 Lynch Margt W Mrs ED 1-4499

CONNER ST 1941

5124 (10) Tate Fred T
5126 (9) Miserlian Lucy
5128 (8) ΔBall Wm
5130 (7) Hattemer Louis F
5140 (6) Milke Walter V
5142 (5) ΔMurawski Steph
5144 (4) Bruder Earl G
5146 (3) Ziolkowski Edw
5148 (2) Adams Hugh
5150 (1) Miller Ruth F Mrs
Frankfort av Intersects
5300 Vandenbroker Victor (0)
5350 Davis Edgar L
5380 Vacant
5410 McLaughlin Harold
5412 ΔNinni Donald
5414 DeLaTorre Nettie Mrs
5416 Vacant
5418 Vacant
5420 Vacant
5422 Vacant
5424 Vacant
5426 Vacant
5428 ΔHallew Hollis
5430 Pillar Jas R
5431 Arcand Julius
5432 Vacant
5434 Vacant
5436 Liles Robt
5438 Ruthenberg Richd
5440 Vacant
5442 Price Jack
5444 Ward Michl
5446 Vacant
5448 Vacant
5450 Glanville Richd
5452 Walters Elmer O

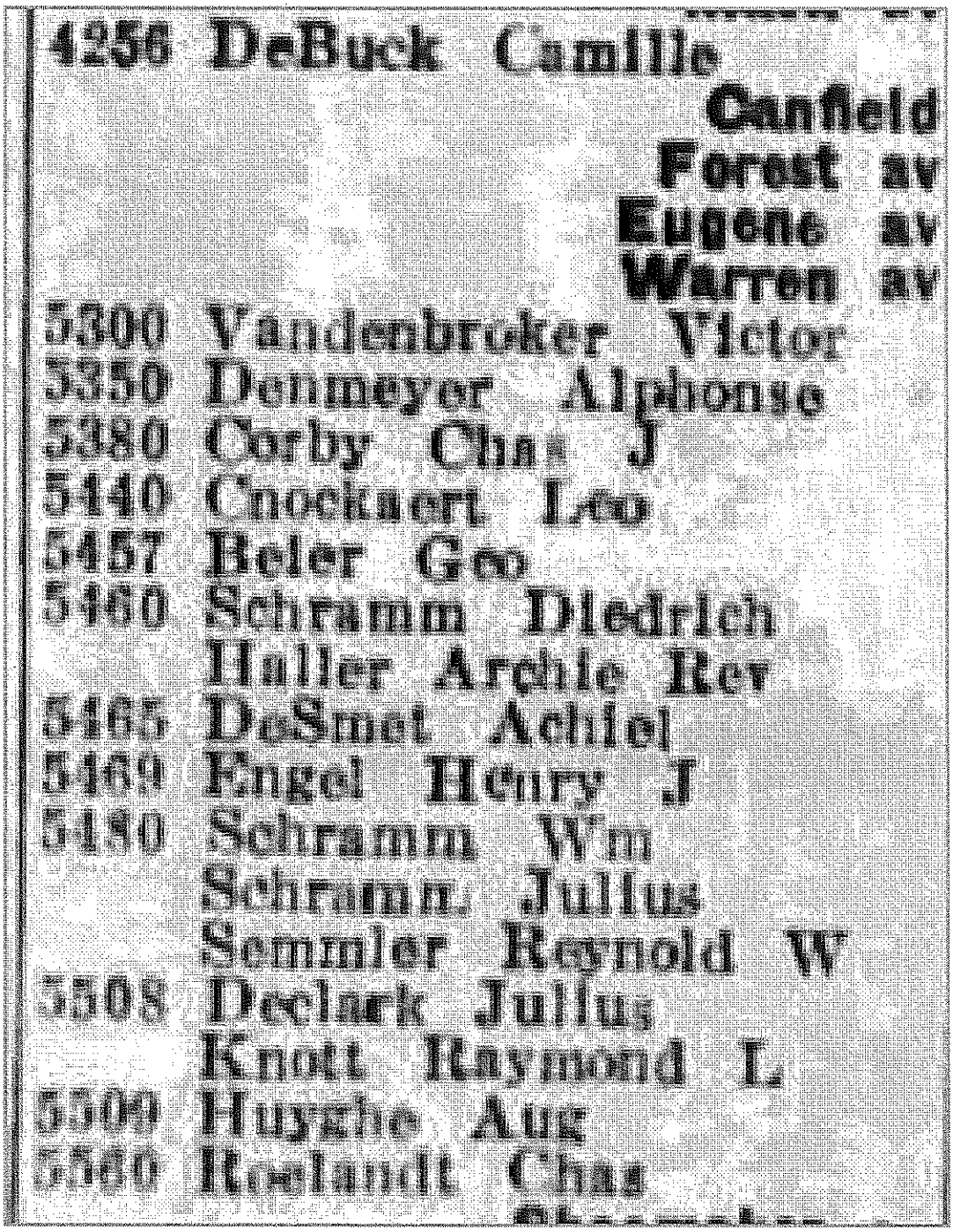
CONNER ST 1936



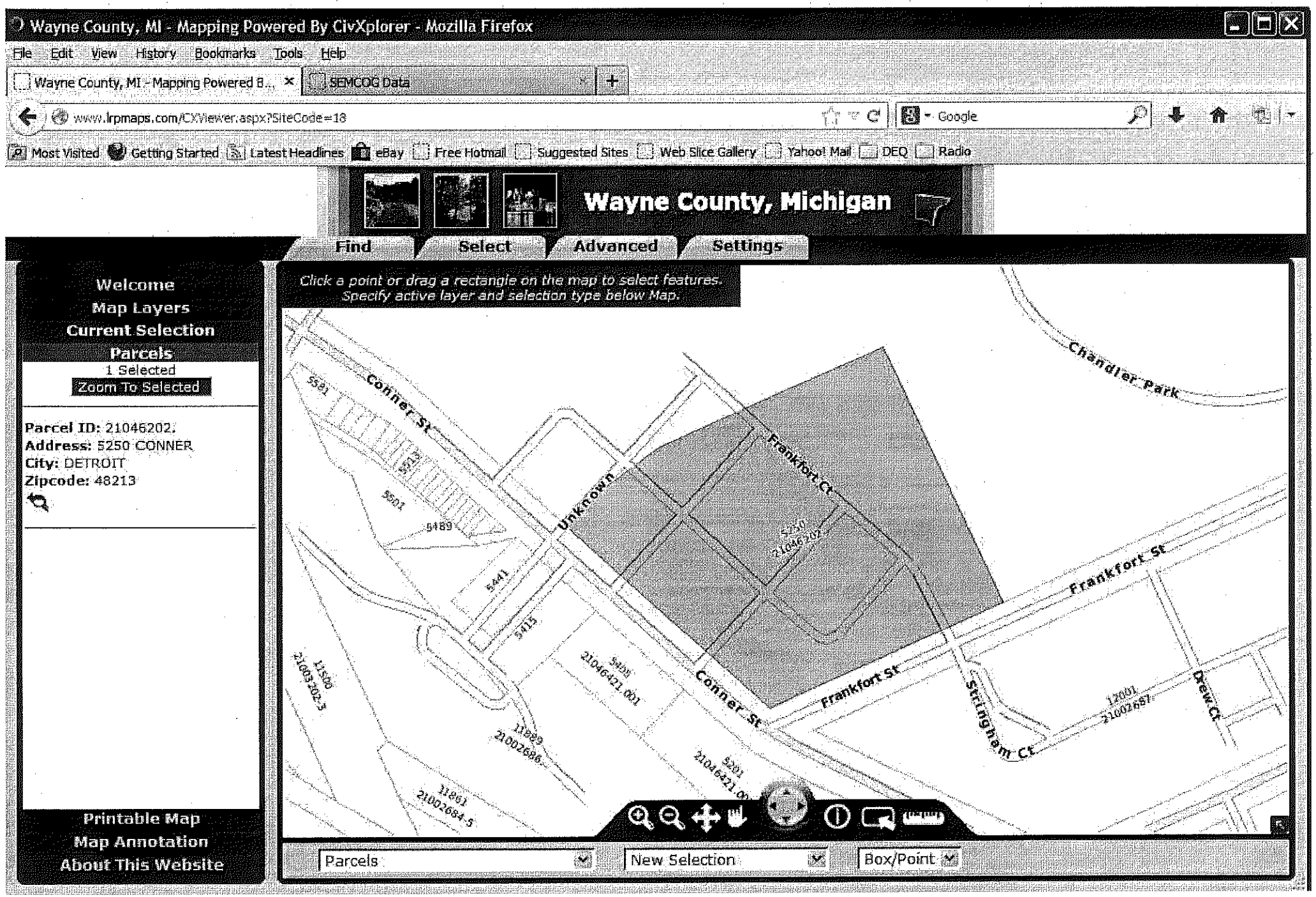
CONNER ST 1930

4250 DeBuck Camille
Canfield intersects
4604 DeBuck Camille fll sta
Forest av intersects
Eugene av intersects
se cor Detroit Edison Co (br)
Warren av intersects
Conwar ol intersects
Frankfort av intersects
5300 Vandenbroker Victor
5350 DeMeyer Gustaf
5380 Corby Chas J
5440 Brier Geo
5460 Schramm Diedrich
Maskel Clifford roofer
5465 McGill Thos
5469 Engel Henry J
5480 Thoma Julius
5500 Gudeneau Wm O
5509 Blondell Adickmar
Shoemaker av intersects
Olga intersects
5830 Dew John gro
Gunston intersects
Harper intersects
Evanston intersects
Camden intersects
9300 Morris & Davis bll-

CONNER ST 1925



4256 DeBuck Camille
Canfield
Forest av
Eugene av
Warren av
5300 Vandenbroeker Victor
5350 Donmeyer Alphonse
5380 Corby Chas J
5440 Cockaert Leo
5457 Beler Geo
5460 Schramm Diedrich
Haller Archie Rev
5465 DeSmet Achiel
5469 Engel Henry J
5480 Schramm Wm
Schramm Julius
Semmler Reynold W
5505 Declark Julius
Knott Raymond L
5508 Huyghe Aug
5560 Roelandt Chas


Wayne County, MI - Mapping Powered By CivXplorer - Mozilla Firefox
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Wayne County, MI - Mapping Powered B...
SEMCOG Data
www.lrpmaps.com/CXViewer.aspx?SiteCode=18
Google
Most Visited Getting Started Latest Headlines eBay Free Hotmail Suggested Sites Web Slice Gallery Yahoo! Mail DEQ Radio
Wayne County, Michigan
Find
Select
Advanced
Settings
Welcome
Map Layers
Current Selection
Parcels
1 Selected
Zoom To Selected
Parcel ID: 21046202.
Address: 5250 CONNER
City: DETROIT
Zipcode: 48213
Printable Map
Map Annotation
About This Website
Click a point or drag a rectangle on the map to select features.
Specify active layer and selection type below Map.
Chandler Park
Conner St
Unknown
Frankfort Ct
Frankfort St
Stringham Ct
Drew Ct
5581
5501
5489
5441
5415
5250
21046202
5408
21046421.001
5201
21046421.00
11500
21003202.3
11889
21002686
11861
21002684.5
12001
21002687
Parcels
New Selection
Box/Point

3/18/14

5/29/14

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

CONSENT TO ENTER PRIVATE PROPERTY

Property Description (attach separate sheet if necessary)

5250 Conner Detroit project
5250 Conner Street
Detroit, Michigan 48213

I, Kelley Lyons, the person in charge of the above-described property/properties, or his/her authorized representative, having been informed of the request of the Michigan Department of Environmental Quality (MDEQ), acting as an agent of the United States Environmental Protection Agency (EPA), to conduct potential contamination evaluation activities on the property, hereby permit and authorize the MDEQ to have entry and as necessary to re-enter the above-described premises from May 20th through June 30, 2014. This access is granted in order to perform a Brownfield Redevelopment Assessment and to undertake any and all activities to conduct the inspection, including collecting soil, soil boring and groundwater samples. This access may also be necessary to take photographs of the property.

I understand that I and/or my designate representative(s) are entitled to accompany the MDEQ during these activities and to participate in the collection of any split samples taken as part of these activities. The MDEQ shall provide me with a copy of any sample analysis results, and photographs taken as soon as they are available. I agree to comply with the requirements of the property health and safety plan while on site during these sampling activities.

The duration of the entry authorization shall be from May 20 to June 30, 2014. If I choose to revoke this entry authorization, I agree that I will do so in writing to Mr. John Spielberg, Team Leader/Project Manager, MDEQ, Remediation and Redevelopment Division, Superfund Section, P.O. Box 30426, Lansing, Michigan, 48909, at least seven days prior to the effective date of the revocation of entry authorization. I also agree that as long as this entry authorization remains in force, I will not interfere with, interrupt, change, or otherwise disturb any systems or equipment installed or utilized by the MDEQ. The MDEQ agrees that it shall provide me with reasonable notice of its activities and that it will conduct its activities at reasonable times and in a manner that will not unreasonably interfere with the ongoing business at the property.

Person in Charge or Representative/Date
(Signature Required)

Executive Director
Title/Position

Villages at Parkside – Village I, a.k.a. Parkside Annex
Facility/Company/Property Name

1301 E. Jefferson
Mailing Address

Detroit, MI 48207
City/State/Zip Code

313-877-8000
Area Code/Telephone Number

RIGHT OF ENTRY
and
WAIVER AND RELEASE

THIS TEMPORARY RIGHT OF ENTRY AGREEMENT ("Agreement") is between the Detroit Housing Commission, acting by and through its DEVELOPMENT DEPARTMENT ("DHC") and the Michigan Department of Environmental Quality ("MDEQ").

1. This Agreement applies to the following DHC–owned property ("Premises") described as:

   Part of Private Claims 386 and 392, Also part of fractional Section 25, T1S, R12E, and also parts of lots 1, 2 and 3, of Corby's Subdivision as recorded in liber 21 of plats, Page 64, Wayne County Records, all being In the City of Detroit, Wayne County, Michigan and being more particularly described as: Commencing at the Intersection of the Westerly line of Private Claim 322 and the Easterly line of Private Claim 386, said point also being on the Northerly line of Private Claim 128; thence North 26 degrees 16 minutes 15 seconds West, 50.00 feet along said Easterly line to a point on the Northerly line of Frankfort Road (variable width), said point being the point of beginning thence South 63 degrees 56 minutes 00 seconds West, 642.68 feet along said Northerly line to a point on the Northwesterly line of Connors Avenue (variable width); thence the following two courses along said Northwesterly line, (1} North 53 degrees 28 minutes 20 seconds West, 72.39 feet and {2} North 46 Degrees 49 minutes 30 seconds West 886.65 feet, thence North 51 degrees 38 minutes 30 seconds East, 403.01 feet; thence North 64 degrees 08 minutes 00 seconds East, 621.84 feet to a point on the Easterly line of Private Claim 386; thence South 26 degrees 16 minutes 15 seconds East 965.75 feet along said Easterly line to the point of beginning and containing 803,682 square feet or 18.450 acres.

   also known as Parkside Annex and/or Parkside Village I, 5250 Conner, Detroit, MI 48213.

2. Subject to satisfaction of the terms and conditions in this Agreement, DHC grants permission to the MDEQ, including its subcontractors, agents and employees, to enter the Premises.

3. This Agreement shall commence on May 20, 2014 and shall automatically terminate upon the completion of the activity described in Section 4, or by June 30, 2014, whichever occurs first.

4. The MDEQ acknowledges and agrees that it is solely its choice to enter the Premises for the purpose of inspecting and investigating all aspects of the Premises.

5. The MDEQ acknowledges and understands that the Premises may be occupied, or vacant and deteriorating and is willing to and does hereby assume all risks associated with entering the Premises, including injury or death to its subcontractors, officers, agents and/or employees who enter the Premises.

6. The MDEQ and its heirs, successors and assigns shall hold DHC harmless and shall defend and indemnify DHC, its officers, agents and employees, from and against any and all damages, claims, demands, liabilities, costs, charges, losses, and expenses arising from, caused by or related to the MDEQ, its subcontractors, officers, agents and/or employees', entry on the Premises, including, but not limited to, any environmental release, threatened release, exacerbation, damage or contamination.

7. The right of entry granted by this Agreement shall not be assigned by the MDEQ, its subcontractors, officers, agents and/or employees.

8. No activities other than those authorized in Section 4 may be performed on the Premises.

9. The MDEQ shall not damage the Premises, except, as customarily incident to the activities being performed pursuant to Section 4 of this Agreement and in accordance with all applicable laws. The MDEQ shall be liable for and shall make all reasonable efforts to repair any damage caused to the Premises and restore the Premises to its original condition.

10. The MDEQ shall not bring materials onto the Premises, except such materials, tools and equipment as customarily required to perform the activities specified in Section 4 of this Agreement.

11. A. The MDEQ shall maintain, and shall cause its contractors, subcontractors or agents to maintain, at its/their sole expense, during the term of this Agreement, the following insurance coverages:

    1) Workers' Compensation Insurance for employees which meets Michigan's statutory requirements and Employer's Liability Insurance with minimum limits of $500,000.00 each accident;

    2) Comprehensive General Liability Insurance with minimum limits of $2,000,000.00 combined single limit, for each occurrence, of bodily injury and property damage;

    3) Automobile Liability Insurance covering all owned, hired and non-owned vehicles with Michigan No-Fault Coverage plus residual liability coverage with a minimum combined single limit of $1,000,000.00 for each occurrence for bodily injury and property damage; and,

4) Environmental Liability or Impairment Insurance with minimum limits of $1,000,000.00 per occurrence and $2,000,000.00 in the aggregate.

B. The insurance policies shall name the MDEQ as the insured and DHC as an additional insured and shall be accompanied by a commitment from the insurer that such policies shall not be canceled or reduced without at least thirty (30) days prior notice to DHC. Certificates of insurance evidencing the required coverage shall be submitted to DHC prior to the MDEQ's entry upon the Premises.

DETROIT HOUSING COMMISSION _____

By: _____ By: _____

Kelley Lyons

Its: Executive Director Its: _____

Date: _____ Date: _____

CITY OF DETROIT
BUILDINGS, SAFETY ENGINEERING AND ENVIRONMENTAL DEPARTMENT
ADMINISTRATION

COLEMAN A. YOUNG MUNICIPAL CENTER
2 WOODWARD AVENUE, FOURTH FLOOR
DETROIT, MICHIGAN 48226
WWW.DETROITMI.GOV

July 14, 2014

John E. Spielberg
Michigan Department of Environmental Quality
Constitution Hall, 5th Floor
525 W. Allegan Street
Lansing, MI 48933

SUBJECT: Letter of Acknowledgment of the EPA Detroit GI Initiative

Through the Detroit GI Initiative, $200,000 was allocated to MDEQ to conduct environmental assessment activities on sites within the City of Detroit that consisted of green infrastructure project plans. The City of Detroit acknowledges the environmental site assessment activities conducted by the Michigan Department of Environmental Quality (MDEQ) under the United States Environmental Protection Agency (EPA) Detroit GI Initiative. The City is in support of this Initiative and concurs with the following sites that were selected by MDEQ for environmental site assessments:

5250 Conner
15303 Plainview
12842 Mack
13020 Mack
13334 Mack
13905 Mack
14242 Mack
14316 Mack
15303 Mack

The City participated in the prioritization of selected sites and attended several conference calls with EPA and MDEQ to discuss the GI Initiative and various properties that were identified.

The Detroit GI Initiative is a means for identifying environmentally impacted properties and spurring development within the City of Detroit. The City will continue to work with MDEQ and EPA on this project, which will improve the quality of life for the residents within the targeted investigation area.

Respectfully,

Raymond A. Scott
General Manager

RAS/lew

(cc) Jan Pels, EPA
Matthew Didier, EPA
Ron Smedley, MDEQ

CITY OF DETROIT
BUILDINGS, SAFETY ENGINEERING AND ENVIRONMENTAL DEPARTMENT
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Raymond A. Scott
General Manager

RAS/lew

(cc) Jan Pels, EPA
Matthew Didier, EPA
Ron Smedley, MDEQ

RECEIVED
JUL 24 2014
SUPERFUND

APPENDIX B

BFRA PROPERTY PHOTOGRAPHS

APPENDIX B

BFRA PROPERTY PHOTOGRAPHS

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: 5250 Conner Detroit PAGE: 1 OF: 15
U.S. EPA ID #: MIB000000184

DATE: 4/17/14

DIRECTION OF PHOTOGRAPH: South

PHOTOGRAPH BY: JES

DESCRIPTION: View of the south end of the entrance drive with dumpster in background.

DATE: 4/17/14

DIRECTION OF PHOTOGRAPH: Northwest

PHOTOGRAPH BY: JES

DESCRIPTION: View of the north end of the entrance drive with power lines in background.

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: 5250 Conner Detroit PAGE: 2 OF: 15
U.S. EPA ID #: MIB000000184

DATE: 5/20/14

DIRECTION OF PHOTOGRAPH: Northwest

PHOTOGRAPH BY: JES

DESCRIPTION: View of gate north of access road end.

DATE: 5/20/14

DIRECTION OF PHOTOGRAPH: Southeast

PHOTOGRAPH BY: JES

DESCRIPTION: View of damaged fence along Conner Street.

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: 5250 Conner Detroit PAGE: 3 OF: 15
U.S. EPA ID #: MIB000000184

DATE: 4/17/14

DIRECTION OF PHOTOGRAPH: Southwest

PHOTOGRAPH BY: TAD

DESCRIPTION: View of the west side of Property showing the power station and building across Conner Street.

DATE: 5/20/14

DIRECTION OF PHOTOGRAPH: West

PHOTOGRAPH BY: JES

DESCRIPTION: Close-up view of the power station.

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: 5250 Conner Detroit PAGE: 4 OF: 15
U.S. EPA ID #: MIB000000184

DATE: 4/17/14

DIRECTION OF PHOTOGRAPH: Southwest

PHOTOGRAPH BY: TAD

DESCRIPTION: View of Conner Street Property between the access road and Conner Street, facing southwest.

DATE: 5/20/14

DIRECTION OF PHOTOGRAPH: West

PHOTOGRAPH BY: JES

DESCRIPTION: View of west-most point of the Property.

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: 5250 Conner Detroit PAGE: 5 OF: 15
U.S. EPA ID #: MIB000000184

DATE: 5/20/14

DIRECTION OF PHOTOGRAPH: Northwest

PHOTOGRAPH BY: JES

DESCRIPTION: View of the city maintenance facility northwest of the Property.

DATE: 5/20/14

DIRECTION OF PHOTOGRAPH: Northwest

PHOTOGRAPH BY: JES

DESCRIPTION: View of transformers on utility pole near the north fence.

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: 5250 Conner Detroit PAGE: 6 OF: 15
U.S. EPA ID #: MIB000000184

DATE: 4/17/14

DIRECTION OF PHOTOGRAPH: North

PHOTOGRAPH BY: JES

DESCRIPTION: View of the north side of Property, looking towards the aquatic center.

DATE: 5/20/14

DIRECTION OF PHOTOGRAPH: North or East

PHOTOGRAPH BY: JES

DESCRIPTION: View of standing water near fence.

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: 5250 Conner Detroit PAGE: 7 OF: 15
U.S. EPA ID #: MIB000000184

DATE: 5/20/14

DIRECTION OF PHOTOGRAPH: North

PHOTOGRAPH BY: JES

DESCRIPTION: View of dirt and debris pile on Conner Street Property.

DATE: 5/20/14

DIRECTION OF PHOTOGRAPH: Southeast

PHOTOGRAPH BY: JES

DESCRIPTION: View of dirt and debris pile on Conner Street Property.

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: 5250 Conner Detroit PAGE: 8 OF: 15
U.S. EPA ID #: MIB000000184

DATE: 5/20/14

DIRECTION OF PHOTOGRAPH: Unknown

PHOTOGRAPH BY: JES

DESCRIPTION: View of heavy gauge wire or rebar sticking out of ground surface.

DATE: 5/20/14

DIRECTION OF PHOTOGRAPH: Unknown

PHOTOGRAPH BY: JES

DESCRIPTION: View of rebar/debris on Property.

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: 5250 Conner Detroit PAGE: 9 OF: 15
U.S. EPA ID #: MIB000000184

DATE: 5/20/14

DIRECTION OF PHOTOGRAPH: Unknown

PHOTOGRAPH BY: JES

DESCRIPTION: View of interior fence.

DATE: 5/20/14

DIRECTION OF PHOTOGRAPH: Unknown

PHOTOGRAPH BY: JES

DESCRIPTION: View of damaged interior fence.

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: 5250 Conner Detroit PAGE: 10 OF: 15
U.S. EPA ID #: MIB000000184

DATE: 5/20/14

DIRECTION OF PHOTOGRAPH: Unknown

PHOTOGRAPH BY: JES

DESCRIPTION: View of poor condition of interior fence.

DATE: 5/20/14

DIRECTION OF PHOTOGRAPH: Northwest

PHOTOGRAPH BY: JES

DESCRIPTION: View of broken sewer manhole near power station.

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: 5250 Conner Detroit PAGE: 11 OF: 15
U.S. EPA ID #: MIB000000184

DATE: 5/20/14

DIRECTION OF PHOTOGRAPH: Down

PHOTOGRAPH BY: JES

DESCRIPTION: Close-up view of broken manhole and open sewer.

DATE: 5/20/14

DIRECTION OF PHOTOGRAPH: Unknown

PHOTOGRAPH BY: JES

DESCRIPTION: View of sewer manhole without cover.

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: 5250 Conner Detroit PAGE: 12 OF: 15
U.S. EPA ID #: MIB000000184

DATE: 5/20/14

DIRECTION OF PHOTOGRAPH: Down

PHOTOGRAPH BY: JES

DESCRIPTION: View of sewer manhole without cover.

DATE: 5/20/14

DIRECTION OF PHOTOGRAPH: Down

PHOTOGRAPH BY: JES

DESCRIPTION: View of sewer manhole without cover.

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: 5250 Conner Detroit PAGE: 13 OF: 15
U.S. EPA ID #: MIB000000184

DATE: 5/20/14

DIRECTION OF PHOTOGRAPH: Southwest

PHOTOGRAPH BY: JES

DESCRIPTION: US EPA conducting EM work at Conner Street Property.

DATE: 5/20/14

DIRECTION OF PHOTOGRAPH: Unknown

PHOTOGRAPH BY: JES

DESCRIPTION: View of DU-1 corner stake.

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: 5250 Conner Detroit PAGE: 14 OF: 15
U.S. EPA ID #: MIB000000184

DATE: 6/3/14

DIRECTION OF PHOTOGRAPH: Unknown

PHOTOGRAPH BY: JES

DESCRIPTION: Flagging marking edge of a decision unit.

DATE: 6/2/14

DIRECTION OF PHOTOGRAPH: Southeast

PHOTOGRAPH BY: JES

DESCRIPTION: Marking the first decision unit grid at DU-4.

FIELD PHOTOGRAPHY LOG SHEET

PROPERTY NAME: 5250 Conner Detroit PAGE: 15 OF: 15
U.S. EPA ID #: MIB000000184

DATE: 6/2/14

DIRECTION OF PHOTOGRAPH: Down

PHOTOGRAPH BY: JES

DESCRIPTION: Decision unit sample increments making up a sample.

DATE: 6/2/14

DIRECTION OF PHOTOGRAPH: Down

PHOTOGRAPH BY: JES

DESCRIPTION: Sample 4 from decision unit 4.

APPENDIX C

GEOPHYSICAL SURVEY

Geophysical Survey Report
5250 Conner Street Site – DU1
Detroit, Michigan

Date of Survey
May 20, 201

James Ursic
Superfund Division - Field Services Section
United States Environmental Protection Agency
Region 5
Chicago, Illinois

Introduction

At the request of Jan Pels, USEPA Brownfield Project Manager – Region 5, through John Spielberg (MDEQ Brownfield Project Manager), a geophysical survey was conducted on May 20, 2014 in Detroit, Michigan at 5250 Conner Street within an area designated by MDEQ as DU-1 which is just north of Conner and Frankfort Streets (see Figure 1). The purpose of the survey was to locate possible buried tanks or other significant subsurface anomalous objects, if any. Present during a short portion of the survey was John Spielberg from MDEQ.

The site was a former residential area that was torn down and is now a grass covered field with remnants of past infrastructure such as a power transformer, utility poles and sub-surface lines, possibly sewers, or drainage system.

A GEM2 electromagnetic frequency domain geophysical tool was used to investigate this area.

Site Conditions

Weather conditions during the survey were overcast with a light rainfall near mid-morning, data were collected throughout these conditions, refer to appendix for local weather report.

Access to the site by vehicle was difficult since keys to the area, which was gated, was not available. However, the U.S. EPA representative was advised by the MDEQ representative it was acceptable to enter the site where the chain link fence was missing near the access road (see Photo 10). Since the U.S. EPA representative was towing a trailer which contained an ATV (All-Terrain Vehicle) indented for data collection, this posed some concern since the opening where the fence was missing had a curb that had to be crossed (see Photo 29). The trailer was able to traverse the curb going in, but the trailer coupler hung up on the curb going out and could not exit the site. Fortunately at this point in time someone with keys to the gate opened the lock to allow a truck driver in to pick up a loaded dumpster and leave an empty one, which permitted the U.S. EPA representative's vehicle and trailer to egress through the gate.

Due to the size of the site, it was intended to survey the site with an ATV towing geophysical equipment. However, a preliminary walk through of the site found it very rutted from brush cut equipment. Additional safety issues existed due to several missing manhole covers (see Photos 12, 14, 21, 22, 27 and 28), which were difficult to see in the grassy areas, and some partially covered with debris, which were found throughout this area. Some of these openings were almost ten feet deep. For these reasons it was determined that using the ATV in these areas would not be safe and a decision was made to hand carry instruments so the operator's attention can be focused on where not to walk. Walking through the site was also tenuous since it was difficult to see where the deep ruts were located through the grass resulting in unpredictable footing.

Another obstacle found on the site were mounded landscaped areas partially along Frankfort Street and a major portion along of Conner Street which was approximately six feet high (See Figure 1 and Photo 22 upper left side).

Survey stakes delineating DU-1 were placed by MDEQ personnel, at a prior date for this survey,

to mark the corners and some flagging between DU-1 and DU-3 (see Photo19).

Field Procedures

Broadband Electromagnetics.
A Geophex GEM-2 broadband multi frequency electromagnetic tool was used to measure changes in matrix conductivity. This tool recently returned from the manufacture after a repair and calibration several months earlier.

Frequencies chosen for this survey were:

35,010 Hz; and 3,930 Hz.

It is important to note that due to the sensitivity of this tool and the position it is carried, specifically next to the operator's hip, any metal on the operator will affect the instruments readings and were removed as practicably possible. Typically a Trimble parallel swathing tool is used to maintain uniform grid spacing for traverses with geophysical instruments but since the Trimble tool contains enough metal to interfere with data collection a less metallic device was used for logging GPS values.

For GPS positioning using the EM tool, the operator of the instrument wore a plastic hardhat with a small Garmin GPS 18x unit Velcro'ed to the top of the hardhat. The Garmin unit was able to receive Coast Guard radio beacons allowing sub meter accuracies 95% of the time. Latitude and Longitude values obtained through the Garmin unit were coupled to the GEM-2 instrument and data were automatically tagged to provide positional information.

Since a parallel swathing tool could not be used, the operator had to estimate parallel traverses and results can be seen in Figure 1.

Data collection ceased near the west side of DU-1 near the end of the day due to unforeseen circumstances and subsequently did not allow for any further instruments to be used on site. Photographs of the site were taken the following morning which then concluded activities at this site.

Data Processing

Data were processed using Golden Software's Surfer 12 contouring program using the Kriging Method. The contour level used for the GEM2 varied depending on each contour map. Distances shown in Figures 2 thru 6 are referenced by a bar scale which has been converted to feet by calculations from latitude and longitude values.

Broadband Electromagnetic Data

Two frequencies were selected to investigate the sub-surface of the site. The highest frequency was limited to shallower depths and lowest frequency was limited to a deeper depth. The exact depth of investigation for each frequency cannot be determined precisely since there was no

secondary method to physically examine the subsurface conductivities which would help to estimate signal transmission. Each frequency may be averaging a vertical area as much as ten feet.

Contour Map, Frequency 35,010 Hz In-Phase (Metal Detection) Mode – Figure 2
This map presents the highest frequency applied at the site and is estimated to reach depths ranging from near surface to 12 feet, it uses the In-Phase mode which enables detection of metal (ferrous and non-ferrous). The contour interval of this map is 480 parts per million (ppm) per Geophex's proprietary calculation methods. One of the most prevalent anomalies in this record is noted as anomaly A which is near a dumpster (represented by yellow rectangle) and nearby trash. Anomaly B is adjacent to a large electrical panel (represented by yellow rectangle) surrounded by a chain link fence on a concrete base. Anomaly C is also an area of discarded trash but could also be influenced by subsurface utilities since a fire hydrant can be seen near this area. Anomaly D is a linearly trending anomaly that is not consistent in values but does have a definite trend which seems to match an area where a previous road existed. Anomaly E also has a linear trend probably due to the chain link fence and also underground power lines which are also in this area. Anomalies F and G appear to have a linear trends which may connect to Anomaly D, but this source is not known. Anomaly H has a very weak signature, which appears to have a linear trend, but does not appear to have a major extent. Other minor anomalous areas exist in the area most which are isolated. Note that yellow circles in the area represent uncovered manholes, trees or utility poles.

Contour Map, Frequency 35,010 Hz Quadrature Phase (Conductivity) Mode – Figure 3
This map presents measurements of subsurface ground conductivity approximately from the near surface to about 12 feet. Contour interval for this map is 650 ppm. Unfortunately any metal will also interfere with conductivity measurements. If a comparison is made between Figures 2 and 3, definite similarities exist in those anomalous areas where metal possibly exists. However, two large distinct areas exist where conductivity values are very similar, Anomalies A and B, which seem to coincide with darker soil/vegetation conditions in the aerial photograph. Exact cause of these anomalies is not known.

Contour Map, Frequency 3,930 Hz In-Phase Mode (Metal Detection) – Figure 4
Depth of investigation at this frequency could be expected to reach approximately 30 feet, however, not likely since near surface metal would interfere with signal transmission. This is evident in from the data since it appears to mimic the same anomalous areas found in Figure 2.

Contour Map, Frequency 3,930 Hz Quadrature Phase Mode (conductivity) – Figure 5
Once again other metallic interferences appear to be influencing this conductivity data, but the two large areas of similar values seen in Figure 3 are still visible (see Anomalies A and B). It is doubtful that this anomaly is at or near 30 in depth, but once most likely closer to the surface.

Conclusions

Results of the survey are presented in Figures 1 thru 5, which combine surface landmarks with contoured surface and underground anomalies. During the course of the survey not enough time was available or proper lighting to investigate all of the manholes within DU-1 which could have provided additional information on which directions the subsurface conduits existed. It can be assumed that no or not enough metal existed in the subsurface conduits to be detected by the method used.

Considering the past history of the site and historical images, photographs of DU-1 one can see how past structures are influencing the data, especially roads and associated utilities, especially those that may have sources of metal. The two large areas having similarity of conductivities defiantly have a change in color as seen in the aerial photograph base map and remain unexplained. However, note that conductivity measurements are affected by changes in moisture in the ground.

Attached to this document are site photographs taken on May 21, 2014, and also an Appendix of images, maps provided by MDEQ.

DISCLAIMERS & WARNINGS:

Geophysical instruments used at this site were not configured to locate utility lines, although they could be influenced by such lines under certain conditions. It is critical *not to use this data* for utility line location since methods applied were only directed towards larger sub-surface targets, other than utility lines.

It is strongly recommended that before any intrusive sampling, test pits, or other excavation methods are applied at the site, that *all* utility services be contacted to verify that none of the anomalies are the result of or near any buried utilities. Note that not all buried utilities and pipelines are members of local utility location services.

If any excavations are attempted near anomalies mentioned in this report, it is recommended that initial ground breaking be conducted outside the anomalous area and slowly moved towards the anomaly. This procedure will reduce the probability of damaging, puncturing, or disturbing the unknown source of the anomaly.

It is extremely difficult to discriminate specific sources of targets (metal scrap, etc.) based on geophysical responses since no one example can adequately describe each possible configuration. In addition, any distortions or deteriorations of objects will also affect anomaly signatures.

Disclosure of product names in this report is not an implied or direct recommendation of the equipment used for this survey. It is only provided for its scientific value related to a specific method or tool used.

Attachments

5250 Conner Street - Detroit, Michigan - Brownfield Site

Base Map for Geophex GEM2 Frequency Domain Electromagnetic Survey
Date of Survey: May 20, 2014 (periods of rain during survey)

GPS = Garmin GPS 18x Using WAAS (accuracy < 3 meters, 95% typical)

Yellow Circles = Trees, Manholes, Holes, Electric Poles

Red Lines = Traverses (Random)

N

Approximate Scale in Feet

0 100 200 300

Color Image - Do Not Photo Copy in Black and White

USEPA - Region 5
Chicago, Illinois

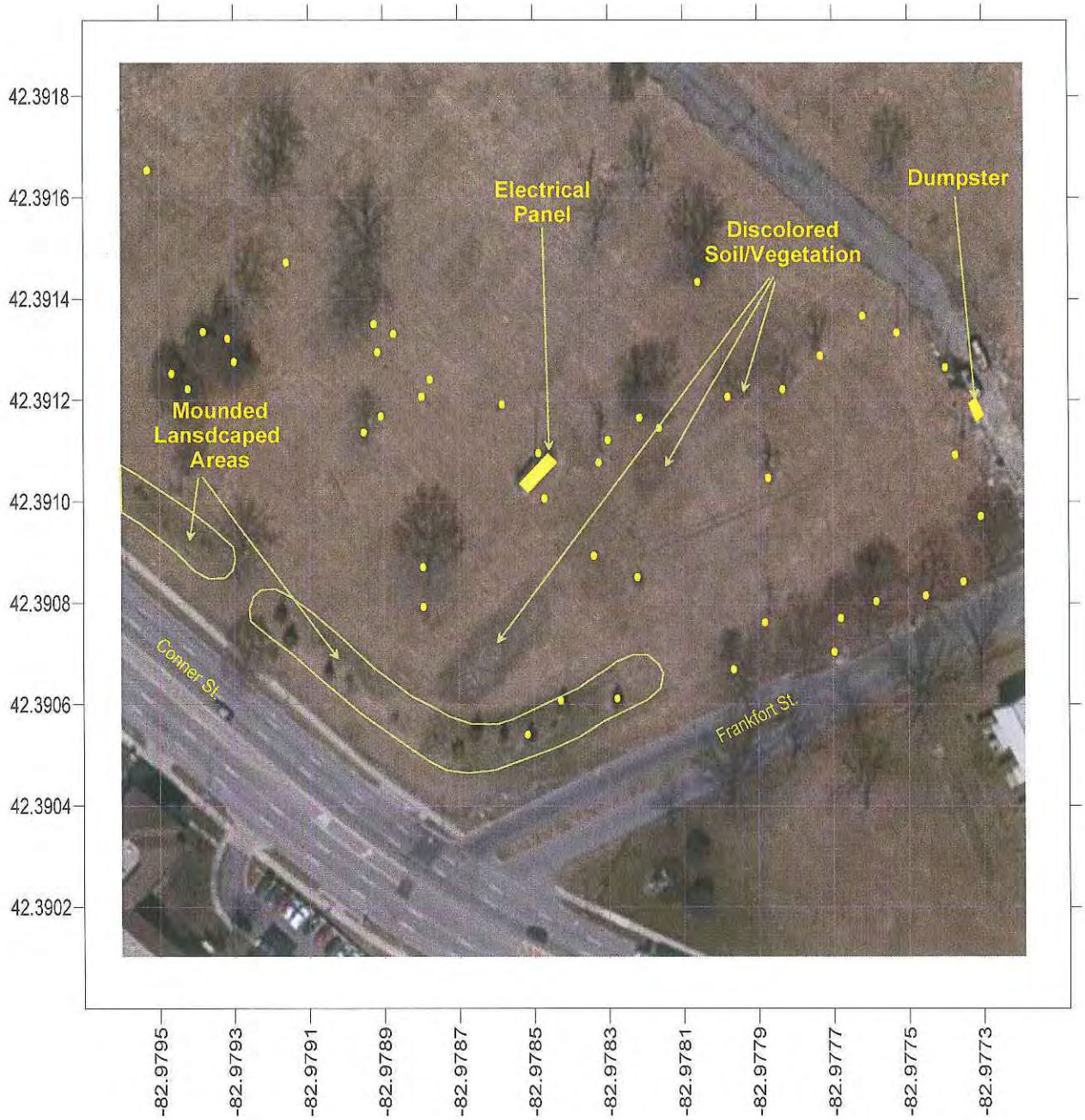


Figure 1

5250 Conner Street - Detroit, Michigan - Brownfield Site

Geophex GEM2 Frequency Domain Electromagnetic Survey; 35,010 Hz In-Phase (metal detection)
Date of Survey: May 20, 2014 (periods of rain during survey)

GPS = Garmin GPS 18x Using WAAS (accuracy < 3 meters, 95% typical)

Yellow Circles = Trees, Manholes, Holes, Electric Poles

White Lines = Contours; Interval 480 ppm

N

Approximate Scale in Feet

0 100 200 300

Color Image - Do Not Photo Copy in Black and White

USEPA - Region 5
Chicago, Illinois

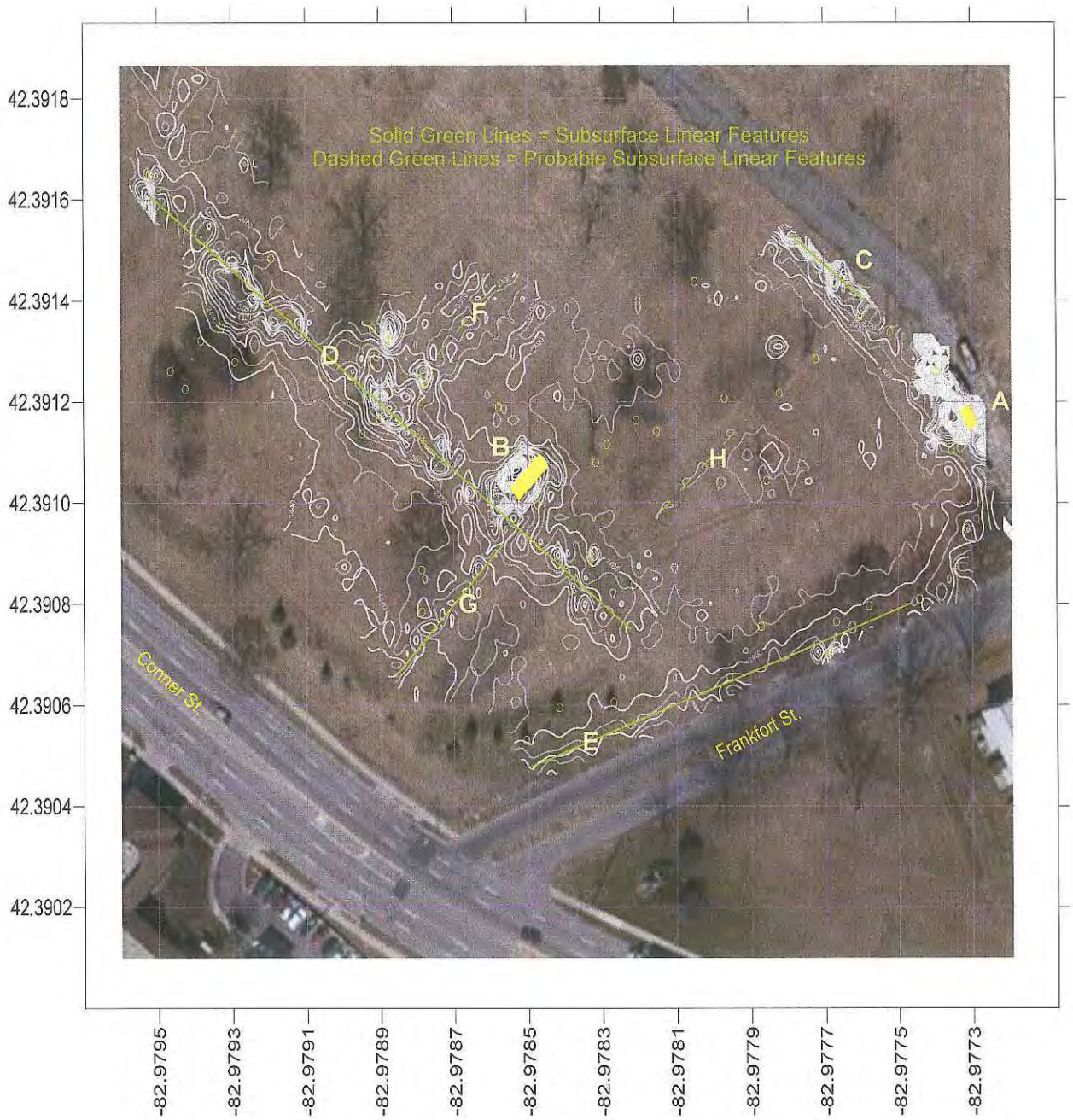


Figure 2

5250 Conner Street - Detroit, Michigan - Brownfield Site

Geophex GEM2 Frequency Domain Electromagnetic Survey; 35,010 Hz Quadrature Phase (conductivity)
Date of Survey: May 20, 2014 (periods of rain during survey)

GPS = Garmin GPS 18x Using WAAS (accuracy < 3 meters, 95% typical)

Yellow Circles = Trees, Manholes, Holes, Electric Poles

White Lines = Contours; Interval 650 ppm

N

Approximate Scale in Feet

0 100 200 300

Color Image - Do Not Photo Copy in Black and White

USEPA - Region 5
Chicago, Illinois

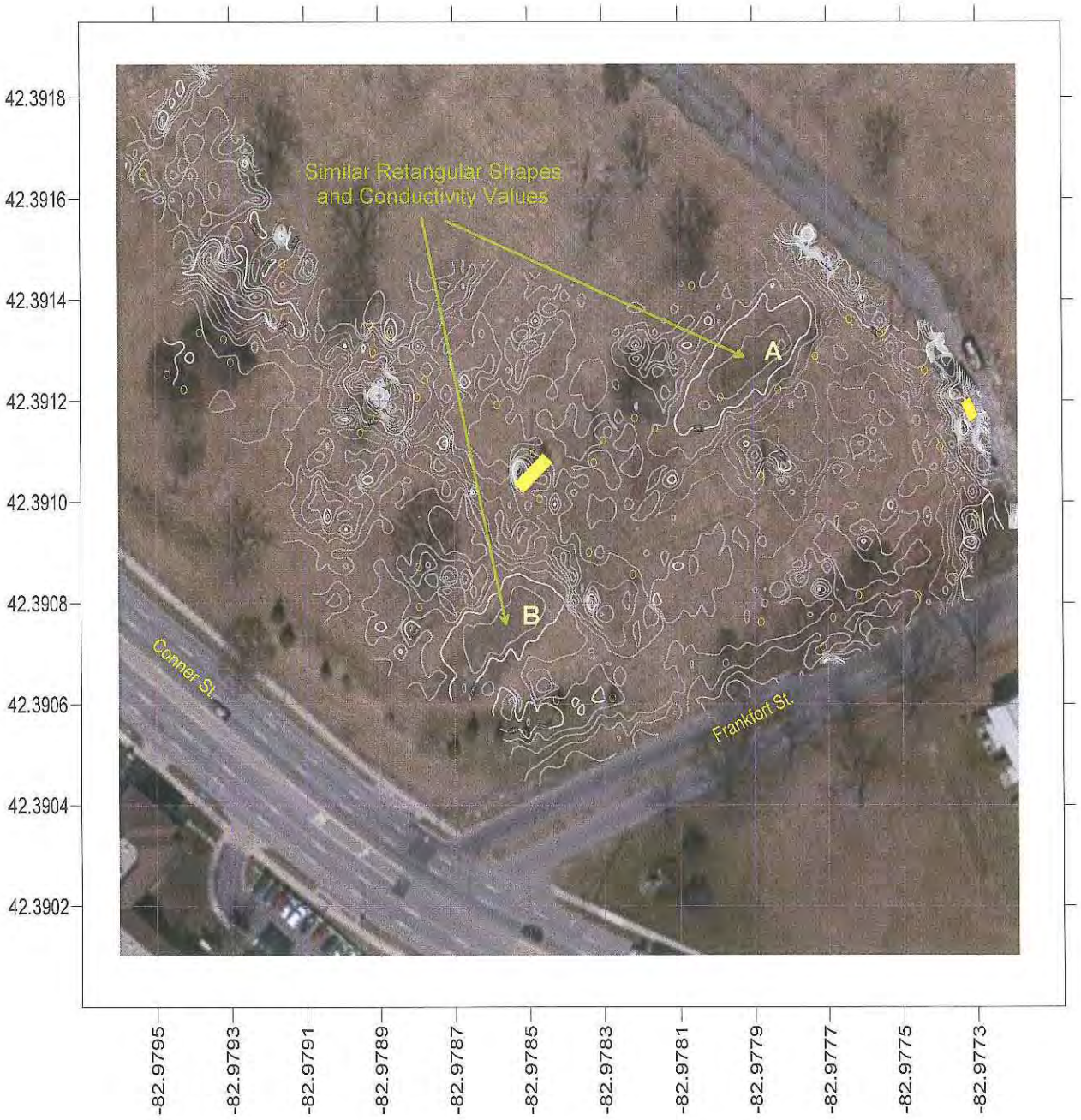


Figure 3

5250 Conner Street - Detroit, Michigan - Brownfield Site

Geophex GEM2 Frequency Domain Electromagnetic Survey; 3,930 Hz In-Phase (metal detection)
Date of Survey: May 20, 2014 (periods of rain during survey)

GPS = Garmin GPS 18x Using WAAS (accuracy < 3 meters, 95% typical)

Yellow Circles = Trees, Manholes, Holes, Electric Poles

White Lines = Contours; Interval 100 ppm

N

Approximate Scale in Feet

0 100 200 300

Color Image - Do Not Photo Copy in Black and White

USEPA - Region 5
Chicago, Illinois

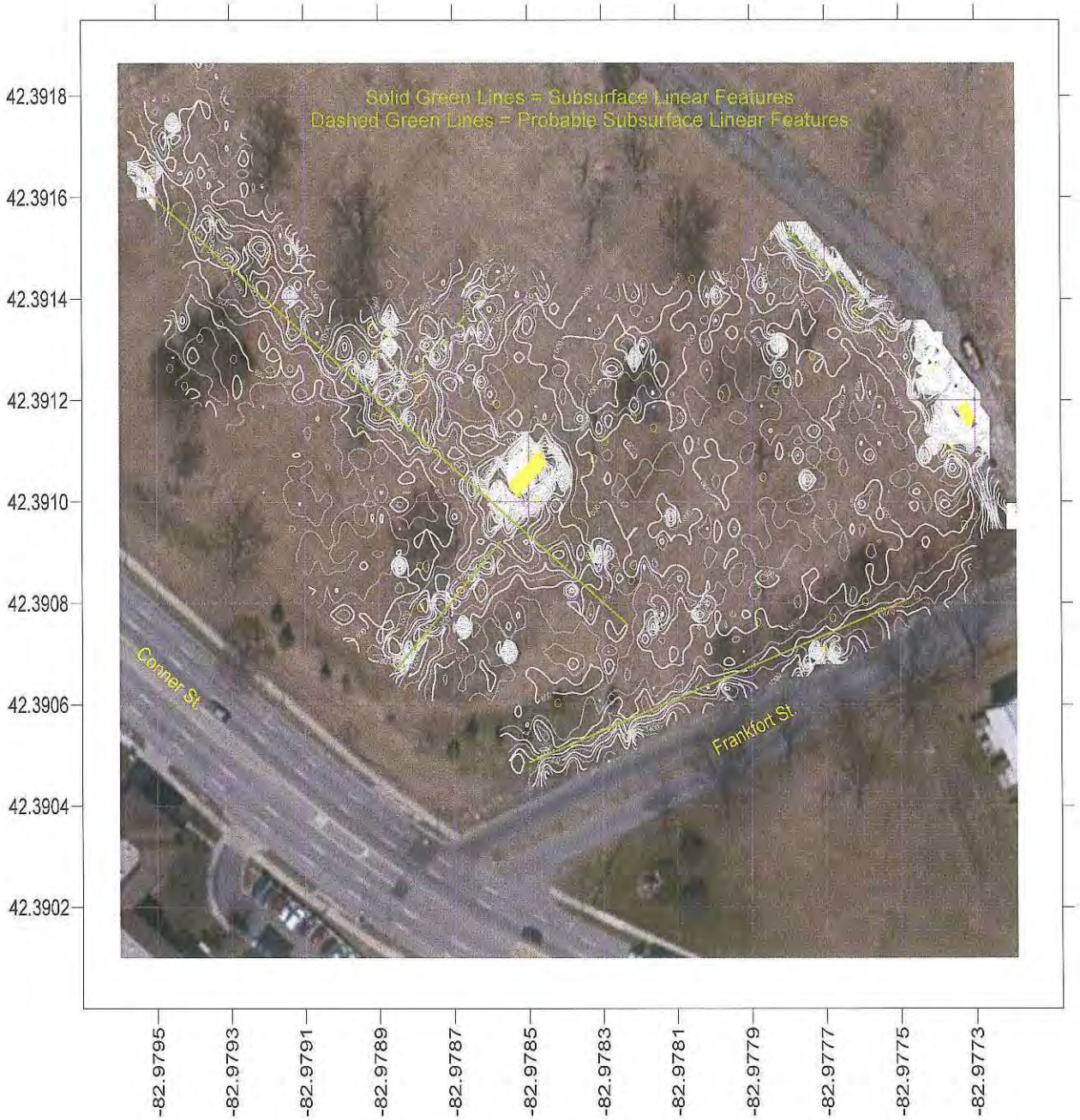


Figure 4

5250 Conner Street - Detroit, Michigan - Brownfield Site

Geophex GEM2 Frequency Domain Electromagnetic Survey; 3,930 Hz Quadrature Phase (conductivity)
Date of Survey: May 20, 2014 (periods of rain during survey)

GPS = Garmin GPS 18x Using WAAS (accuracy < 3 meters, 95% typical)

Yellow Circles = Trees, Manholes, Holes, Electric Poles

White Lines = Contours; Interval 300 ppm

N

Approximate Scale in Feet

0 100 200 300

Color Image - Do Not Photo Copy in Black and White

USEPA - Region 5
Chicago, Illinois

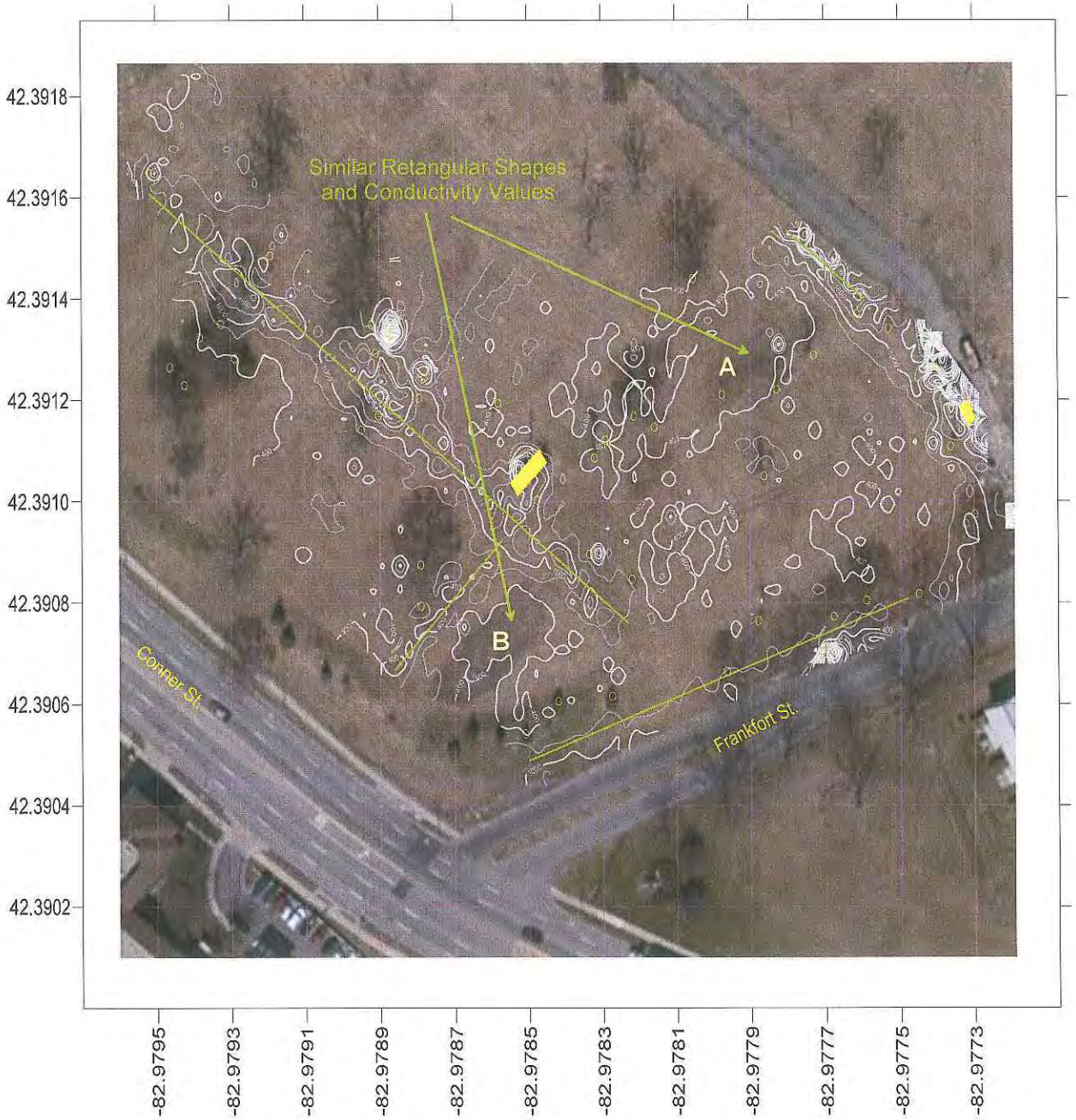


Figure 5

May 21, 2014 Photo Log: 5250 Conner Street

Photo 1: Looking WSW along Frankfort St. by Missing Fence

Photo 2: Looking S from Electrical Panel

Photo 3: Looking W from Frankfort St. by Missing Fence

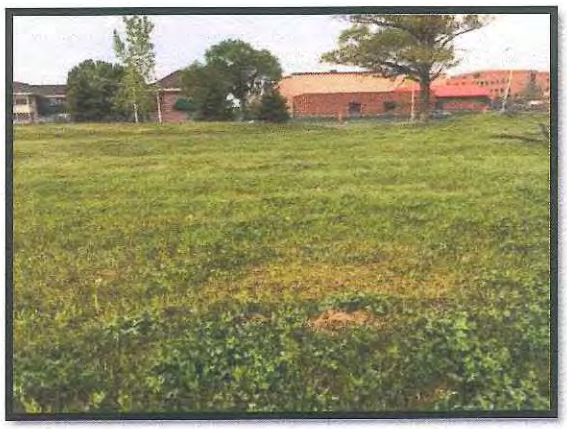


Photo 4: Looking W from Electrical Panel

May 21, 2014 Photo Log: 5250 Conner Street

Photo 5: Looking NNW from Missing Fence Area

Photo 6: Looking NW Near Access Road & Frankfort St.

Photo 7: Looking NNW Near Access Road & Frankfort St.

Photo 8: Looking WSW from Center of DU-1

May 21, 2014 Photo Log: 5250 Conner Street

Photo 9: Looking WSW along Frankfort St. from Access Road

Photo 10: Looking NNW from Frankfort St. at Missing Fence Area

Photo 11: Looking N at Electrical Panel

Photo 12: Uncovered Manhole near SW Corner of Electric Panel

May 21, 2014 Photo Log: 5250 Conner Street

Photo 13: Looking NW at SW Corner of Electric Panel

Photo 14: Looking SW at Trees Around Uncovered Manhole

Photo 15: Looking SW from Electric Panel

Photo 16: Looking SW Between Access Road & Electric Panel

Photo Log: 5250 Conner Street Detroit, MI

Photo 17: Depression in Ground NW of Electric Panel

Photo 18: DPW Manhole Cover NW of Electric Panel

Photo 19: NE Corner State for DU-1 Looking SSW

Photo 20: Looking SE from Hydrant along W side Access Road

May 21, 2014 Photo Log: 5250 Conner Street

Photo 21: Looking WSW at Uncovered Manhole Located at Small Clump of Trees

Photo 22: Looking SW at Uncovered Manhole Left of Tree

Photo 23: Looking S from Covered Manhole N of Electric Panel

Photo 24: Looking NNW from Frankfort St. along Access Road and Gate

May 21, 2014 Photo Log: 5250 Conner Street

Photo 25: Looking NW from Bend in Access Road

Photo 26: Looking SW from Dead Tree at Electrical Panel

Photo 27: Looking S from Another Uncovered Manhole Near Center of DU-1

Photo 28: Looking Down One of the Uncovered Manhole

May 21, 2014 Photo Log: 5250 Conner Street

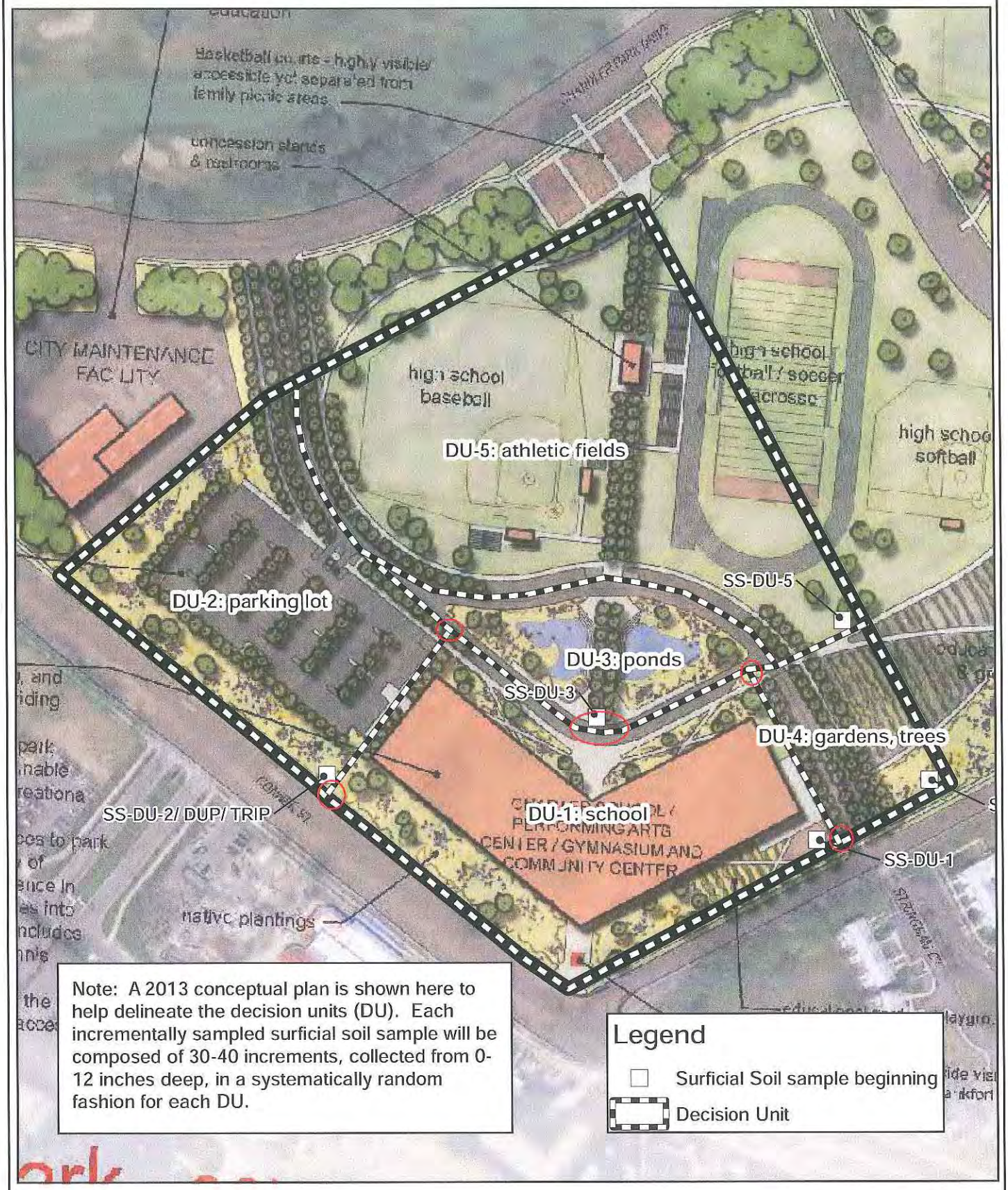
Photo 29: High Curb along Frankfort St. by Missing Fence Area & Access Pathway to Site

Hourly Weather History & Observations; Detroit, Michigan; May 20, 2014

Time (EDT)	Temp.	Dew Point	Humidity	Pressure	Visibility	Wind Dir	Wind Speed	Gust Speed	Precip	Events	Conditions
12:53 AM	59.0 °F	39.0 °F	48%	30.20 in	10.0 mi	SSW	4.6 mph	-	N/A		Clear
1:53 AM	60.1 °F	39.0 °F	46%	30.21 in	10.0 mi	SW	4.6 mph	-	N/A		Overcast
2:53 AM	55.9 °F	46.9 °F	72%	30.18 in	10.0 mi	SSE	8.1 mph	-	0.03 in	Rain	Light Rain
3:53 AM	57.0 °F	46.0 °F	67%	30.17 in	10.0 mi	South	6.9 mph	-	0.00 in		Overcast
4:53 AM	57.2 °F	46.4 °F	67%	30.13 in	10.0 mi	SSE	5.8 mph	-	N/A		Scattered Clouds
5:53 AM	57.9 °F	44.1 °F	60%	30.11 in	10.0 mi	SE	6.9 mph	-	N/A		Overcast
6:53 AM	59.0 °F	43.0 °F	55%	30.11 in	10.0 mi	SE	8.1 mph	-	N/A		Overcast
7:53 AM	60.1 °F	43.0 °F	53%	30.09 in	10.0 mi	SE	10.4 mph	-	0.00 in		Overcast
8:53 AM	61.0 °F	44.1 °F	54%	30.06 in	10.0 mi	SSE	11.5 mph	-	N/A		Overcast
9:53 AM	61.0 °F	44.1 °F	54%	30.06 in	10.0 mi	SSE	11.5 mph	-	N/A		Overcast
10:53 AM	57.9 °F	50.0 °F	75%	30.05 in	10.0 mi	SE	5.8 mph	-	0.03 in	Rain	Light Rain
11:53 AM	60.1 °F	48.0 °F	64%	30.01 in	10.0 mi	SSE	11.5 mph	20.7 mph	0.00 in		Overcast
12:53 PM	63.0 °F	46.9 °F	56%	30.00 in	10.0 mi	SSE	11.5 mph	-	N/A		Overcast
1:53 PM	69.1 °F	48.9 °F	49%	29.97 in	10.0 mi	SE	11.5 mph	-	N/A		Mostly Cloudy
2:53 PM	70.0 °F	50.0 °F	49%	29.95 in	10.0 mi	East	10.4 mph	-	N/A		Scattered Clouds
3:53 PM	70.0 °F	50.0 °F	49%	29.95 in	10.0 mi	ESE	11.5 mph	-	N/A		Clear
4:53 PM	68.0 °F	48.2 °F	49%	29.94 in	10.0 mi	SE	13.8 mph	-	N/A		Clear
5:53 PM	69.1 °F	50.0 °F	51%	29.92 in	10.0 mi	SE	10.4 mph	-	N/A		Clear
6:53 PM	70.0 °F	52.0 °F	53%	29.89 in	10.0 mi	SSE	9.2 mph	-	N/A		Clear
7:53 PM	68.0 °F	52.0 °F	56%	29.90 in	10.0 mi	ESE	6.9 mph	-	N/A		Clear
8:53 PM	66.0 °F	52.0 °F	60%	29.89 in	10.0 mi	East	4.6 mph	-	N/A		Clear
9:45 PM	63.0 °F	51.1 °F	65%	29.90 in	10.0 mi	East	8.1 mph	-	N/A	Thunderstorm	Scattered Clouds
9:53 PM	63.0 °F	52.0 °F	67%	29.91 in	10.0 mi	ENE	6.9 mph	-	N/A	Thunderstorm	Thunderstorm
10:25 PM	61.0 °F	54.0 °F	78%	29.91 in	10.0 mi	Calm	Calm	-	0.00 in		Overcast
10:53 PM	60.1 °F	54.0 °F	80%	29.91 in	10.0 mi	East	4.6 mph	-	0.00 in		Scattered Clouds
11:53 PM	59.0 °F	53.1 °F	81%	29.89 in	9.0 mi	ESE	6.9 mph	-	0.01 in	Rain	Light Rain

Appendix

FIGURE 4 PROPOSED SURFICIAL SOIL SAMPLE LOCATIONS



5250 Conner Detroit
5250 Conner Street
Detroit, MI 48213
Wayne County
MIB000000184

0 50 100 200 300 400 Feet

Compiled by: Leni Steiner-Zehender
March 2014 (rev. 5/8/14, JES)
Projected Coordinate System:
Michigan GeoRef, NAD-83, meters
Sources: hamiltonanderson (courtesy Mr. B. Vosburg, Det. Housing Comm.)

FIGURE 1 PROPERTY LOCATION

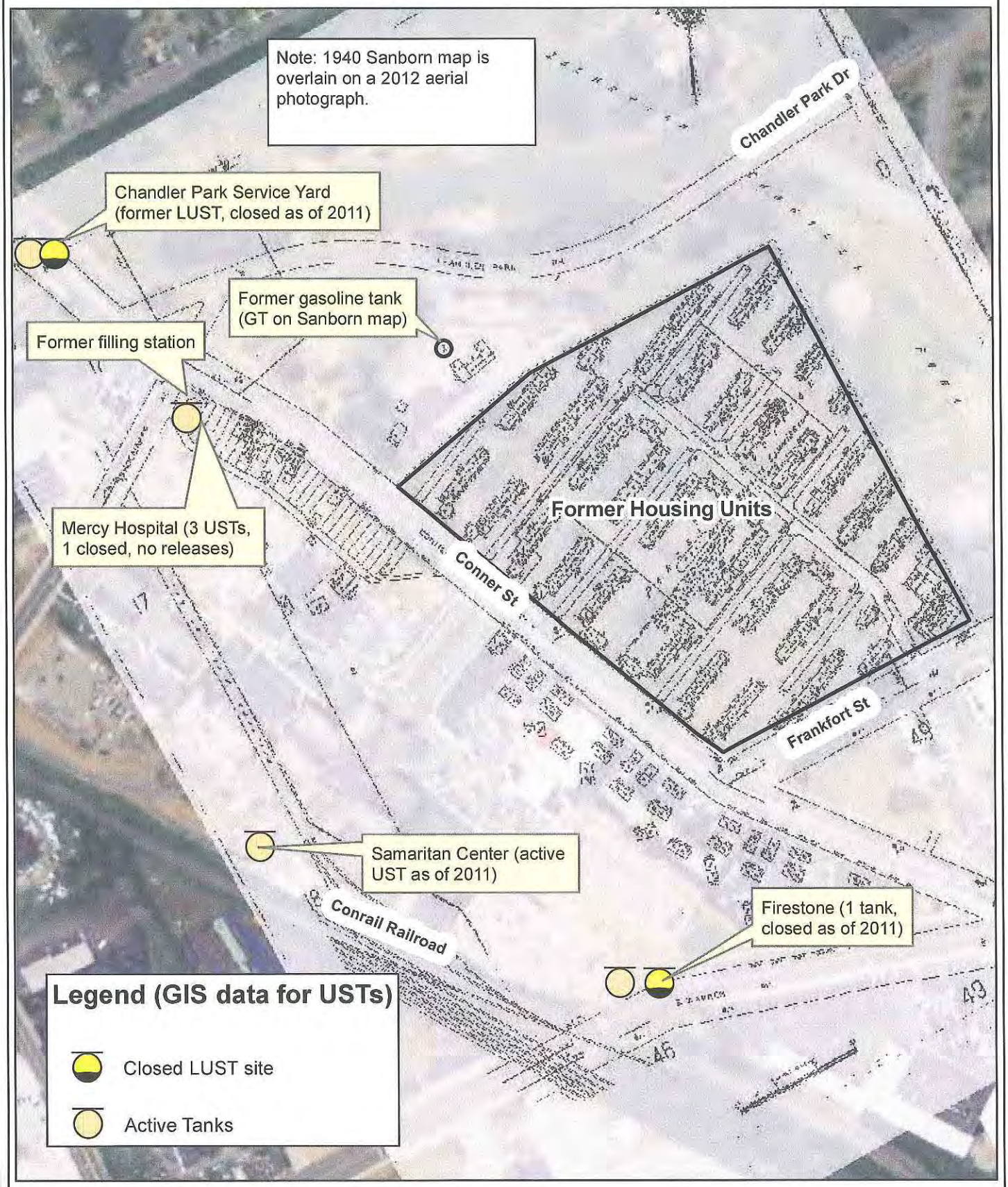
5250 Conner Detroit
5250 Conner Street
Detroit, MI 48213
Wayne County
MIB000000184

0 0.1 0.2 0.4 Miles

Directions to Property:
From Lansing take I-96 E
Keep left to take I-696 E/Walter P Reuther Fwy
Merge onto I-75 S/Walter P Chrysler Fwy (Exit 18)
Take the I-94 W (Exit 53B)
Merge onto I-94 E on the left
Take Conner Ave (Exit 220B)
Keep right at the fork in the ramp
Merge onto Conner St
5250 Conner St is on the left

Compiled by: Leni Steiner-Zehender
March 2014
Projected Coordinate System:
Michigan GeoRef, NAD-83, meters
Sources: Michigan Geographic
Data Library and MSU 2010 Aerial

FIGURE 2A PROPERTY HISTORICAL FEATURES

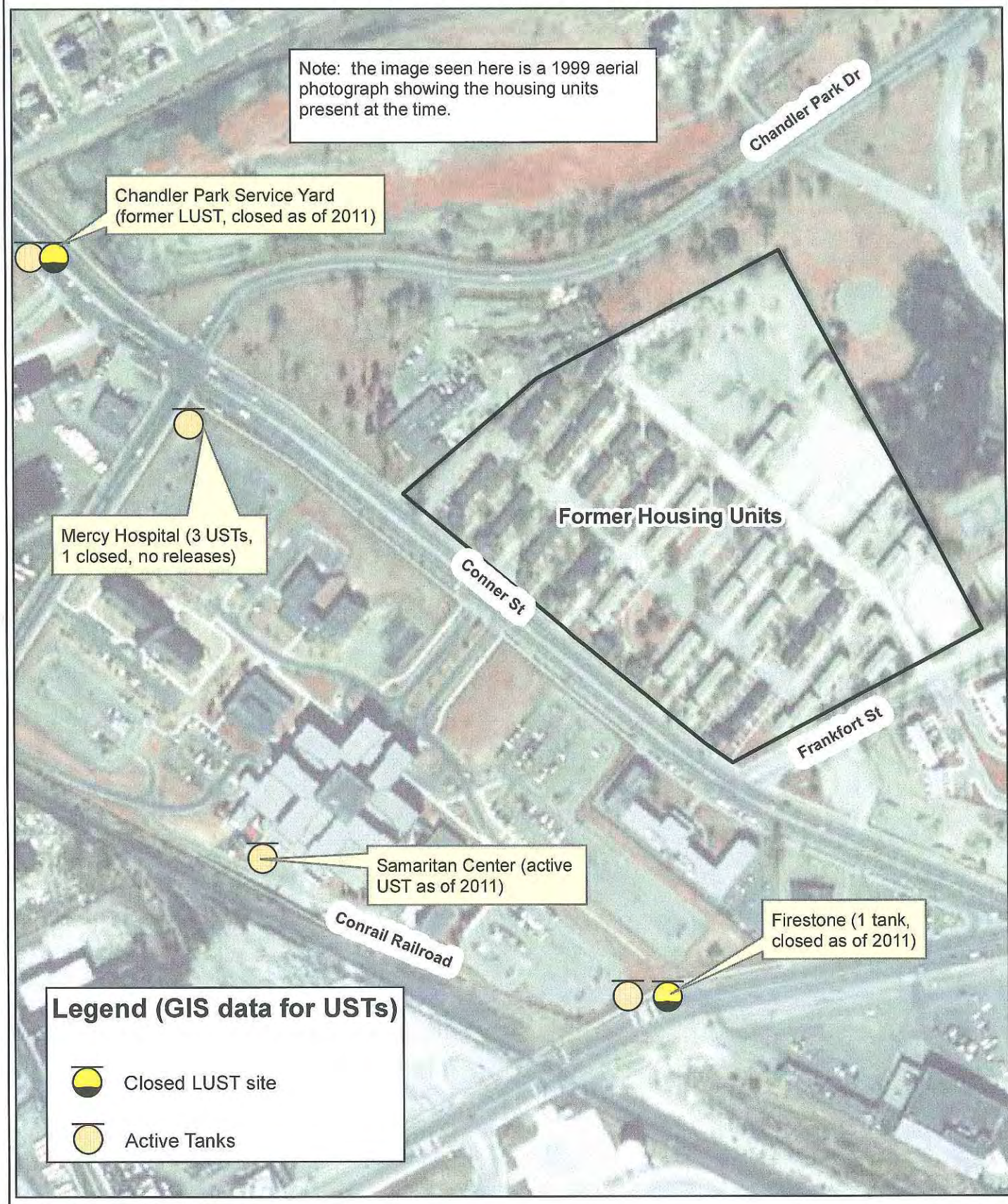


5250 Conner Detroit
5250 Conner Street
Detroit, MI 48213
Wayne County
MIB000000184

0 100 200 400 600 800 Feet

Compiled by: Leni Steiner-Zehender
March 2014 (rev. 5/8/14, JES)
Projected Coordinate System:
Michigan GeoRef, NAD-83, meters
Sources: Michigan Geographic Data Llibrary and EDR 2012 Aerial

FIGURE 2B PROPERTY HISTORICAL FEATURES



5250 Conner Detroit
5250 Conner Street
Detroit, MI 48213
Wayne County
MIB000000184

0 100 200 400 600 800 Feet

Compiled by: Leni Steiner-Zehender
March 2014 (rev. 5/8/14, JES)
Projected Coordinate System:
Michigan GeoRef, NAD-83, meters
Sources: Michigan Geographic Data Llibrary and EDR 2012 Aerial

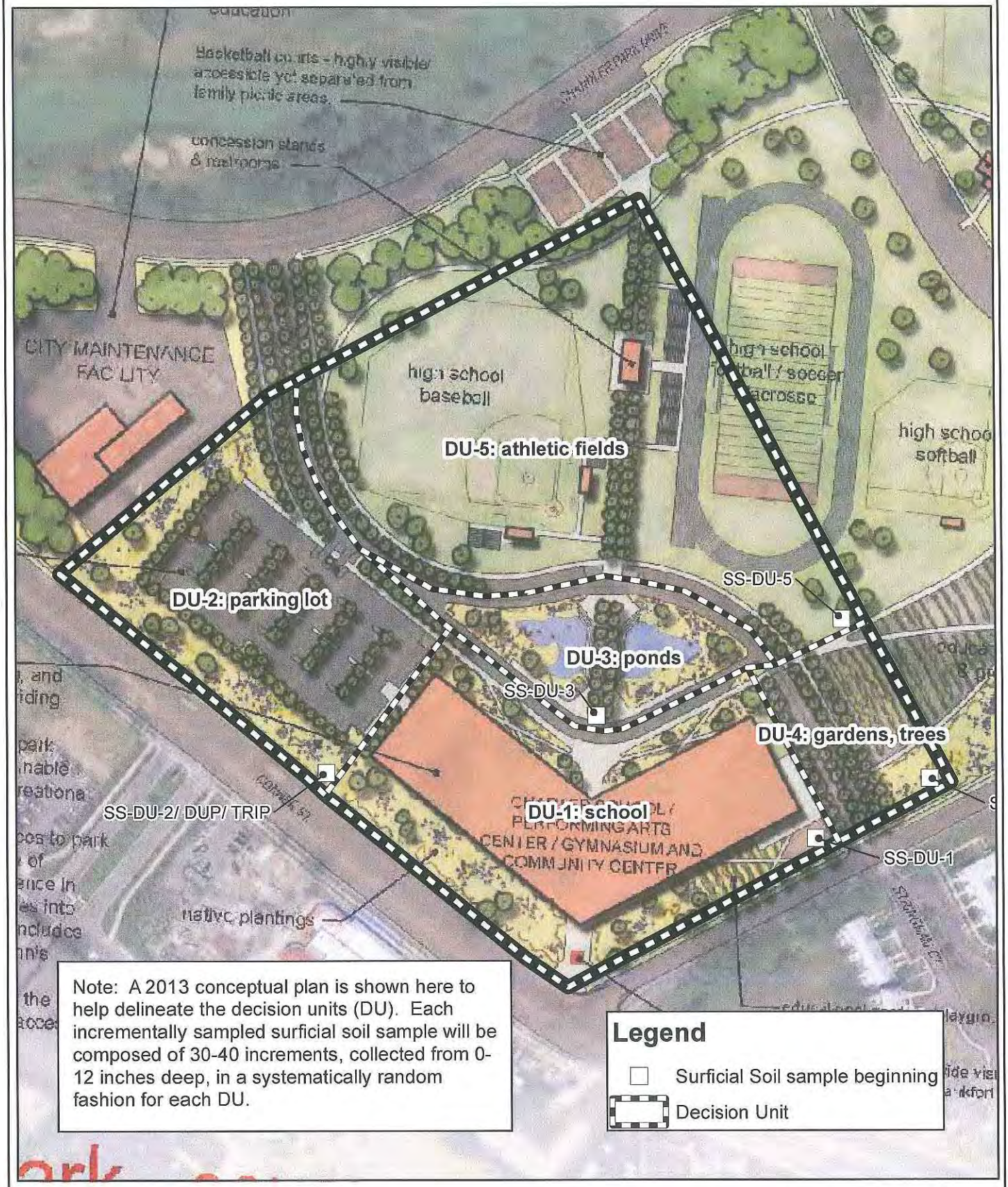
FIGURE 3 PROPERTY CURRENT FEATURES

5250 Conner Detroit
5250 Conner Street
Detroit, MI 48213
Wayne County
MIB000000184

0 100 200 400 600 800 Feet

Compiled by: Leni Steiner-Zehender
March 2014 (rev. 5/8/14, JES)
Projected Coordinate System:
Michigan GeoRef, NAD-83, meters
Sources: Michigan Geographic Data Library and EDR 2012 Aerial

FIGURE 4 PROPOSED SURFICIAL SOIL SAMPLE LOCATIONS



5250 Conner Detroit
5250 Conner Street
Detroit, MI 48213
Wayne County
MIB000000184

0 50 100 200 300 400 Feet

Compiled by: Leni Steiner-Zehender
March 2014 (rev. 5/8/14, JES)
Projected Coordinate System:
Michigan GeoRef, NAD-83, meters
Sources: hamiltonanderson (courtesy Mr. B. Vosburg, Det. Housing Comm.)

FIGURE 5 PROPOSED SOIL BORING SAMPLE LOCATIONS

5250 Conner Detroit
5250 Conner Street
Detroit, MI 48213
Wayne County
MIB000000184

0 50 100 200 300 400 Feet

Compiled by: Leni Steiner-Zehender
March 2014 (rev. 5/8/14, JES)
Projected Coordinate System:
Michigan GeoRef, NAD-83, meters
Sources: Michigan Geographic Data Library and EDR 1999 Aerial

FIGURE 6 PROPOSED TEMPORARY MONITORING WELL SAMPLE LOCATIONS

5250 Conner Detroit
5250 Conner Street
Detroit, MI 48213
Wayne County
MIB000000184

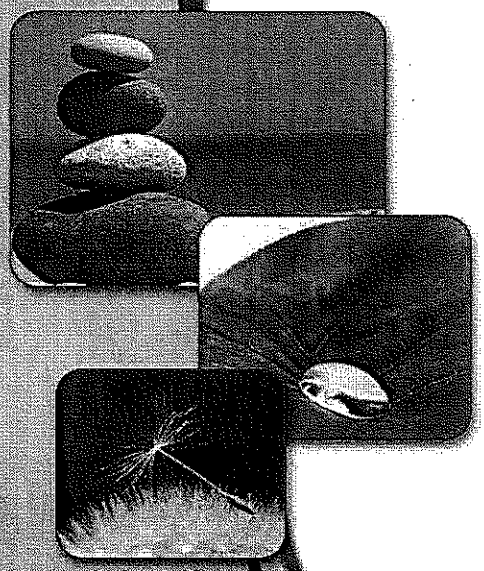
0 50 100 200 300 400 Feet

N
W E
S

Compiled by: Leni Steiner-Zehender
March 2014 (rev. 5/8/14, JES)
Projected Coordinate System:
Michigan GeoRef, NAD-83, meters
Sources: Michigan Geographic
Data Library and EDR 1999 Aerial

APPENDIX D

CHEMICAL ANALYSIS OF BFRA SAMPLES



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-38156-1
Client Project/Site: 5250 Conner Detroit

For:
Michigan Dept. of Environmental Quality
Constitution Hall 3rd floor SW
525 W. Allegan Street
Lansing, Michigan 48909

Attn: John E Spielberg

Kris Brooks

Authorized for release by:
6/19/2014 8:34:29 PM

Kris Brooks, Project Manager II
(330)966-9790
kris.brooks@testamericainc.com

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www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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.alifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery exceeds the control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F2	MS/MSD RPD exceeds control limits

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery exceeds the control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery exceeds the control limits

neral Chemistry

lifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
	Reporting Limit or Requested Limit (Radiochemistry)
	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)

b ID: 240-38156-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Michigan Dept. of Environmental Quality

Project: 5250 Conner Detroit

Report Number: 240-38156-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions ELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written proval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 6/5/2014 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 1.2° C, 1.2° C, 1.4° C and 2.0° C.

INCREMENTAL SAMPLING METHOD (ISM)

All samples were processed by incremental methodology prior to prep and analyses. The samples were processed by drying, dissagregating them through the hammer mill, seived through the #10 and 2-D slab cake subsampled for each of the analyses requested. The metals were sub sampled for the 10 gram prep and 3 gram prep for the Mercury.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS) WITH INCREMENTAL SAMPLE PREPARATION

Samples C-SS-DU-1 (240-38156-1), C-SS-DU-2 (240-38156-2), C-SS-DU-2D (240-38156-3), C-SS-DU-2T (240-38156-4), C-SS-DU-3 (240-38156-5), C-SS-DU-4 (240-38156-6) and C-SS-DU-5 (240-38156-7) were analyzed for semivolatile organic compounds (GCMS) with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 8270C. The sample drying and disaggregation process began on 06/06/2014, prepared on 06/12/2014 and analyzed on 16/2014.

Phenol was detected in method blank MB 240-134405/21-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Job ID: 240-38156-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

2,4-Dinitrophenol and Hexachlorocyclopentadiene failed the recovery criteria low for the MS of sample C-SS-DU-3MS (240-38156-5) in batch 240-134745. Several analytes failed the recovery criteria high.

For the MSD of sample C-SS-DU-3MSD (240-38156-5) in batch 240-134745, Hexachlorocyclopentadiene failed the recovery criteria low. Several analytes failed the recovery criteria high. Also, N-Nitrosodimethylamine and Pyridine exceeded the RPD limit. Refer to the QC report for details.

Samples C-SS-DU-1 (240-38156-1)[10X], C-SS-DU-2 (240-38156-2)[6.67X], C-SS-DU-2D (240-38156-3)[5X], C-SS-DU-2T (240-38156-4) [10X], C-SS-DU-3 (240-38156-5)[10X], C-SS-DU-4 (240-38156-6)[20X] and C-SS-DU-5 (240-38156-7)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the SVOCs analysis. All other quality control parameters were within the acceptance limits.

PESTICIDES

Samples C-SS-DU-1 (240-38156-1), C-SS-DU-2 (240-38156-2), C-SS-DU-2D (240-38156-3), C-SS-DU-2T (240-38156-4), C-SS-DU-3 (240-38156-5), C-SS-DU-4 (240-38156-6) and C-SS-DU-5 (240-38156-7) were analyzed for pesticides in accordance with EPA SW-846 Method 8081A. The sample drying and disaggregation process began on 06/06/2014, prepared on 06/12/2014 and analyzed on 06/16/2014.

DCB Decachlorobiphenyl failed the surrogate recovery criteria high for C-SS-DU-4 (240-38156-6). Tetrachloro-m-xylene failed the surrogate recovery criteria high for MB 240-134411/21-A. Tetrachloro-m-xylene failed the surrogate recovery criteria high for LCS 240-134411/22-A. Refer to the QC report for details.

Several analytes failed the recovery criteria low for the MS/MSD of sample C-SS-DU-3MS/MSD (240-38156-5) in batch 240-134757. 4,4'-DDE failed the recovery criteria high. Refer to the QC report for details.

Samples C-SS-DU-1 (240-38156-1)[20X], C-SS-DU-2 (240-38156-2)[20X], C-SS-DU-2D (240-38156-3)[20X], C-SS-DU-2T (240-38156-4) [20X], C-SS-DU-3 (240-38156-5)[20X], C-SS-DU-4 (240-38156-6)[20X] and C-SS-DU-5 (240-38156-7)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following sample(s) was diluted due to the nature of the sample matrix: C-SS-DU-1 (240-38156-1), C-SS-DU-2 (240-38156-2), C-SS-DU-2D (240-38156-3), C-SS-DU-2T (240-38156-4), C-SS-DU-3 (240-38156-5), C-SS-DU-3 (240-38156-5 MS), C-SS-DU-3 (240-38156-5 MSD), C-SS-DU-4 (240-38156-6) and C-SS-DU-5 (240-38156-7). Elevated reporting limits (RLs) are provided.

The continuing calibration verification (CCV) associated with batch 134757 recovered above the upper control limit for multiple analytes. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: C-SS-DU-1 (240-38156-1), C-SS-DU-2 (240-38156-2), C-SS-DU-2D (240-38156-3), C-SS-DU-2T (240-38156-4), C-SS-DU-3 (240-38156-5), C-SS-DU-3 (240-38156-5 MS), C-SS-DU-3 (240-38156-5 MSD), C-SS-DU-4 (240-38156-6) and C-SS-DU-5 (240-38156-7).

No other difficulties were encountered during the pesticides analysis. All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS) WITH INCREMENTAL SAMPLE PREPARATION

Samples C-SS-DU-1 (240-38156-1), C-SS-DU-2 (240-38156-2), C-SS-DU-2D (240-38156-3), C-SS-DU-2T (240-38156-4), C-SS-DU-3 (240-38156-5), C-SS-DU-4 (240-38156-6) and C-SS-DU-5 (240-38156-7) were analyzed for polychlorinated biphenyls (PCBs) with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 8082. The sample drying and disaggregation process began on 06/06/2014, prepared on 06/12/2014 and analyzed on 06/16/2014.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required. All of the samples in this data set analyzed for PCBs were subjected to the sulfuric acid cleanup procedure before instrumental analysis, per EPA Method 3665A.

DCB Decachlorobiphenyl failed the surrogate recovery criteria high for C-SS-DU-1 (240-38156-1). Refer to the QC report for details.

) ID: 240-38156-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

Method(s) 8082: The following sample(s) required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: (MB 240-134409/21-A), C-SS-DU-1 (240-38156-1), C-SS-DU-2 (240-38156-2), C-SS-DU-2D (240-38156-3), C-SS-DU-2T (240-38156-4), C-SS-DU-3 (240-38156-5), C-SS-DU-4 (240-38156-6) and C-SS-DU-5 (240-38156-7). Reagents: 1530805, 1526524 and 1501522.

The following sample(s) appears to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not closely match any of the laboratory's Aroclor standards used for instrument calibration: C-SS-DU-5 (240-38156-7). The sample(s) has been quantified and reported as a mixture of Aroclors 1248 and 1254. Due to the poor match with the Aroclor standard(s), there is increased qualitative and quantitative uncertainty associated with this result. The best overall pattern match was used for identification and quantitation.

The following sample(s) appears to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not closely match any of the laboratory's Aroclor standards used for instrument calibration: C-SS-DU-2D (240-38156-3), C-SS-DU-2T (240-38156-4), C-SS-DU-3 (240-38156-5). The sample(s) has been quantified and reported as Aroclor 1260. Due to the poor match with the Aroclor standard(s), there is increased qualitative and quantitative uncertainty associated with this result. The best overall pattern match was used for identification and quantitation.

No other difficulties were encountered during the PCBs analysis. All other quality control parameters were within the acceptance limits.

TOTAL METALS (ICPMS) WITH INCREMENTAL SAMPLE PREPARATION

Samples C-SS-DU-1 (240-38156-1), C-SS-DU-2 (240-38156-2), C-SS-DU-2D (240-38156-3), C-SS-DU-2T (240-38156-4), C-SS-DU-3 (240-38156-5), C-SS-DU-4 (240-38156-6) and C-SS-DU-5 (240-38156-7) were analyzed for total metals (ICPMS) with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 6020. The sample ing and disaggregation process began on 06/06/2014, prepared on 06/17/2014 and analyzed on 06/17/2014 and 06/18/2014.

Several analytes were detected in method blank MB 240-134947/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Antimony, Calcium and Magnesium failed the recovery criteria low for the MS of sample C-SS-DU-3MS (240-38156-5) in batch 240-135284. Aluminum, Potassium, Titanium and Boron failed the recovery criteria high. Antimony failed the recovery criteria low for the MSD of sample C-SS-DU-3MSD (240-38156-5) in batch 240-135284. Several analytes failed the recovery criteria high. Refer to the QC report for details.

Samples C-SS-DU-1 (240-38156-1)[5X], C-SS-DU-2 (240-38156-2)[5X], C-SS-DU-2D (240-38156-3)[5X], C-SS-DU-2T (240-38156-4)[5X], C-SS-DU-3 (240-38156-5)[5X], C-SS-DU-4 (240-38156-6)[5X] and C-SS-DU-5 (240-38156-7)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the metals analysis. All other quality control parameters were within the acceptance limits.

MERCURY WITH INCREMENTAL SAMPLE PREPARATION

Samples C-SS-DU-1 (240-38156-1), C-SS-DU-2 (240-38156-2), C-SS-DU-2D (240-38156-3), C-SS-DU-2T (240-38156-4), C-SS-DU-3 (240-38156-5), C-SS-DU-4 (240-38156-6) and C-SS-DU-5 (240-38156-7) were analyzed for mercury with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 7471A. The sample drying and disaggregation process began on 06/06/2014, and prepared and analyzed on 06/17/2014.

No difficulties were encountered during the mercury analysis. All quality control parameters were within the acceptance limits.

TOTAL CYANIDE

Samples C-SS-DU-1 (240-38156-1), C-SS-DU-2 (240-38156-2), C-SS-DU-2D (240-38156-3), C-SS-DU-2T (240-38156-4), C-SS-DU-3 (240-38156-5), C-SS-DU-4 (240-38156-6) and C-SS-DU-5 (240-38156-7) were analyzed for total cyanide in accordance with SW-846 thod 9012A. The sample drying and disaggregation process began on 06/06/2014, and prepared and analyzed on 06/13/2014.

Cyanide, Total was detected in method blank MB 240-134565/1-A at a level that was above the method detection limit but below the

Job ID: 240-38156-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No other difficulties were encountered during the cyanide analysis. All other quality control parameters were within the acceptance limits.

TOTAL SOLIDS/PERCENT MOISTURE

Samples C-SS-DU-1 (240-38156-1), C-SS-DU-2 (240-38156-2), C-SS-DU-2D (240-38156-3), C-SS-DU-2T (240-38156-4), C-SS-DU-3 (240-38156-5), C-SS-DU-4 (240-38156-6) and C-SS-DU-5 (240-38156-7) were analyzed for Total Solids/Percent Moisture in accordance with Percent Moisture method. The sample drying and disaggregation process began on 06/06/2014 and analyzed on 06/12/2014.

No difficulties were encountered during the % Moisture analysis. All quality control parameters were within the acceptance limits.

Method Summary

Client: Michigan Dept. of Environmental Quality
Project/Site: 5250 Conner Detroit

TestAmerica Job ID: 240-38156-1

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8081A	Organochlorine Pesticides (GC)	SW846	TAL CAN
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6020	Metals (ICP/MS)	SW846	TAL CAN
7471A	Mercury (CVAA)	SW846	TAL CAN
9012A	Cyanide, Total and/or Amenable	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Michigan Dept. of Environmental Quality
Project/Site: 5250 Conner Detroit

TestAmerica Job ID: 240-38156-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-38156-1	C-SS-DU-1	Solid	06/03/14 09:30	06/05/14 09:45
240-38156-2	C-SS-DU-2	Solid	06/03/14 10:20	06/05/14 09:45
240-38156-3	C-SS-DU-2D	Solid	06/03/14 10:20	06/05/14 09:45
240-38156-4	C-SS-DU-2T	Solid	06/03/14 10:20	06/05/14 09:45
240-38156-5	C-SS-DU-3	Solid	06/03/14 11:15	06/05/14 09:45
240-38156-6	C-SS-DU-4	Solid	06/02/14 14:45	06/05/14 09:45
240-38156-7	C-SS-DU-5	Solid	06/03/14 09:00	06/05/14 09:45

Detection Summary

Client: Michigan Dept. of Environmental Quality
Project/Site: 5250 Conner Detroit

TestAmerica Job ID: 240-38156-1

ent Sample ID: C-SS-DU-1 — **Lab Sample ID: 240-38156-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	530		65	7.4	ug/Kg	10	☼	8270C	Total/NA
Acenaphthylene	49	J	65	3.4	ug/Kg	10	☼	8270C	Total/NA
Anthracene	1200		65	7.6	ug/Kg	10	☼	8270C	Total/NA
Benzo[a]anthracene	2500		65	6.2	ug/Kg	10	☼	8270C	Total/NA
Benzo[b]fluoranthene	2900		65	5.8	ug/Kg	10	☼	8270C	Total/NA
Benzo[k]fluoranthene	1100		65	6.6	ug/Kg	10	☼	8270C	Total/NA
Benzo[g,h,i]perylene	1400		65	3.4	ug/Kg	10	☼	8270C	Total/NA
Benzo[a]pyrene	2000		65	6.3	ug/Kg	10	☼	8270C	Total/NA
Carbazole	650		490	260	ug/Kg	10	☼	8270C	Total/NA
Chrysene	2400		65	11	ug/Kg	10	☼	8270C	Total/NA
2-Methylnaphthalene	170		65	4.9	ug/Kg	10	☼	8270C	Total/NA
Dibenz(a,h)anthracene	370		65	6.5	ug/Kg	10	☼	8270C	Total/NA
Dibenzofuran	400	J	490	6.5	ug/Kg	10	☼	8270C	Total/NA
Fluoranthene	6200		65	5.4	ug/Kg	10	☼	8270C	Total/NA
Fluorene	640		65	5.2	ug/Kg	10	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	1300		65	3.4	ug/Kg	10	☼	8270C	Total/NA
Naphthalene	550		65	8.0	ug/Kg	10	☼	8270C	Total/NA
Phenanthrene	4800		65	7.1	ug/Kg	10	☼	8270C	Total/NA
Phenol	86	J B	490	71	ug/Kg	10	☼	8270C	Total/NA
Pyrene	4400		65	4.3	ug/Kg	10	☼	8270C	Total/NA
4,4'-DDE	390		34	7.7	ug/Kg	20	☼	8081A	Total/NA
4,4'-DDT	200		34	12	ug/Kg	20	☼	8081A	Total/NA
Aluminum	8000000		14000	460	ug/Kg	5	☼	6020	Total/NA
timony	190	J B	550	25	ug/Kg	5	☼	6020	Total/NA
rsenic	7200	B	1400	17	ug/Kg	5	☼	6020	Total/NA
Barium	69000	B	1400	150	ug/Kg	5	☼	6020	Total/NA
Beryllium	530	B	280	6.9	ug/Kg	5	☼	6020	Total/NA
Calcium	33000000	B	280000	8600	ug/Kg	5	☼	6020	Total/NA
Cadmium	420	B	280	6.2	ug/Kg	5	☼	6020	Total/NA
Cobalt	6600	B	280	5.3	ug/Kg	5	☼	6020	Total/NA
Chromium	20000	B	550	83	ug/Kg	5	☼	6020	Total/NA
Copper	20000	B	550	110	ug/Kg	5	☼	6020	Total/NA
Iron	15000000	B	28000	2000	ug/Kg	5	☼	6020	Total/NA
Magnesium	11000000	B	280000	17000	ug/Kg	5	☼	6020	Total/NA
Potassium	1200000	B	280000	3000	ug/Kg	5	☼	6020	Total/NA
Manganese	310000	B	1400	210	ug/Kg	5	☼	6020	Total/NA
Molybdenum	1500	J	2800	150	ug/Kg	5	☼	6020	Total/NA
Nickel	18000	B	550	110	ug/Kg	5	☼	6020	Total/NA
Lead	51000	B	280	36	ug/Kg	5	☼	6020	Total/NA
Selenium	1000	J B	1400	76	ug/Kg	5	☼	6020	Total/NA
Strontium	60000	B	2800	36	ug/Kg	5	☼	6020	Total/NA
Thallium	160	J	550	22	ug/Kg	5	☼	6020	Total/NA
Vanadium	22000		1400	28	ug/Kg	5	☼	6020	Total/NA
Zinc	74000	B	5500	1800	ug/Kg	5	☼	6020	Total/NA
Boron	6400		5500	760	ug/Kg	5	☼	6020	Total/NA
Silver	59	J	280	3.0	ug/Kg	5	☼	6020	Total/NA
Sodium	90000	J B	280000	7600	ug/Kg	5	☼	6020	Total/NA
Titanium	120000		2800	130	ug/Kg	5	☼	6020	Total/NA
Mercury	0.064	J	0.11	0.017	mg/Kg	1	☼	7471A	Total/NA
anide, Total	0.16	J B	0.49	0.097	mg/Kg	1	☼	9012A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Michigan Dept. of Environmental Quality
Project/Site: 5250 Conner Detroit

TestAmerica Job ID: 240-38156-1

Client Sample ID: C-SS-DU-2

Lab Sample ID: 240-38156

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	510		46	5.2	ug/Kg	6.6667	☼	8270C	Total/NA
Acenaphthylene	110		46	2.4	ug/Kg	6.6667	☼	8270C	Total/NA
Anthracene	1200		46	5.4	ug/Kg	6.6667	☼	8270C	Total/NA
Benzo[a]anthracene	2500		46	4.3	ug/Kg	6.6667	☼	8270C	Total/NA
Benzo[b]fluoranthene	3000		46	4.1	ug/Kg	6.6667	☼	8270C	Total/NA
Benzo[k]fluoranthene	1200		46	4.7	ug/Kg	6.6667	☼	8270C	Total/NA
Benzo[g,h,i]perylene	1600		46	2.4	ug/Kg	6.6667	☼	8270C	Total/NA
Benzo[a]pyrene	2100		46	4.4	ug/Kg	6.6667	☼	8270C	Total/NA
Carbazole	670		340	190	ug/Kg	6.6667	☼	8270C	Total/NA
Chrysene	2500		46	7.6	ug/Kg	6.6667	☼	8270C	Total/NA
2-Methylnaphthalene	260		46	3.4	ug/Kg	6.6667	☼	8270C	Total/NA
Dibenz(a,h)anthracene	390		46	4.5	ug/Kg	6.6667	☼	8270C	Total/NA
Dibenzofuran	410		340	4.5	ug/Kg	6.6667	☼	8270C	Total/NA
Fluoranthene	6300		46	3.8	ug/Kg	6.6667	☼	8270C	Total/NA
Fluorene	620		46	3.6	ug/Kg	6.6667	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	1400		46	2.4	ug/Kg	6.6667	☼	8270C	Total/NA
Naphthalene	430		46	5.6	ug/Kg	6.6667	☼	8270C	Total/NA
Phenanthrene	4700		46	5.0	ug/Kg	6.6667	☼	8270C	Total/NA
Phenol	88	J B	340	50	ug/Kg	6.6667	☼	8270C	Total/NA
Pyrene	4300		46	3.0	ug/Kg	6.6667	☼	8270C	Total/NA
4,4'-DDD	17	J	34	13	ug/Kg	20	☼	8081A	Total/NA
4,4'-DDE	220		34	7.9	ug/Kg	20	☼	8081A	Total/NA
4,4'-DDT	180		34	13	ug/Kg	20	☼	8081A	Total/NA
Aluminum	8000000		13000	420	ug/Kg	5	☼	6020	Total/NA
Antimony	190	J B	510	23	ug/Kg	5	☼	6020	Total/NA
Arsenic	6700	B	1300	15	ug/Kg	5	☼	6020	Total/NA
Barium	67000	B	1300	140	ug/Kg	5	☼	6020	Total/NA
Beryllium	450	B	260	6.4	ug/Kg	5	☼	6020	Total/NA
Calcium	27000000	B	260000	8000	ug/Kg	5	☼	6020	Total/NA
Cadmium	570	B	260	5.8	ug/Kg	5	☼	6020	Total/NA
Cobalt	5800	B	260	4.9	ug/Kg	5	☼	6020	Total/NA
Chromium	19000	B	510	77	ug/Kg	5	☼	6020	Total/NA
Copper	42000	B	510	100	ug/Kg	5	☼	6020	Total/NA
Iron	14000000	B	26000	1900	ug/Kg	5	☼	6020	Total/NA
Magnesium	9100000	B	260000	15000	ug/Kg	5	☼	6020	Total/NA
Potassium	1200000	B	260000	2700	ug/Kg	5	☼	6020	Total/NA
Manganese	320000	B	1300	190	ug/Kg	5	☼	6020	Total/NA
Molybdenum	1400	J	2600	130	ug/Kg	5	☼	6020	Total/NA
Nickel	18000	B	510	100	ug/Kg	5	☼	6020	Total/NA
Lead	56000	B	260	33	ug/Kg	5	☼	6020	Total/NA
Selenium	1100	J B	1300	71	ug/Kg	5	☼	6020	Total/NA
Strontium	61000	B	2600	33	ug/Kg	5	☼	6020	Total/NA
Thallium	160	J	510	21	ug/Kg	5	☼	6020	Total/NA
Vanadium	21000		1300	26	ug/Kg	5	☼	6020	Total/NA
Zinc	95000	B	5100	1700	ug/Kg	5	☼	6020	Total/NA
Boron	6400		5100	710	ug/Kg	5	☼	6020	Total/NA
Silver	72	J	260	2.8	ug/Kg	5	☼	6020	Total/NA
Sodium	260000	B	260000	7000	ug/Kg	5	☼	6020	Total/NA
Titanium	110000		2600	120	ug/Kg	5	☼	6020	Total/NA
Mercury	0.063	J	0.11	0.016	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

ent Sample ID: C-SS-DU-2 (Continued)

Lab Sample ID: 240-38156-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	0.23	J B	0.51	0.10	mg/Kg	1	☼	9012A	Total/NA

Client Sample ID: C-SS-DU-2D

Lab Sample ID: 240-38156-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	150		35	4.0	ug/Kg	5	☼	8270C	Total/NA
Acenaphthylene	94		35	1.9	ug/Kg	5	☼	8270C	Total/NA
Anthracene	410		35	4.1	ug/Kg	5	☼	8270C	Total/NA
Benzo[a]anthracene	1500		35	3.3	ug/Kg	5	☼	8270C	Total/NA
Benzo[b]fluoranthene	1800		35	3.1	ug/Kg	5	☼	8270C	Total/NA
Benzo[k]fluoranthene	710		35	3.6	ug/Kg	5	☼	8270C	Total/NA
Benzo[g,h,i]perylene	910		35	1.9	ug/Kg	5	☼	8270C	Total/NA
Benzo[a]pyrene	1300		35	3.4	ug/Kg	5	☼	8270C	Total/NA
Carbazole	220	J	270	140	ug/Kg	5	☼	8270C	Total/NA
Chrysene	1500		35	5.8	ug/Kg	5	☼	8270C	Total/NA
2-Methylnaphthalene	57		35	2.7	ug/Kg	5	☼	8270C	Total/NA
Dibenz(a,h)anthracene	260		35	3.5	ug/Kg	5	☼	8270C	Total/NA
Dibenzofuran	97	J	270	3.5	ug/Kg	5	☼	8270C	Total/NA
Fluoranthene	3100		35	2.9	ug/Kg	5	☼	8270C	Total/NA
Fluorene	180		35	2.8	ug/Kg	5	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	830		35	1.9	ug/Kg	5	☼	8270C	Total/NA
Naphthalene	87		35	4.4	ug/Kg	5	☼	8270C	Total/NA
Phenanthrene	1800		35	3.9	ug/Kg	5	☼	8270C	Total/NA
henol	57	J B	270	39	ug/Kg	5	☼	8270C	Total/NA
yrene	2300		35	2.3	ug/Kg	5	☼	8270C	Total/NA
4,4'-DDE	180		36	8.3	ug/Kg	20	☼	8081A	Total/NA
4,4'-DDT	140		36	13	ug/Kg	20	☼	8081A	Total/NA
Aroclor-1260	5.2	J	35	4.3	ug/Kg	1	☼	8082	Total/NA
Aluminum	7900000		13000	420	ug/Kg	5	☼	6020	Total/NA
Antimony	200	J B	510	23	ug/Kg	5	☼	6020	Total/NA
Arsenic	6100	B	1300	15	ug/Kg	5	☼	6020	Total/NA
Barium	68000	B	1300	140	ug/Kg	5	☼	6020	Total/NA
Beryllium	450	B	260	6.4	ug/Kg	5	☼	6020	Total/NA
Calcium	26000000	B	260000	8000	ug/Kg	5	☼	6020	Total/NA
Cadmium	590	B	260	5.8	ug/Kg	5	☼	6020	Total/NA
Cobalt	6600	B	260	4.9	ug/Kg	5	☼	6020	Total/NA
Chromium	21000	B	510	77	ug/Kg	5	☼	6020	Total/NA
Copper	22000	B	510	100	ug/Kg	5	☼	6020	Total/NA
Iron	14000000	B	26000	1900	ug/Kg	5	☼	6020	Total/NA
Magnesium	9200000	B	260000	15000	ug/Kg	5	☼	6020	Total/NA
Potassium	1100000	B	260000	2700	ug/Kg	5	☼	6020	Total/NA
Manganese	340000	B	1300	190	ug/Kg	5	☼	6020	Total/NA
Molybdenum	1400	J	2600	130	ug/Kg	5	☼	6020	Total/NA
Nickel	18000	B	510	100	ug/Kg	5	☼	6020	Total/NA
Lead	49000	B	260	33	ug/Kg	5	☼	6020	Total/NA
Selenium	1000	J B	1300	70	ug/Kg	5	☼	6020	Total/NA
Strontium	93000	B	2600	33	ug/Kg	5	☼	6020	Total/NA
Thallium	150	J	510	21	ug/Kg	5	☼	6020	Total/NA
Vanadium	22000		1300	26	ug/Kg	5	☼	6020	Total/NA
nc	72000	B	5100	1700	ug/Kg	5	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: C-SS-DU-2D (Continued)

Lab Sample ID: 240-38156

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	6000		5100	700	ug/Kg	5	☼	6020	Total/NA
Silver	63	J	260	2.8	ug/Kg	5	☼	6020	Total/NA
Sodium	88000	J B	260000	7000	ug/Kg	5	☼	6020	Total/NA
Titanium	120000		2600	120	ug/Kg	5	☼	6020	Total/NA
Mercury	0.062	J	0.11	0.016	mg/Kg	1	☼	7471A	Total/NA
Cyanide, Total	0.20	J B	0.54	0.11	mg/Kg	1	☼	9012A	Total/NA

Client Sample ID: C-SS-DU-2T

Lab Sample ID: 240-38156-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	600		71	8.1	ug/Kg	10	☼	8270C	Total/NA
Acenaphthylene	160		71	3.7	ug/Kg	10	☼	8270C	Total/NA
Anthracene	1900		71	8.3	ug/Kg	10	☼	8270C	Total/NA
Benzo[a]anthracene	4300		71	6.7	ug/Kg	10	☼	8270C	Total/NA
Benzo[b]fluoranthene	4700		71	6.3	ug/Kg	10	☼	8270C	Total/NA
Benzo[k]fluoranthene	2000		71	7.3	ug/Kg	10	☼	8270C	Total/NA
Benzo[g,h,i]perylene	2200		71	3.7	ug/Kg	10	☼	8270C	Total/NA
Benzo[a]pyrene	3400		71	6.8	ug/Kg	10	☼	8270C	Total/NA
Carbazole	1100		530	290	ug/Kg	10	☼	8270C	Total/NA
Chrysene	4100		71	12	ug/Kg	10	☼	8270C	Total/NA
2-Methylnaphthalene	230		71	5.3	ug/Kg	10	☼	8270C	Total/NA
Dibenz(a,h)anthracene	640		71	7.0	ug/Kg	10	☼	8270C	Total/NA
Dibenzofuran	520	J	530	7.0	ug/Kg	10	☼	8270C	Total/NA
Fluoranthene	10000		71	5.9	ug/Kg	10	☼	8270C	Total/NA
Fluorene	790		71	5.7	ug/Kg	10	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	2000		71	3.7	ug/Kg	10	☼	8270C	Total/NA
Naphthalene	550		71	8.8	ug/Kg	10	☼	8270C	Total/NA
Phenanthrene	7700		71	7.8	ug/Kg	10	☼	8270C	Total/NA
Phenol	130	J B	530	78	ug/Kg	10	☼	8270C	Total/NA
Pyrene	7100		71	4.7	ug/Kg	10	☼	8270C	Total/NA
4,4'-DDE	190		35	8.1	ug/Kg	20	☼	8081A	Total/NA
4,4'-DDT	150		35	13	ug/Kg	20	☼	8081A	Total/NA
Aroclor-1260	12	J	34	4.2	ug/Kg	1	☼	8082	Total/NA
Aluminum	8100000		13000	430	ug/Kg	5	☼	6020	Total/NA
Antimony	180	J B	520	23	ug/Kg	5	☼	6020	Total/NA
Arsenic	6200	B	1300	15	ug/Kg	5	☼	6020	Total/NA
Barium	70000	B	1300	140	ug/Kg	5	☼	6020	Total/NA
Beryllium	430	B	260	6.5	ug/Kg	5	☼	6020	Total/NA
Calcium	28000000	B	260000	8100	ug/Kg	5	☼	6020	Total/NA
Cadmium	620	B	260	5.8	ug/Kg	5	☼	6020	Total/NA
Cobalt	6000	B	260	4.9	ug/Kg	5	☼	6020	Total/NA
Chromium	20000	B	520	77	ug/Kg	5	☼	6020	Total/NA
Copper	40000	B	520	100	ug/Kg	5	☼	6020	Total/NA
Iron	14000000	B	26000	1900	ug/Kg	5	☼	6020	Total/NA
Magnesium	9300000	B	260000	15000	ug/Kg	5	☼	6020	Total/NA
Potassium	1200000	B	260000	2800	ug/Kg	5	☼	6020	Total/NA
Manganese	350000	B	1300	190	ug/Kg	5	☼	6020	Total/NA
Molybdenum	1400	J	2600	140	ug/Kg	5	☼	6020	Total/NA
Nickel	19000	B	520	100	ug/Kg	5	☼	6020	Total/NA
Lead	52000	B	260	34	ug/Kg	5	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

ent Sample ID: C-SS-DU-2T (Continued)

Lab Sample ID: 240-38156-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	1000	J B	1300	71	ug/Kg	5	☼	6020	Total/NA
Strontium	81000	B	2600	34	ug/Kg	5	☼	6020	Total/NA
Thallium	160	J	520	21	ug/Kg	5	☼	6020	Total/NA
Vanadium	22000		1300	26	ug/Kg	5	☼	6020	Total/NA
Zinc	85000	B	5200	1700	ug/Kg	5	☼	6020	Total/NA
Boron	6000		5200	710	ug/Kg	5	☼	6020	Total/NA
Silver	71	J	260	2.8	ug/Kg	5	☼	6020	Total/NA
Sodium	89000	J B	260000	7100	ug/Kg	5	☼	6020	Total/NA
Titanium	110000		2600	120	ug/Kg	5	☼	6020	Total/NA
Mercury	0.067	J	0.12	0.018	mg/Kg	1	☼	7471A	Total/NA
Cyanide, Total	0.14	J B	0.51	0.10	mg/Kg	1	☼	9012A	Total/NA

Client Sample ID: C-SS-DU-3

Lab Sample ID: 240-38156-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	850		69	7.8	ug/Kg	10	☼	8270C	Total/NA
Anthracene	1800		69	8.0	ug/Kg	10	☼	8270C	Total/NA
Benzo[a]anthracene	3100		69	6.5	ug/Kg	10	☼	8270C	Total/NA
Benzo[b]fluoranthene	3500		69	6.1	ug/Kg	10	☼	8270C	Total/NA
Benzo[k]fluoranthene	1400		69	7.0	ug/Kg	10	☼	8270C	Total/NA
Benzo[g,h,i]perylene	1500		69	3.6	ug/Kg	10	☼	8270C	Total/NA
Benzo[a]pyrene	2500		69	6.6	ug/Kg	10	☼	8270C	Total/NA
Carbazole	990		520	280	ug/Kg	10	☼	8270C	Total/NA
ırysene	3100		69	11	ug/Kg	10	☼	8270C	Total/NA
-Methylnaphthalene	260		69	5.2	ug/Kg	10	☼	8270C	Total/NA
Dibenz(a,h)anthracene	370		69	6.8	ug/Kg	10	☼	8270C	Total/NA
Dibenzofuran	680		520	6.8	ug/Kg	10	☼	8270C	Total/NA
Fluoranthene	7800		69	5.7	ug/Kg	10	☼	8270C	Total/NA
Fluorene	1000		69	5.5	ug/Kg	10	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	1400		69	3.6	ug/Kg	10	☼	8270C	Total/NA
Naphthalene	750		69	8.4	ug/Kg	10	☼	8270C	Total/NA
Phenanthrene	7000		69	7.5	ug/Kg	10	☼	8270C	Total/NA
Phenol	100	J B	520	75	ug/Kg	10	☼	8270C	Total/NA
Pyrene	5600		69	4.5	ug/Kg	10	☼	8270C	Total/NA
4,4'-DDE	250		33	7.5	ug/Kg	20	☼	8081A	Total/NA
4,4'-DDT	100		33	12	ug/Kg	20	☼	8081A	Total/NA
Aroclor-1260	8.2	J	32	3.9	ug/Kg	1	☼	8082	Total/NA
Aluminum	7200000		13000	430	ug/Kg	5	☼	6020	Total/NA
Antimony	230	J B	520	23	ug/Kg	5	☼	6020	Total/NA
Arsenic	6600	B	1300	16	ug/Kg	5	☼	6020	Total/NA
Barium	67000	B	1300	140	ug/Kg	5	☼	6020	Total/NA
Beryllium	390	B	260	6.5	ug/Kg	5	☼	6020	Total/NA
Calcium	34000000	B	260000	8100	ug/Kg	5	☼	6020	Total/NA
Cadmium	430	B	260	5.8	ug/Kg	5	☼	6020	Total/NA
Cobalt	6200	B	260	4.9	ug/Kg	5	☼	6020	Total/NA
Chromium	18000	B	520	78	ug/Kg	5	☼	6020	Total/NA
Copper	23000	B	520	100	ug/Kg	5	☼	6020	Total/NA
Iron	14000000	B	26000	1900	ug/Kg	5	☼	6020	Total/NA
Magnesium	11000000	B	260000	16000	ug/Kg	5	☼	6020	Total/NA
ıtassium	1100000	B	260000	2800	ug/Kg	5	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: C-SS-DU-3 (Continued)

Lab Sample ID: 240-38156

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	320000	B	1300	190	ug/Kg	5	☼	6020	Total/NA
Molybdenum	1500	J	2600	140	ug/Kg	5	☼	6020	Total/NA
Nickel	18000	B	520	100	ug/Kg	5	☼	6020	Total/NA
Lead	36000	B	260	34	ug/Kg	5	☼	6020	Total/NA
Selenium	980	J B	1300	71	ug/Kg	5	☼	6020	Total/NA
Strontium	130000	B	2600	34	ug/Kg	5	☼	6020	Total/NA
Thallium	150	J	520	21	ug/Kg	5	☼	6020	Total/NA
Vanadium	20000		1300	26	ug/Kg	5	☼	6020	Total/NA
Zinc	71000	B	5200	1700	ug/Kg	5	☼	6020	Total/NA
Boron	6200		5200	710	ug/Kg	5	☼	6020	Total/NA
Silver	62	J	260	2.8	ug/Kg	5	☼	6020	Total/NA
Sodium	95000	J B	260000	7100	ug/Kg	5	☼	6020	Total/NA
Titanium	120000		2600	120	ug/Kg	5	☼	6020	Total/NA
Mercury	0.057	J	0.12	0.019	mg/Kg	1	☼	7471A	Total/NA
Cyanide, Total	0.48	J B	0.54	0.11	mg/Kg	1	☼	9012A	Total/NA

Client Sample ID: C-SS-DU-4

Lab Sample ID: 240-38156-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	1400		130	15	ug/Kg	20	☼	8270C	Total/NA
Acenaphthylene	120	J	130	7.0	ug/Kg	20	☼	8270C	Total/NA
Anthracene	2900		130	16	ug/Kg	20	☼	8270C	Total/NA
Benzo[a]anthracene	5800		130	13	ug/Kg	20	☼	8270C	Total/NA
Benzo[b]fluoranthene	6700		130	12	ug/Kg	20	☼	8270C	Total/NA
Benzo[k]fluoranthene	2900		130	14	ug/Kg	20	☼	8270C	Total/NA
Benzo[g,h,i]perylene	3200		130	7.0	ug/Kg	20	☼	8270C	Total/NA
Benzo[a]pyrene	5100		130	13	ug/Kg	20	☼	8270C	Total/NA
Butyl benzyl phthalate	300	J	1400	200	ug/Kg	20	☼	8270C	Total/NA
Carbazole	1400		990	540	ug/Kg	20	☼	8270C	Total/NA
Chrysene	5800		130	22	ug/Kg	20	☼	8270C	Total/NA
2-Methylnaphthalene	380		130	9.9	ug/Kg	20	☼	8270C	Total/NA
Dibenz(a,h)anthracene	960		130	13	ug/Kg	20	☼	8270C	Total/NA
Dibenzofuran	1000		990	13	ug/Kg	20	☼	8270C	Total/NA
Fluoranthene	15000		130	11	ug/Kg	20	☼	8270C	Total/NA
Fluorene	1400		130	11	ug/Kg	20	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	2800		130	7.0	ug/Kg	20	☼	8270C	Total/NA
Naphthalene	1100		130	16	ug/Kg	20	☼	8270C	Total/NA
Phenanthrene	11000		130	15	ug/Kg	20	☼	8270C	Total/NA
Phenol	260	J B	990	150	ug/Kg	20	☼	8270C	Total/NA
Pyrene	11000		130	8.7	ug/Kg	20	☼	8270C	Total/NA
4,4'-DDE	72		34	7.8	ug/Kg	20	☼	8081A	Total/NA
4,4'-DDT	62		34	13	ug/Kg	20	☼	8081A	Total/NA
Aroclor-1254	30	J	33	4.7	ug/Kg	1	☼	8082	Total/NA
Aluminum	5100000		13000	430	ug/Kg	5	☼	6020	Total/NA
Antimony	110	J B	520	23	ug/Kg	5	☼	6020	Total/NA
Arsenic	5100	B	1300	15	ug/Kg	5	☼	6020	Total/NA
Barium	47000	B	1300	140	ug/Kg	5	☼	6020	Total/NA
Beryllium	270	B	260	6.4	ug/Kg	5	☼	6020	Total/NA
Calcium	43000000	B	260000	8100	ug/Kg	5	☼	6020	Total/NA
Cadmium	250	J B	260	5.8	ug/Kg	5	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

ent Sample ID: C-SS-DU-4 (Continued) — Lab Sample ID: 240-38156-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	4400	B	260	4.9	ug/Kg	5	☼	6020	Total/NA
Chromium	12000	B	520	77	ug/Kg	5	☼	6020	Total/NA
Copper	13000	B	520	100	ug/Kg	5	☼	6020	Total/NA
Iron	9800000	B	26000	1900	ug/Kg	5	☼	6020	Total/NA
Magnesium	9900000	B	260000	15000	ug/Kg	5	☼	6020	Total/NA
Potassium	800000	B	260000	2800	ug/Kg	5	☼	6020	Total/NA
Manganese	260000	B	1300	190	ug/Kg	5	☼	6020	Total/NA
Molybdenum	1100	J	2600	140	ug/Kg	5	☼	6020	Total/NA
Nickel	12000	B	520	100	ug/Kg	5	☼	6020	Total/NA
Lead	27000	B	260	33	ug/Kg	5	☼	6020	Total/NA
Selenium	730	J B	1300	71	ug/Kg	5	☼	6020	Total/NA
Strontium	58000	B	2600	33	ug/Kg	5	☼	6020	Total/NA
Thallium	120	J	520	21	ug/Kg	5	☼	6020	Total/NA
Vanadium	14000		1300	26	ug/Kg	5	☼	6020	Total/NA
Zinc	58000	B	5200	1700	ug/Kg	5	☼	6020	Total/NA
Boron	4600	J	5200	710	ug/Kg	5	☼	6020	Total/NA
Silver	34	J	260	2.8	ug/Kg	5	☼	6020	Total/NA
Sodium	88000	J B	260000	7000	ug/Kg	5	☼	6020	Total/NA
Titanium	97000		2600	120	ug/Kg	5	☼	6020	Total/NA
Mercury	0.038	J	0.10	0.015	mg/Kg	1	☼	7471A	Total/NA
Cyanide, Total	0.11	J B	0.48	0.096	mg/Kg	1	☼	9012A	Total/NA

Client Sample ID: C-SS-DU-5 — Lab Sample ID: 240-38156-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	250		61	7.0	ug/Kg	10	☼	8270C	Total/NA
Acenaphthylene	280		61	3.2	ug/Kg	10	☼	8270C	Total/NA
Anthracene	720		61	7.1	ug/Kg	10	☼	8270C	Total/NA
Benzo[a]anthracene	2800		61	5.8	ug/Kg	10	☼	8270C	Total/NA
Benzo[b]fluoranthene	3300		61	5.4	ug/Kg	10	☼	8270C	Total/NA
Benzo[k]fluoranthene	1200		61	6.2	ug/Kg	10	☼	8270C	Total/NA
Benzo[g,h,i]perylene	1500		61	3.2	ug/Kg	10	☼	8270C	Total/NA
Benzo[a]pyrene	2400		61	5.9	ug/Kg	10	☼	8270C	Total/NA
Carbazole	290	J	460	250	ug/Kg	10	☼	8270C	Total/NA
Chrysene	2500		61	10	ug/Kg	10	☼	8270C	Total/NA
2-Methylnaphthalene	75		61	4.6	ug/Kg	10	☼	8270C	Total/NA
Dibenz(a,h)anthracene	430		61	6.0	ug/Kg	10	☼	8270C	Total/NA
Dibenzofuran	150	J	460	6.0	ug/Kg	10	☼	8270C	Total/NA
Fluoranthene	5800		61	5.0	ug/Kg	10	☼	8270C	Total/NA
Fluorene	270		61	4.9	ug/Kg	10	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	1400		61	3.2	ug/Kg	10	☼	8270C	Total/NA
Naphthalene	150		61	7.5	ug/Kg	10	☼	8270C	Total/NA
Phenanthrene	2600		61	6.7	ug/Kg	10	☼	8270C	Total/NA
Phenol	110	J B	460	67	ug/Kg	10	☼	8270C	Total/NA
Pyrene	4400		61	4.0	ug/Kg	10	☼	8270C	Total/NA
4,4'-DDE	220		32	7.4	ug/Kg	20	☼	8081A	Total/NA
4,4'-DDT	79		32	12	ug/Kg	20	☼	8081A	Total/NA
Aroclor-1248	130		31	4.3	ug/Kg	1	☼	8082	Total/NA
Aluminum	7800000		13000	430	ug/Kg	5	☼	6020	Total/NA
ntimony	150	J B	520	23	ug/Kg	5	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Michigan Dept. of Environmental Quality
Project/Site: 5250 Conner Detroit

TestAmerica Job ID: 240-38156-1

Client Sample ID: C-SS-DU-5 (Continued)

Lab Sample ID: 240-3815(

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	6300	B	1300	16	ug/Kg	5	☼	6020	Total/NA
Barium	67000	B	1300	140	ug/Kg	5	☼	6020	Total/NA
Beryllium	430	B	260	6.5	ug/Kg	5	☼	6020	Total/NA
Calcium	30000000	B	260000	8100	ug/Kg	5	☼	6020	Total/NA
Cadmium	430	B	260	5.8	ug/Kg	5	☼	6020	Total/NA
Cobalt	6400	B	260	4.9	ug/Kg	5	☼	6020	Total/NA
Chromium	20000	B	520	78	ug/Kg	5	☼	6020	Total/NA
Copper	21000	B	520	100	ug/Kg	5	☼	6020	Total/NA
Iron	15000000	B	26000	1900	ug/Kg	5	☼	6020	Total/NA
Magnesium	9700000	B	260000	16000	ug/Kg	5	☼	6020	Total/NA
Potassium	1200000	B	260000	2800	ug/Kg	5	☼	6020	Total/NA
Manganese	370000	B	1300	190	ug/Kg	5	☼	6020	Total/NA
Molybdenum	1300	J	2600	140	ug/Kg	5	☼	6020	Total/NA
Nickel	19000	B	520	100	ug/Kg	5	☼	6020	Total/NA
Lead	52000	B	260	34	ug/Kg	5	☼	6020	Total/NA
Selenium	1000	J B	1300	71	ug/Kg	5	☼	6020	Total/NA
Strontium	92000	B	2600	34	ug/Kg	5	☼	6020	Total/NA
Thallium	160	J	520	21	ug/Kg	5	☼	6020	Total/NA
Vanadium	22000		1300	26	ug/Kg	5	☼	6020	Total/NA
Zinc	72000	B	5200	1700	ug/Kg	5	☼	6020	Total/NA
Boron	5800		5200	710	ug/Kg	5	☼	6020	Total/NA
Silver	82	J	260	2.9	ug/Kg	5	☼	6020	Total/NA
Sodium	80000	J B	260000	7100	ug/Kg	5	☼	6020	Total/NA
Titanium	120000		2600	120	ug/Kg	5	☼	6020	Total/NA
Mercury	0.050	J	0.11	0.016	mg/Kg	1	☼	7471A	Total/NA
Cyanide, Total	0.14	J B	0.54	0.11	mg/Kg	1	☼	9012A	Total/NA

This Detection Summary does not include radiochemical test results.

'ent Sample ID: C-SS-DU-1 — **Lab Sample ID: 240-38156-1**

Date Collected: 06/03/14 09:30 — **Matrix: Solid**

Date Received: 06/05/14 09:45 — **Percent Solids: 97.8**

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**530**		65	7.4	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Acenaphthylene	**49**	J	65	3.4	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Anthracene	**1200**		65	7.6	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Benzo[a]anthracene	**2500**		65	6.2	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Benzo[b]fluoranthene	**2900**		65	5.8	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Benzo[k]fluoranthene	**1100**		65	6.6	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Benzo[g,h,i]perylene	**1400**		65	3.4	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Benzo[a]pyrene	**2000**		65	6.3	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Butyl benzyl phthalate	ND		680	98	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Bis(2-chloroethoxy)methane	ND		980	220	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Bis(2-chloroethyl)ether	ND		980	20	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Bis(2-ethylhexyl) phthalate	ND		680	190	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
4-Bromophenyl phenyl ether	ND		490	130	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Carbazole	**650**		490	260	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
4-Chloro-3-methylphenol	ND		1500	210	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
2-Chloronaphthalene	ND		490	4.4	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
2-Chlorophenol	ND		490	80	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
4-Chlorophenyl phenyl ether	ND		490	130	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Chrysene	**2400**		65	11	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
2-Methylnaphthalene	**170**		65	4.9	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
& 4 Methylphenol	ND		3900	200	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
.benz(a,h)anthracene	**370**		65	6.5	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Dibenzofuran	**400**	J	490	6.5	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
2,4-Dichlorophenol	ND		1500	200	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Diethyl phthalate	ND		680	160	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
2,4-Dimethylphenol	ND		1500	200	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Dimethyl phthalate	ND		680	170	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
4,6-Dinitro-2-methylphenol	ND		1500	90	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
2,4-Dinitrophenol	ND		3200	210	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
2,4-Dinitrotoluene	ND		2000	170	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Di-n-butyl phthalate	ND		680	150	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Di-n-octyl phthalate	ND		680	77	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Fluoranthene	**6200**		65	5.4	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Fluorene	**640**		65	5.2	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Hexachlorobenzene	ND		65	21	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Hexachlorobutadiene	ND		490	55	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Hexachlorocyclopentadiene	ND		3200	79	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Hexachloroethane	ND		490	88	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Indeno[1,2,3-cd]pyrene	**1300**		65	3.4	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Isophorone	ND		490	130	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
2-Methylphenol	ND		2000	110	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Naphthalene	**550**		65	8.0	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
2-Nitroaniline	ND		2000	89	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
3-Nitroaniline	ND		2000	160	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
4-Nitroaniline	ND		2000	250	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Nitrobenzene	ND		980	22	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
` Nitrophenol	ND		490	81	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
.Nitrophenol	ND		3200	170	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
N-Nitrosodimethylamine	ND		980	160	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10

Client Sample ID: C-SS-DU-1
Date Collected: 06/03/14 09:30
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156
Matrix: So...
Percent Solids: 97.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		490	210	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
N-Nitrosodi-n-propylamine	ND		490	62	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
2,2'-oxybis[1-chloropropane]	ND		980	93	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Pentachlorophenol	ND		1500	89	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Phenanthrene	**4800**		65	7.1	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Phenol	**86**	J B	490	71	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Pyridine	ND		980	34	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
1,2,4-Trichlorobenzene	ND		490	34	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
2,4,5-Trichlorophenol	ND		1500	240	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
2,4,6-Trichlorophenol	ND		1500	87	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Azobenzene	ND		3200	200	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
2,6-Dinitrotoluene	ND		2000	210	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10
Pyrene	**4400**		65	4.3	ug/Kg	☼	06/12/14 10:10	06/16/14 10:15	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*69*		*24 - 110*	*06/12/14 10:10*	*06/16/14 10:15*	*10*
2-Fluorophenol (Surr)	*73*		*24 - 110*	*06/12/14 10:10*	*06/16/14 10:15*	*10*
2,4,6-Tribromophenol (Surr)	*46*		*10 - 110*	*06/12/14 10:10*	*06/16/14 10:15*	*10*
Nitrobenzene-d5 (Surr)	*61*		*20 - 110*	*06/12/14 10:10*	*06/16/14 10:15*	*10*
Phenol-d5 (Surr)	*69*		*26 - 110*	*06/12/14 10:10*	*06/16/14 10:15*	*10*
Terphenyl-d14 (Surr)	*82*		*36 - 110*	*06/12/14 10:10*	*06/16/14 10:15*	*10*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		34	12	ug/Kg	☼	06/12/14 10:46	06/16/14 20:08	20
4,4'-DDE	**390**		34	7.7	ug/Kg	☼	06/12/14 10:46	06/16/14 20:08	20
4,4'-DDT	**200**		34	12	ug/Kg	☼	06/12/14 10:46	06/16/14 20:08	20
Aldrin	ND		34	24	ug/Kg	☼	06/12/14 10:46	06/16/14 20:08	20
alpha-BHC	ND		34	14	ug/Kg	☼	06/12/14 10:46	06/16/14 20:08	20
alpha-Chlordane	ND		34	19	ug/Kg	☼	06/12/14 10:46	06/16/14 20:08	20
beta-BHC	ND		34	22	ug/Kg	☼	06/12/14 10:46	06/16/14 20:08	20
delta-BHC	ND		34	24	ug/Kg	☼	06/12/14 10:46	06/16/14 20:08	20
Dieldrin	ND		34	9.3	ug/Kg	☼	06/12/14 10:46	06/16/14 20:08	20
Endosulfan I	ND		34	10	ug/Kg	☼	06/12/14 10:46	06/16/14 20:08	20
Endosulfan II	ND		34	16	ug/Kg	☼	06/12/14 10:46	06/16/14 20:08	20
Endosulfan sulfate	ND		34	17	ug/Kg	☼	06/12/14 10:46	06/16/14 20:08	20
Endrin	ND		34	9.9	ug/Kg	☼	06/12/14 10:46	06/16/14 20:08	20
Endrin aldehyde	ND		34	20	ug/Kg	☼	06/12/14 10:46	06/16/14 20:08	20
Endrin ketone	ND		34	12	ug/Kg	☼	06/12/14 10:46	06/16/14 20:08	20
gamma-BHC (Lindane)	ND		34	15	ug/Kg	☼	06/12/14 10:46	06/16/14 20:08	20
gamma-Chlordane	ND		34	8.3	ug/Kg	☼	06/12/14 10:46	06/16/14 20:08	20
Heptachlor	ND		34	22	ug/Kg	☼	06/12/14 10:46	06/16/14 20:08	20
Heptachlor epoxide	ND		34	16	ug/Kg	☼	06/12/14 10:46	06/16/14 20:08	20
Methoxychlor	ND		65	30	ug/Kg	☼	06/12/14 10:46	06/16/14 20:08	20
Toxaphene	ND		1300	380	ug/Kg	☼	06/12/14 10:46	06/16/14 20:08	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*547*	*X*	*41 - 157*	*06/12/14 10:46*	*06/16/14 20:08*	
DCB Decachlorobiphenyl	*102*	*p*	*41 - 157*	*06/12/14 10:46*	*06/16/14 20:08*	
Tetrachloro-m-xylene	*128*		*40 - 149*	*06/12/14 10:46*	*06/16/14 20:08*	*20*

Client Sample ID: C-SS-DU-1
Date Collected: 06/03/14 09:30
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156-1
Matrix: Solid
Percent Solids: 97.8

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	102		40 - 149	06/12/14 10:46	06/16/14 20:08	20

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		33	4.0	ug/Kg	☼	06/12/14 10:40	06/16/14 08:20	1
Aroclor-1221	ND		33	3.9	ug/Kg	☼	06/12/14 10:40	06/16/14 08:20	1
Aroclor-1232	ND		33	7.7	ug/Kg	☼	06/12/14 10:40	06/16/14 08:20	1
Aroclor-1242	ND		33	4.6	ug/Kg	☼	06/12/14 10:40	06/16/14 08:20	1
Aroclor-1248	ND		33	4.4	ug/Kg	☼	06/12/14 10:40	06/16/14 08:20	1
Aroclor-1254	ND		33	4.7	ug/Kg	☼	06/12/14 10:40	06/16/14 08:20	1
Aroclor-1260	ND		33	4.0	ug/Kg	☼	06/12/14 10:40	06/16/14 08:20	1
Aroclor-1262	ND		33	5.9	ug/Kg	☼	06/12/14 10:40	06/16/14 08:20	1
Aroclor-1268	ND		33	7.5	ug/Kg	☼	06/12/14 10:40	06/16/14 08:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	54		29 - 151	06/12/14 10:40	06/16/14 08:20	1
DCB Decachlorobiphenyl	171	X	14 - 163	06/12/14 10:40	06/16/14 08:20	1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8000000		14000	460	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Antimony	190	J B	550	25	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Arsenic	7200	B	1400	17	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Barium	69000	B	1400	150	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Beryllium	530	B	280	6.9	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Calcium	33000000	B	280000	8600	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Cadmium	420	B	280	6.2	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Cobalt	6600	B	280	5.3	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Chromium	20000	B	550	83	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Copper	20000	B	550	110	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Iron	15000000	B	28000	2000	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Magnesium	11000000	B	280000	17000	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Potassium	1200000	B	280000	3000	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Manganese	310000	B	1400	210	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Molybdenum	1500	J	2800	150	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Nickel	18000	B	550	110	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Lead	51000	B	280	36	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Selenium	1000	J B	1400	76	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Strontium	60000	B	2800	36	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Thallium	160	J	550	22	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Vanadium	22000		1400	28	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Zinc	74000	B	5500	1800	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Boron	6400		5500	760	ug/Kg	☼	06/17/14 08:18	06/18/14 16:40	5
Silver	59	J	280	3.0	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Sodium	90000	J B	280000	7600	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5
Titanium	120000		2800	130	ug/Kg	☼	06/17/14 08:18	06/17/14 21:05	5

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.064	J	0.11	0.017	mg/Kg	☼	06/17/14 11:10	06/17/14 17:32	1

Client: Michigan Dept. of Environmental Quality
Project/Site: 5250 Conner Detroit

TestAmerica Job ID: 240-38156-1

Client Sample ID: C-SS-DU-1
Date Collected: 06/03/14 09:30
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156
Matrix: Soil
Percent Solids: 97.8

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.16	J B	0.49	0.097	mg/Kg	☼	06/13/14 09:06	06/13/14 11:41	1

ient Sample ID: C-SS-DU-2
Lab Sample ID: 240-38156-2

Date Collected: 06/03/14 10:20
Matrix: Solid

Date Received: 06/05/14 09:45
Percent Solids: 97.9

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**510**		46	5.2	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Acenaphthylene	**110**		46	2.4	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Anthracene	**1200**		46	5.4	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Benzo[a]anthracene	**2500**		46	4.3	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Benzo[b]fluoranthene	**3000**		46	4.1	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Benzo[k]fluoranthene	**1200**		46	4.7	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Benzo[g,h,i]perylene	**1600**		46	2.4	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Benzo[a]pyrene	**2100**		46	4.4	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Butyl benzyl phthalate	ND		480	69	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Bis(2-chloroethoxy)methane	ND		690	150	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Bis(2-chloroethyl)ether	ND		690	14	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Bis(2-ethylhexyl) phthalate	ND		480	130	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
4-Bromophenyl phenyl ether	ND		340	89	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Carbazole	**670**		340	190	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
4-Chloro-3-methylphenol	ND		1000	140	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
2-Chloronaphthalene	ND		340	3.1	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
2-Chlorophenol	ND		340	56	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
4-Chlorophenyl phenyl ether	ND		340	89	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Chrysene	**2500**		46	7.6	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
2-Methylnaphthalene	**260**		46	3.4	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
& 4 Methylphenol	ND		2700	140	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
ibenz(a,h)anthracene	**390**		46	4.5	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Dibenzofuran	**410**		340	4.5	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
2,4-Dichlorophenol	ND		1000	140	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Diethyl phthalate	ND		480	110	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
2,4-Dimethylphenol	ND		1000	140	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Dimethyl phthalate	ND		480	120	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
4,6-Dinitro-2-methylphenol	ND		1000	63	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
2,4-Dinitrophenol	ND		2300	140	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
2,4-Dinitrotoluene	ND		1400	120	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Di-n-butyl phthalate	ND		480	100	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Di-n-octyl phthalate	ND		480	54	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Fluoranthene	**6300**		46	3.8	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Fluorene	**620**		46	3.6	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Hexachlorobenzene	ND		46	14	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Hexachlorobutadiene	ND		340	38	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Hexachlorocyclopentadiene	ND		2300	56	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Hexachloroethane	ND		340	62	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Indeno[1,2,3-cd]pyrene	**1400**		46	2.4	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Isophorone	ND		340	89	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
2-Methylphenol	ND		1400	76	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Naphthalene	**430**		46	5.6	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
2-Nitroaniline	ND		1400	62	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
3-Nitroaniline	ND		1400	110	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
4-Nitroaniline	ND		1400	180	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Nitrobenzene	ND		690	15	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Nitrophenol	ND		340	57	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Nitrophenol	ND		2300	120	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
N-Nitrosodimethylamine	ND		690	110	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667

Client Sample ID: C-SS-DU-2
Date Collected: 06/03/14 10:20
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156
Matrix: Soi
Percent Solids: 97.9

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		340	140	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
N-Nitrosodi-n-propylamine	ND		340	43	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
2,2'-oxybis[1-chloropropane]	ND		690	65	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Pentachlorophenol	ND		1000	62	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Phenanthrene	**4700**		46	5.0	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Phenol	**88**	J B	340	50	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Pyridine	ND		690	24	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
1,2,4-Trichlorobenzene	ND		340	24	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
2,4,5-Trichlorophenol	ND		1000	170	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
2,4,6-Trichlorophenol	ND		1000	61	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Azobenzene	ND		2300	140	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
2,6-Dinitrotoluene	ND		1400	140	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667
Pyrene	**4300**		46	3.0	ug/Kg	☼	06/12/14 10:10	06/16/14 11:28	6.6667

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*24 - 110*	*06/12/14 10:10*	*06/16/14 11:28*	*6.6667*
2-Fluorophenol (Surr)	*69*		*24 - 110*	*06/12/14 10:10*	*06/16/14 11:28*	*6.6667*
2,4,6-Tribromophenol (Surr)	*56*		*10 - 110*	*06/12/14 10:10*	*06/16/14 11:28*	*6.6667*
Nitrobenzene-d5 (Surr)	*59*		*20 - 110*	*06/12/14 10:10*	*06/16/14 11:28*	*6.6667*
Phenol-d5 (Surr)	*69*		*26 - 110*	*06/12/14 10:10*	*06/16/14 11:28*	*6.6667*
Terphenyl-d14 (Surr)	*82*		*36 - 110*	*06/12/14 10:10*	*06/16/14 11:28*	*6.6667*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**17**	J	34	13	ug/Kg	☼	06/12/14 10:46	06/16/14 20:31	20
4,4'-DDE	**220**		34	7.9	ug/Kg	☼	06/12/14 10:46	06/16/14 20:31	20
4,4'-DDT	**180**		34	13	ug/Kg	☼	06/12/14 10:46	06/16/14 20:31	20
Aldrin	ND		34	24	ug/Kg	☼	06/12/14 10:46	06/16/14 20:31	20
alpha-BHC	ND		34	15	ug/Kg	☼	06/12/14 10:46	06/16/14 20:31	20
alpha-Chlordane	ND		34	19	ug/Kg	☼	06/12/14 10:46	06/16/14 20:31	20
beta-BHC	ND		34	22	ug/Kg	☼	06/12/14 10:46	06/16/14 20:31	20
delta-BHC	ND		34	24	ug/Kg	☼	06/12/14 10:46	06/16/14 20:31	20
Dieldrin	ND		34	9.5	ug/Kg	☼	06/12/14 10:46	06/16/14 20:31	20
Endosulfan I	ND		34	11	ug/Kg	☼	06/12/14 10:46	06/16/14 20:31	20
Endosulfan II	ND		34	17	ug/Kg	☼	06/12/14 10:46	06/16/14 20:31	20
Endosulfan sulfate	ND		34	18	ug/Kg	☼	06/12/14 10:46	06/16/14 20:31	20
Endrin	ND		34	10	ug/Kg	☼	06/12/14 10:46	06/16/14 20:31	20
Endrin aldehyde	ND		34	20	ug/Kg	☼	06/12/14 10:46	06/16/14 20:31	20
Endrin ketone	ND		34	13	ug/Kg	☼	06/12/14 10:46	06/16/14 20:31	20
gamma-BHC (Lindane)	ND		34	15	ug/Kg	☼	06/12/14 10:46	06/16/14 20:31	20
gamma-Chlordane	ND		34	8.5	ug/Kg	☼	06/12/14 10:46	06/16/14 20:31	20
Heptachlor	ND		34	22	ug/Kg	☼	06/12/14 10:46	06/16/14 20:31	20
Heptachlor epoxide	ND		34	16	ug/Kg	☼	06/12/14 10:46	06/16/14 20:31	20
Methoxychlor	ND		67	30	ug/Kg	☼	06/12/14 10:46	06/16/14 20:31	20
Toxaphene	ND		1400	380	ug/Kg	☼	06/12/14 10:46	06/16/14 20:31	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*545*	*X*	*41 - 157*	*06/12/14 10:46*	*06/16/14 20:31*	*20*
DCB Decachlorobiphenyl	*66*	*p*	*41 - 157*	*06/12/14 10:46*	*06/16/14 20:31*	
Tetrachloro-m-xylene	*97*		*40 - 149*	*06/12/14 10:46*	*06/16/14 20:31*	*20*

Client Sample ID: C-SS-DU-2
Date Collected: 06/03/14 10:20
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156-2
Matrix: Solid
Percent Solids: 97.9

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*99*		*40 - 149*	*06/12/14 10:46*	*06/16/14 20:31*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		33	4.1	ug/Kg	☼	06/12/14 10:40	06/16/14 07:31	1
Aroclor-1221	ND		33	4.0	ug/Kg	☼	06/12/14 10:40	06/16/14 07:31	1
Aroclor-1232	ND		33	7.9	ug/Kg	☼	06/12/14 10:40	06/16/14 07:31	1
Aroclor-1242	ND		33	4.7	ug/Kg	☼	06/12/14 10:40	06/16/14 07:31	1
Aroclor-1248	ND		33	4.5	ug/Kg	☼	06/12/14 10:40	06/16/14 07:31	1
Aroclor-1254	ND		33	4.8	ug/Kg	☼	06/12/14 10:40	06/16/14 07:31	1
Aroclor-1260	ND		33	4.1	ug/Kg	☼	06/12/14 10:40	06/16/14 07:31	1
Aroclor-1262	ND		33	6.0	ug/Kg	☼	06/12/14 10:40	06/16/14 07:31	1
Aroclor-1268	ND		33	7.6	ug/Kg	☼	06/12/14 10:40	06/16/14 07:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*53*		*29 - 151*	*06/12/14 10:40*	*06/16/14 07:31*	*1*
DCB Decachlorobiphenyl	*78*		*14 - 163*	*06/12/14 10:40*	*06/16/14 07:31*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8000000		13000	420	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
ntimony	190	J B	510	23	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Arsenic	6700	B	1300	15	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Barium	67000	B	1300	140	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Beryllium	450	B	260	6.4	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Calcium	27000000	B	260000	8000	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Cadmium	570	B	260	5.8	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Cobalt	5800	B	260	4.9	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Chromium	19000	B	510	77	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Copper	42000	B	510	100	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Iron	14000000	B	26000	1900	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Magnesium	9100000	B	260000	15000	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Potassium	1200000	B	260000	2700	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Manganese	320000	B	1300	190	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Molybdenum	1400	J	2600	130	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Nickel	18000	B	510	100	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Lead	56000	B	260	33	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Selenium	1100	J B	1300	71	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Strontium	61000	B	2600	33	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Thallium	160	J	510	21	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Vanadium	21000		1300	26	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Zinc	95000	B	5100	1700	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Boron	6400		5100	710	ug/Kg	☼	06/17/14 08:18	06/18/14 16:47	5
Silver	72	J	260	2.8	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Sodium	260000	B	260000	7000	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5
Titanium	110000		2600	120	ug/Kg	☼	06/17/14 08:18	06/17/14 21:17	5

ethod: 7471A - Mercury (CVAA)

nalyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.063	J	0.11	0.016	mg/Kg	☼	06/17/14 11:10	06/17/14 17:35	1

Client: Michigan Dept. of Environmental Quality
Project/Site: 5250 Conner Detroit

TestAmerica Job ID: 240-38156-1

Client Sample ID: C-SS-DU-2
Date Collected: 06/03/14 10:20
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156
Matrix: Soil
Percent Solids: 97.9

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.23	J B	0.51	0.10	mg/Kg	☼	06/13/14 09:06	06/13/14 11:41	1

Client Sample ID: C-SS-DU-2D
Date Collected: 06/03/14 10:20
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156-3
Matrix: Solid
Percent Solids: 97.9

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**150**		35	4.0	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Acenaphthylene	**94**		35	1.9	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Anthracene	**410**		35	4.1	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Benzo[a]anthracene	**1500**		35	3.3	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Benzo[b]fluoranthene	**1800**		35	3.1	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Benzo[k]fluoranthene	**710**		35	3.6	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Benzo[g,h,i]perylene	**910**		35	1.9	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Benzo[a]pyrene	**1300**		35	3.4	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Butyl benzyl phthalate	ND		370	53	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Bis(2-chloroethoxy)methane	ND		530	120	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Bis(2-chloroethyl)ether	ND		530	11	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Bis(2-ethylhexyl) phthalate	ND		370	100	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
4-Bromophenyl phenyl ether	ND		270	69	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Carbazole	**220**	J	270	140	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
4-Chloro-3-methylphenol	ND		800	110	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
2-Chloronaphthalene	ND		270	2.4	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
2-Chlorophenol	ND		270	44	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
4-Chlorophenyl phenyl ether	ND		270	69	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Chrysene	**1500**		35	5.8	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
2-Methylnaphthalene	**57**		35	2.7	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
[illegible] & 4 Methylphenol	ND		2100	110	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
[illegible]benz(a,h)anthracene	**260**		35	3.5	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Dibenzofuran	97	J	270	3.5	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
2,4-Dichlorophenol	ND		800	110	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Diethyl phthalate	ND		370	85	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
2,4-Dimethylphenol	ND		800	110	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Dimethyl phthalate	ND		370	90	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
4,6-Dinitro-2-methylphenol	ND		800	49	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
2,4-Dinitrophenol	ND		1800	110	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
2,4-Dinitrotoluene	ND		1100	90	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Di-n-butyl phthalate	ND		370	80	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Di-n-octyl phthalate	ND		370	42	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Fluoranthene	**3100**		35	2.9	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Fluorene	**180**		35	2.8	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Hexachlorobenzene	ND		35	11	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Hexachlorobutadiene	ND		270	30	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Hexachlorocyclopentadiene	ND		1800	43	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Hexachloroethane	ND		270	48	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Indeno[1,2,3-cd]pyrene	**830**		35	1.9	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Isophorone	ND		270	69	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
2-Methylphenol	ND		1100	58	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Naphthalene	**87**		35	4.4	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
2-Nitroaniline	ND		1100	48	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
3-Nitroaniline	ND		1100	85	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
4-Nitroaniline	ND		1100	140	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Nitrobenzene	ND		530	12	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
[illegible]-Nitrophenol	ND		270	44	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
[illegible]Nitrophenol	ND		1800	90	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
N-Nitrosodimethylamine	ND		530	85	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5

Client Sample ID: C-SS-DU-2D
Date Collected: 06/03/14 10:20
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156
Matrix: So
Percent Solids: 97.9

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		270	110	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
N-Nitrosodi-n-propylamine	ND		270	33	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
2,2'-oxybis[1-chloropropane]	ND		530	50	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Pentachlorophenol	ND		800	48	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Phenanthrene	**1800**		35	3.9	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Phenol	**57**	J B	270	39	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Pyridine	ND		530	19	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
1,2,4-Trichlorobenzene	ND		270	19	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
2,4,5-Trichlorophenol	ND		800	130	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
2,4,6-Trichlorophenol	ND		800	47	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Azobenzene	ND		1800	110	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
2,6-Dinitrotoluene	ND		1100	110	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5
Pyrene	**2300**		35	2.3	ug/Kg	☼	06/12/14 10:10	06/16/14 11:53	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*58*		*24 - 110*	*06/12/14 10:10*	*06/16/14 11:53*	*5*
2-Fluorophenol (Surr)	*50*		*24 - 110*	*06/12/14 10:10*	*06/16/14 11:53*	*5*
2,4,6-Tribromophenol (Surr)	*49*		*10 - 110*	*06/12/14 10:10*	*06/16/14 11:53*	*5*
Nitrobenzene-d5 (Surr)	*41*		*20 - 110*	*06/12/14 10:10*	*06/16/14 11:53*	*5*
Phenol-d5 (Surr)	*57*		*26 - 110*	*06/12/14 10:10*	*06/16/14 11:53*	*5*
Terphenyl-d14 (Surr)	*71*		*36 - 110*	*06/12/14 10:10*	*06/16/14 11:53*	*5*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		36	13	ug/Kg	☼	06/12/14 10:46	06/16/14 20:54	20
4,4'-DDE	**180**		36	8.3	ug/Kg	☼	06/12/14 10:46	06/16/14 20:54	20
4,4'-DDT	**140**		36	13	ug/Kg	☼	06/12/14 10:46	06/16/14 20:54	20
Aldrin	ND		36	26	ug/Kg	☼	06/12/14 10:46	06/16/14 20:54	20
alpha-BHC	ND		36	16	ug/Kg	☼	06/12/14 10:46	06/16/14 20:54	20
alpha-Chlordane	ND		36	20	ug/Kg	☼	06/12/14 10:46	06/16/14 20:54	20
beta-BHC	ND		36	24	ug/Kg	☼	06/12/14 10:46	06/16/14 20:54	20
delta-BHC	ND		36	26	ug/Kg	☼	06/12/14 10:46	06/16/14 20:54	20
Dieldrin	ND		36	10	ug/Kg	☼	06/12/14 10:46	06/16/14 20:54	20
Endosulfan I	ND		36	11	ug/Kg	☼	06/12/14 10:46	06/16/14 20:54	20
Endosulfan II	ND		36	18	ug/Kg	☼	06/12/14 10:46	06/16/14 20:54	20
Endosulfan sulfate	ND		36	19	ug/Kg	☼	06/12/14 10:46	06/16/14 20:54	20
Endrin	ND		36	11	ug/Kg	☼	06/12/14 10:46	06/16/14 20:54	20
Endrin aldehyde	ND		36	21	ug/Kg	☼	06/12/14 10:46	06/16/14 20:54	20
Endrin ketone	ND		36	13	ug/Kg	☼	06/12/14 10:46	06/16/14 20:54	20
gamma-BHC (Lindane)	ND		36	16	ug/Kg	☼	06/12/14 10:46	06/16/14 20:54	20
gamma-Chlordane	ND		36	9.0	ug/Kg	☼	06/12/14 10:46	06/16/14 20:54	20
Heptachlor	ND		36	24	ug/Kg	☼	06/12/14 10:46	06/16/14 20:54	20
Heptachlor epoxide	ND		36	17	ug/Kg	☼	06/12/14 10:46	06/16/14 20:54	20
Methoxychlor	ND		71	32	ug/Kg	☼	06/12/14 10:46	06/16/14 20:54	20
Toxaphene	ND		1400	410	ug/Kg	☼	06/12/14 10:46	06/16/14 20:54	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*363*	*X*	*41 - 157*	*06/12/14 10:46*	*06/16/14 20:54*	*20*
DCB Decachlorobiphenyl	*84*	*p*	*41 - 157*	*06/12/14 10:46*	*06/16/14 20:54*	
Tetrachloro-m-xylene	*94*		*40 - 149*	*06/12/14 10:46*	*06/16/14 20:54*	*20*

Client Sample ID: C-SS-DU-2D
Date Collected: 06/03/14 10:20
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156-3
Matrix: Solid
Percent Solids: 97.9

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*94*		*40 - 149*	*06/12/14 10:46*	*06/16/14 20:54*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		35	4.4	ug/Kg	☼	06/12/14 10:40	06/16/14 08:37	1
Aroclor-1221	ND		35	4.2	ug/Kg	☼	06/12/14 10:40	06/16/14 08:37	1
Aroclor-1232	ND		35	8.3	ug/Kg	☼	06/12/14 10:40	06/16/14 08:37	1
Aroclor-1242	ND		35	5.0	ug/Kg	☼	06/12/14 10:40	06/16/14 08:37	1
Aroclor-1248	ND		35	4.8	ug/Kg	☼	06/12/14 10:40	06/16/14 08:37	1
Aroclor-1254	ND		35	5.1	ug/Kg	☼	06/12/14 10:40	06/16/14 08:37	1
Aroclor-1260	5.2	J	35	4.3	ug/Kg	☼	06/12/14 10:40	06/16/14 08:37	1
Aroclor-1262	ND		35	6.3	ug/Kg	☼	06/12/14 10:40	06/16/14 08:37	1
Aroclor-1268	ND		35	8.1	ug/Kg	☼	06/12/14 10:40	06/16/14 08:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*51*		*29 - 151*	*06/12/14 10:40*	*06/16/14 08:37*	*1*
DCB Decachlorobiphenyl	*57*		*14 - 163*	*06/12/14 10:40*	*06/16/14 08:37*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7900000		13000	420	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
ıtimony	200	J B	510	23	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Arsenic	6100	B	1300	15	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Barium	68000	B	1300	140	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Beryllium	450	B	260	6.4	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Calcium	26000000	B	260000	8000	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Cadmium	590	B	260	5.8	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Cobalt	6600	B	260	4.9	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Chromium	21000	B	510	77	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Copper	22000	B	510	100	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Iron	14000000	B	26000	1900	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Magnesium	9200000	B	260000	15000	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Potassium	1100000	B	260000	2700	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Manganese	340000	B	1300	190	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Molybdenum	1400	J	2600	130	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Nickel	18000	B	510	100	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Lead	49000	B	260	33	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Selenium	1000	J B	1300	70	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Strontium	93000	B	2600	33	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Thallium	150	J	510	21	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Vanadium	22000		1300	26	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Zinc	72000	B	5100	1700	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Boron	6000		5100	700	ug/Kg	☼	06/17/14 08:18	06/18/14 16:54	5
Silver	63	J	260	2.8	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Sodium	88000	J B	260000	7000	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5
Titanium	120000		2600	120	ug/Kg	☼	06/17/14 08:18	06/17/14 21:21	5

ethod: 7471A - Mercury (CVAA)

nalyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.062	J	0.11	0.016	mg/Kg	☼	06/17/14 11:10	06/17/14 17:37	1

Client: Michigan Dept. of Environmental Quality
Project/Site: 5250 Conner Detroit

TestAmerica Job ID: 240-38156-1

Client Sample ID: C-SS-DU-2D
Date Collected: 06/03/14 10:20
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156
Matrix: So...
Percent Solids: 97.9

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.20	J B	0.54	0.11	mg/Kg	☼	06/13/14 09:06	06/13/14 11:46	1

Client Sample ID: C-SS-DU-2T
Date Collected: 06/03/14 10:20
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156-4
Matrix: Solid
Percent Solids: 98.0

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**600**		71	8.1	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Acenaphthylene	**160**		71	3.7	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Anthracene	**1900**		71	8.3	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Benzo[a]anthracene	**4300**		71	6.7	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Benzo[b]fluoranthene	**4700**		71	6.3	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Benzo[k]fluoranthene	**2000**		71	7.3	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Benzo[g,h,i]perylene	**2200**		71	3.7	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Benzo[a]pyrene	**3400**		71	6.8	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Butyl benzyl phthalate	ND		750	110	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Bis(2-chloroethoxy)methane	ND		1100	230	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Bis(2-chloroethyl)ether	ND		1100	21	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Bis(2-ethylhexyl) phthalate	ND		750	200	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
4-Bromophenyl phenyl ether	ND		530	140	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Carbazole	**1100**		530	290	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
4-Chloro-3-methylphenol	ND		1600	220	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
2-Chloronaphthalene	ND		530	4.8	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
2-Chlorophenol	ND		530	88	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
4-Chlorophenyl phenyl ether	ND		530	140	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Chrysene	**4100**		71	12	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
2-Methylnaphthalene	**230**		71	5.3	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
? & 4 Methylphenol	ND		4300	210	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
ibenz(a,h)anthracene	**640**		71	7.0	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Dibenzofuran	**520**	J	530	7.0	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
2,4-Dichlorophenol	ND		1600	210	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Diethyl phthalate	ND		750	170	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
2,4-Dimethylphenol	ND		1600	210	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Dimethyl phthalate	ND		750	180	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
4,6-Dinitro-2-methylphenol	ND		1600	98	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
2,4-Dinitrophenol	ND		3500	220	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
2,4-Dinitrotoluene	ND		2100	180	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Di-n-butyl phthalate	ND		750	160	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Di-n-octyl phthalate	ND		750	84	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Fluoranthene	**10000**		71	5.9	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Fluorene	**790**		71	5.7	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Hexachlorobenzene	ND		71	22	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Hexachlorobutadiene	ND		530	60	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Hexachlorocyclopentadiene	ND		3500	86	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Hexachloroethane	ND		530	96	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Indeno[1,2,3-cd]pyrene	**2000**		71	3.7	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Isophorone	ND		530	140	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
2-Methylphenol	ND		2100	120	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Naphthalene	**550**		71	8.8	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
2-Nitroaniline	ND		2100	97	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
3-Nitroaniline	ND		2100	170	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
4-Nitroaniline	ND		2100	280	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Nitrobenzene	ND		1100	23	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
?-Nitrophenol	ND		530	89	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Nitrophenol	ND		3500	180	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
N-Nitrosodimethylamine	ND		1100	170	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10

Client Sample ID: C-SS-DU-2T
Date Collected: 06/03/14 10:20
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156
Matrix: So...
Percent Solids: 98.0

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		530	220	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
N-Nitrosodi-n-propylamine	ND		530	67	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
2,2'-oxybis[1-chloropropane]	ND		1100	100	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Pentachlorophenol	ND		1600	97	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Phenanthrene	**7700**		71	7.8	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Phenol	**130**	J B	530	78	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Pyridine	ND		1100	37	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
1,2,4-Trichlorobenzene	ND		530	37	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
2,4,5-Trichlorophenol	ND		1600	270	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
2,4,6-Trichlorophenol	ND		1600	95	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Azobenzene	ND		3500	210	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
2,6-Dinitrotoluene	ND		2100	220	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10
Pyrene	**7100**		71	4.7	ug/Kg	☼	06/12/14 10:10	06/16/14 10:40	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*68*		*24 - 110*	*06/12/14 10:10*	*06/16/14 10:40*	*10*
2-Fluorophenol (Surr)	*72*		*24 - 110*	*06/12/14 10:10*	*06/16/14 10:40*	*10*
2,4,6-Tribromophenol (Surr)	*60*		*10 - 110*	*06/12/14 10:10*	*06/16/14 10:40*	*10*
Nitrobenzene-d5 (Surr)	*66*		*20 - 110*	*06/12/14 10:10*	*06/16/14 10:40*	*10*
Phenol-d5 (Surr)	*73*		*26 - 110*	*06/12/14 10:10*	*06/16/14 10:40*	*10*
Terphenyl-d14 (Surr)	*80*		*36 - 110*	*06/12/14 10:10*	*06/16/14 10:40*	*10*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		35	13	ug/Kg	☼	06/12/14 10:46	06/16/14 21:16	20
4,4'-DDE	**190**		35	8.1	ug/Kg	☼	06/12/14 10:46	06/16/14 21:16	20
4,4'-DDT	**150**		35	13	ug/Kg	☼	06/12/14 10:46	06/16/14 21:16	20
Aldrin	ND		35	25	ug/Kg	☼	06/12/14 10:46	06/16/14 21:16	20
alpha-BHC	ND		35	15	ug/Kg	☼	06/12/14 10:46	06/16/14 21:16	20
alpha-Chlordane	ND		35	19	ug/Kg	☼	06/12/14 10:46	06/16/14 21:16	20
beta-BHC	ND		35	23	ug/Kg	☼	06/12/14 10:46	06/16/14 21:16	20
delta-BHC	ND		35	25	ug/Kg	☼	06/12/14 10:46	06/16/14 21:16	20
Dieldrin	ND		35	9.7	ug/Kg	☼	06/12/14 10:46	06/16/14 21:16	20
Endosulfan I	ND		35	11	ug/Kg	☼	06/12/14 10:46	06/16/14 21:16	20
Endosulfan II	ND		35	17	ug/Kg	☼	06/12/14 10:46	06/16/14 21:16	20
Endosulfan sulfate	ND		35	18	ug/Kg	☼	06/12/14 10:46	06/16/14 21:16	20
Endrin	ND		35	10	ug/Kg	☼	06/12/14 10:46	06/16/14 21:16	20
Endrin aldehyde	ND		35	21	ug/Kg	☼	06/12/14 10:46	06/16/14 21:16	20
Endrin ketone	ND		35	13	ug/Kg	☼	06/12/14 10:46	06/16/14 21:16	20
gamma-BHC (Lindane)	ND		35	15	ug/Kg	☼	06/12/14 10:46	06/16/14 21:16	20
gamma-Chlordane	ND		35	8.7	ug/Kg	☼	06/12/14 10:46	06/16/14 21:16	20
Heptachlor	ND		35	23	ug/Kg	☼	06/12/14 10:46	06/16/14 21:16	20
Heptachlor epoxide	ND		35	17	ug/Kg	☼	06/12/14 10:46	06/16/14 21:16	20
Methoxychlor	ND		68	31	ug/Kg	☼	06/12/14 10:46	06/16/14 21:16	20
Toxaphene	ND		1400	390	ug/Kg	☼	06/12/14 10:46	06/16/14 21:16	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*752*	*X*	*41 - 157*	*06/12/14 10:46*	*06/16/14 21:16*	
DCB Decachlorobiphenyl	*52*	*p*	*41 - 157*	*06/12/14 10:46*	*06/16/14 21:16*	
Tetrachloro-m-xylene	*130*		*40 - 149*	*06/12/14 10:46*	*06/16/14 21:16*	*20*

'ient Sample ID: C-SS-DU-2T
Lab Sample ID: 240-38156-4
..te Collected: 06/03/14 10:20
Matrix: Solid
Date Received: 06/05/14 09:45
Percent Solids: 98.0

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*93*		*40 - 149*	*06/12/14 10:46*	*06/16/14 21:16*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		34	4.2	ug/Kg	☼	06/12/14 10:40	06/16/14 01:30	1
Aroclor-1221	ND		34	4.1	ug/Kg	☼	06/12/14 10:40	06/16/14 01:30	1
Aroclor-1232	ND		34	8.0	ug/Kg	☼	06/12/14 10:40	06/16/14 01:30	1
Aroclor-1242	ND		34	4.8	ug/Kg	☼	06/12/14 10:40	06/16/14 01:30	1
Aroclor-1248	ND		34	4.6	ug/Kg	☼	06/12/14 10:40	06/16/14 01:30	1
Aroclor-1254	ND		34	4.9	ug/Kg	☼	06/12/14 10:40	06/16/14 01:30	1
Aroclor-1260	12	J	34	4.2	ug/Kg	☼	06/12/14 10:40	06/16/14 01:30	1
Aroclor-1262	ND		34	6.1	ug/Kg	☼	06/12/14 10:40	06/16/14 01:30	1
Aroclor-1268	ND		34	7.8	ug/Kg	☼	06/12/14 10:40	06/16/14 01:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*49*		*29 - 151*	*06/12/14 10:40*	*06/16/14 01:30*	*1*
DCB Decachlorobiphenyl	*68*		*14 - 163*	*06/12/14 10:40*	*06/16/14 01:30*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8100000		13000	430	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
ıtimony	180	J B	520	23	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Arsenic	6200	B	1300	15	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Barium	70000	B	1300	140	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Beryllium	430	B	260	6.5	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Calcium	28000000	B	260000	8100	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Cadmium	620	B	260	5.8	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Cobalt	6000	B	260	4.9	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Chromium	20000	B	520	77	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Copper	40000	B	520	100	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Iron	14000000	B	26000	1900	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Magnesium	9300000	B	260000	15000	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Potassium	1200000	B	260000	2800	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Manganese	350000	B	1300	190	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Molybdenum	1400	J	2600	140	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Nickel	19000	B	520	100	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Lead	52000	B	260	34	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Selenium	1000	J B	1300	71	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Strontium	81000	B	2600	34	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Thallium	160	J	520	21	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Vanadium	22000		1300	26	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Zinc	85000	B	5200	1700	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Boron	6000		5200	710	ug/Kg	☼	06/17/14 08:18	06/18/14 17:01	5
Silver	71	J	260	2.8	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Sodium	89000	J B	260000	7100	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5
Titanium	110000		2600	120	ug/Kg	☼	06/17/14 08:18	06/17/14 21:24	5

'ethod: 7471A - Mercury (CVAA)

ıalyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.067	J	0.12	0.018	mg/Kg	☼	06/17/14 11:10	06/17/14 17:40	1

Client: Michigan Dept. of Environmental Quality
Project/Site: 5250 Conner Detroit

TestAmerica Job ID: 240-38156-1

Client Sample ID: C-SS-DU-2T
Date Collected: 06/03/14 10:20
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156
Matrix: Soil
Percent Solids: 98.0

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.14	J B	0.51	0.10	mg/Kg	☼	06/13/14 09:06	06/13/14 11:41	1

ent Sample ID: C-SS-DU-3
Lab Sample ID: 240-38156-5

Date Collected: 06/03/14 11:15
Matrix: Solid

Date Received: 06/05/14 09:45
Percent Solids: 98.3

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**850**		69	7.8	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Acenaphthylene	ND		69	3.6	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Anthracene	**1800**		69	8.0	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Benzo[a]anthracene	**3100**		69	6.5	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Benzo[b]fluoranthene	**3500**		69	6.1	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Benzo[k]fluoranthene	**1400**		69	7.0	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Benzo[g,h,i]perylene	**1500**		69	3.6	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Benzo[a]pyrene	**2500**		69	6.6	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Butyl benzyl phthalate	ND		720	100	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Bis(2-chloroethoxy)methane	ND		1000	230	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Bis(2-chloroethyl)ether	ND		1000	21	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Bis(2-ethylhexyl) phthalate	ND		720	200	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
4-Bromophenyl phenyl ether	ND		520	130	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Carbazole	**990**		520	280	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
4-Chloro-3-methylphenol	ND		1500	220	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
2-Chloronaphthalene	ND		520	4.6	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
2-Chlorophenol	ND		520	84	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
4-Chlorophenyl phenyl ether	ND		520	130	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Chrysene	**3100**		69	11	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
2-Methylnaphthalene	**260**		69	5.2	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
& 4 Methylphenol	ND		4100	210	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
ibenz(a,h)anthracene	**370**		69	6.8	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Dibenzofuran	**680**		520	6.8	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
2,4-Dichlorophenol	ND		1500	210	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Diethyl phthalate	ND		720	160	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
2,4-Dimethylphenol	ND		1500	210	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Dimethyl phthalate	ND		720	180	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
4,6-Dinitro-2-methylphenol	ND		1500	95	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
2,4-Dinitrophenol	ND		3400	220	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
2,4-Dinitrotoluene	ND		2100	180	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Di-n-butyl phthalate	ND		720	150	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Di-n-octyl phthalate	ND		720	81	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Fluoranthene	**7800**		69	5.7	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Fluorene	**1000**		69	5.5	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Hexachlorobenzene	ND		69	22	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Hexachlorobutadiene	ND		520	58	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Hexachlorocyclopentadiene	ND		3400	83	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Hexachloroethane	ND		520	93	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Indeno[1,2,3-cd]pyrene	**1400**		69	3.6	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Isophorone	ND		520	130	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
2-Methylphenol	ND		2100	110	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Naphthalene	**750**		69	8.4	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
2-Nitroaniline	ND		2100	94	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
3-Nitroaniline	ND		2100	160	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
4-Nitroaniline	ND		2100	270	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Nitrobenzene	ND		1000	23	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Nitrophenol	ND		520	86	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Nitrophenol	ND		3400	180	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
N-Nitrosodimethylamine	ND		1000	160	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10

Client Sample ID: C-SS-DU-3
Date Collected: 06/03/14 11:15
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156
Matrix: Soil
Percent Solids: 98.3

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		520	220	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
N-Nitrosodi-n-propylamine	ND		520	65	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
2,2'-oxybis[1-chloropropane]	ND		1000	98	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Pentachlorophenol	ND		1500	94	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Phenanthrene	**7000**		69	7.5	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Phenol	**100**	J B	520	75	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Pyridine	ND		1000	36	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
1,2,4-Trichlorobenzene	ND		520	36	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
2,4,5-Trichlorophenol	ND		1500	260	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
2,4,6-Trichlorophenol	ND		1500	92	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Azobenzene	ND		3400	210	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
2,6-Dinitrotoluene	ND		2100	220	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10
Pyrene	**5600**		69	4.5	ug/Kg	☼	06/12/14 10:10	06/16/14 09:02	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*43*		*24 - 110*	*06/12/14 10:10*	*06/16/14 09:02*	*10*
2-Fluorophenol (Surr)	*40*		*24 - 110*	*06/12/14 10:10*	*06/16/14 09:02*	*10*
2,4,6-Tribromophenol (Surr)	*17*		*10 - 110*	*06/12/14 10:10*	*06/16/14 09:02*	*10*
Nitrobenzene-d5 (Surr)	*36*		*20 - 110*	*06/12/14 10:10*	*06/16/14 09:02*	*10*
Phenol-d5 (Surr)	*41*		*26 - 110*	*06/12/14 10:10*	*06/16/14 09:02*	*10*
Terphenyl-d14 (Surr)	*51*		*36 - 110*	*06/12/14 10:10*	*06/16/14 09:02*	*10*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		33	12	ug/Kg	☼	06/12/14 10:46	06/16/14 21:39	20
4,4'-DDE	**250**		33	7.5	ug/Kg	☼	06/12/14 10:46	06/16/14 21:39	20
4,4'-DDT	**100**		33	12	ug/Kg	☼	06/12/14 10:46	06/16/14 21:39	20
Aldrin	ND		33	23	ug/Kg	☼	06/12/14 10:46	06/16/14 21:39	20
alpha-BHC	ND		33	14	ug/Kg	☼	06/12/14 10:46	06/16/14 21:39	20
alpha-Chlordane	ND		33	18	ug/Kg	☼	06/12/14 10:46	06/16/14 21:39	20
beta-BHC	ND		33	21	ug/Kg	☼	06/12/14 10:46	06/16/14 21:39	20
delta-BHC	ND		33	23	ug/Kg	☼	06/12/14 10:46	06/16/14 21:39	20
Dieldrin	ND		33	9.0	ug/Kg	☼	06/12/14 10:46	06/16/14 21:39	20
Endosulfan I	ND		33	10	ug/Kg	☼	06/12/14 10:46	06/16/14 21:39	20
Endosulfan II	ND		33	16	ug/Kg	☼	06/12/14 10:46	06/16/14 21:39	20
Endosulfan sulfate	ND		33	17	ug/Kg	☼	06/12/14 10:46	06/16/14 21:39	20
Endrin	ND		33	9.6	ug/Kg	☼	06/12/14 10:46	06/16/14 21:39	20
Endrin aldehyde	ND		33	19	ug/Kg	☼	06/12/14 10:46	06/16/14 21:39	20
Endrin ketone	ND		33	12	ug/Kg	☼	06/12/14 10:46	06/16/14 21:39	20
gamma-BHC (Lindane)	ND		33	14	ug/Kg	☼	06/12/14 10:46	06/16/14 21:39	20
gamma-Chlordane	ND		33	8.1	ug/Kg	☼	06/12/14 10:46	06/16/14 21:39	20
Heptachlor	ND		33	21	ug/Kg	☼	06/12/14 10:46	06/16/14 21:39	20
Heptachlor epoxide	ND		33	15	ug/Kg	☼	06/12/14 10:46	06/16/14 21:39	20
Methoxychlor	ND		63	29	ug/Kg	☼	06/12/14 10:46	06/16/14 21:39	20
Toxaphene	ND		1300	360	ug/Kg	☼	06/12/14 10:46	06/16/14 21:39	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*774*	*X*	*41 - 157*	*06/12/14 10:46*	*06/16/14 21:39*	
DCB Decachlorobiphenyl	*118*	*p*	*41 - 157*	*06/12/14 10:46*	*06/16/14 21:39*	
Tetrachloro-m-xylene	*85*		*40 - 149*	*06/12/14 10:46*	*06/16/14 21:39*	*20*

Client Sample ID: C-SS-DU-3
Date Collected: 06/03/14 11:15
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156-5
Matrix: Solid
Percent Solids: 98.3

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*110*		*40 - 149*	*06/12/14 10:46*	*06/16/14 21:39*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		32	3.9	ug/Kg	☼	06/12/14 10:40	06/16/14 01:46	1
Aroclor-1221	ND		32	3.8	ug/Kg	☼	06/12/14 10:40	06/16/14 01:46	1
Aroclor-1232	ND		32	7.5	ug/Kg	☼	06/12/14 10:40	06/16/14 01:46	1
Aroclor-1242	ND		32	4.5	ug/Kg	☼	06/12/14 10:40	06/16/14 01:46	1
Aroclor-1248	ND		32	4.3	ug/Kg	☼	06/12/14 10:40	06/16/14 01:46	1
Aroclor-1254	ND		32	4.6	ug/Kg	☼	06/12/14 10:40	06/16/14 01:46	1
Aroclor-1260	**8.2**	J	32	3.9	ug/Kg	☼	06/12/14 10:40	06/16/14 01:46	1
Aroclor-1262	ND		32	5.7	ug/Kg	☼	06/12/14 10:40	06/16/14 01:46	1
Aroclor-1268	ND		32	7.2	ug/Kg	☼	06/12/14 10:40	06/16/14 01:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*54*		*29 - 151*	*06/12/14 10:40*	*06/16/14 01:46*	*1*
DCB Decachlorobiphenyl	*114*		*14 - 163*	*06/12/14 10:40*	*06/16/14 01:46*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7200000		13000	430	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
ıtimony	230	J B	520	23	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Arsenic	6600	B	1300	16	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Barium	67000	B	1300	140	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Beryllium	390	B	260	6.5	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Calcium	34000000	B	260000	8100	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Cadmium	430	B	260	5.8	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Cobalt	6200	B	260	4.9	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Chromium	18000	B	520	78	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Copper	23000	B	520	100	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Iron	14000000	B	26000	1900	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Magnesium	11000000	B	260000	16000	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Potassium	1100000	B	260000	2800	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Manganese	320000	B	1300	190	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Molybdenum	1500	J	2600	140	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Nickel	18000	B	520	100	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Lead	36000	B	260	34	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Selenium	980	J B	1300	71	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Strontium	130000	B	2600	34	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Thallium	150	J	520	21	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Vanadium	20000		1300	26	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Zinc	71000	B	5200	1700	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Boron	6200		5200	710	ug/Kg	☼	06/17/14 08:18	06/18/14 15:21	5
Silver	62	J	260	2.8	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Sodium	95000	J B	260000	7100	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5
Titanium	120000		2600	120	ug/Kg	☼	06/17/14 08:18	06/17/14 20:31	5

ethod: 7471A - Mercury (CVAA)

ınalyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.057	J	0.12	0.019	mg/Kg	☼	06/17/14 11:10	06/17/14 17:11	1

Client: Michigan Dept. of Environmental Quality
Project/Site: 5250 Conner Detroit

TestAmerica Job ID: 240-38156-1

Client Sample ID: C-SS-DU-3
Date Collected: 06/03/14 11:15
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156
Matrix: Soil
Percent Solids: 98.3

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.48	J B	0.54	0.11	mg/Kg	☼	06/13/14 09:06	06/13/14 11:41	1

Client Sample ID: C-SS-DU-4
Date Collected: 06/02/14 14:45
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156-6
Matrix: Solid
Percent Solids: 98.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**1400**		130	15	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Acenaphthylene	**120**	J	130	7.0	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Anthracene	**2900**		130	16	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Benzo[a]anthracene	**5800**		130	13	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Benzo[b]fluoranthene	**6700**		130	12	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Benzo[k]fluoranthene	**2900**		130	14	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Benzo[g,h,i]perylene	**3200**		130	7.0	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Benzo[a]pyrene	**5100**		130	13	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Butyl benzyl phthalate	**300**	J	1400	200	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Bis(2-chloroethoxy)methane	ND		2000	440	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Bis(2-chloroethyl)ether	ND		2000	40	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Bis(2-ethylhexyl) phthalate	ND		1400	380	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
4-Bromophenyl phenyl ether	ND		990	260	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Carbazole	**1400**		990	540	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
4-Chloro-3-methylphenol	ND		3000	420	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
2-Chloronaphthalene	ND		990	8.9	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
2-Chlorophenol	ND		990	160	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
4-Chlorophenyl phenyl ether	ND		990	260	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Chrysene	**5800**		130	22	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
2-Methylnaphthalene	**380**		130	9.9	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
& 4 Methylphenol	ND		8000	400	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
ibenz(a,h)anthracene	**960**		130	13	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Dibenzofuran	**1000**		990	13	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
2,4-Dichlorophenol	ND		3000	400	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Diethyl phthalate	ND		1400	320	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
2,4-Dimethylphenol	ND		3000	400	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Dimethyl phthalate	ND		1400	340	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
4,6-Dinitro-2-methylphenol	ND		3000	180	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
2,4-Dinitrophenol	ND		6600	420	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
2,4-Dinitrotoluene	ND		4000	340	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Di-n-butyl phthalate	ND		1400	300	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Di-n-octyl phthalate	ND		1400	160	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Fluoranthene	**15000**		130	11	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Fluorene	**1400**		130	11	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Hexachlorobenzene	ND		130	42	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Hexachlorobutadiene	ND		990	110	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Hexachlorocyclopentadiene	ND		6600	160	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Hexachloroethane	ND		990	180	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Indeno[1,2,3-cd]pyrene	**2800**		130	7.0	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Isophorone	ND		990	260	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
2-Methylphenol	ND		4000	220	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Naphthalene	**1100**		130	16	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
2-Nitroaniline	ND		4000	180	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
3-Nitroaniline	ND		4000	320	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
4-Nitroaniline	ND		4000	520	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Nitrobenzene	ND		2000	44	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Nitrophenol	ND		990	170	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Nitrophenol	ND		6600	340	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
N-Nitrosodimethylamine	ND		2000	320	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20

Client Sample ID: C-SS-DU-4
Date Collected: 06/02/14 14:45
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156
Matrix: Soil
Percent Solids: 98.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		990	420	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
N-Nitrosodi-n-propylamine	ND		990	130	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
2,2'-oxybis[1-chloropropane]	ND		2000	190	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Pentachlorophenol	ND		3000	180	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Phenanthrene	**11000**		130	15	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Phenol	**260**	J B	990	150	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Pyridine	ND		2000	70	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
1,2,4-Trichlorobenzene	ND		990	70	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
2,4,5-Trichlorophenol	ND		3000	500	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
2,4,6-Trichlorophenol	ND		3000	180	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Azobenzene	ND		6600	400	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
2,6-Dinitrotoluene	ND		4000	420	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20
Pyrene	**11000**		130	8.7	ug/Kg	☼	06/12/14 10:10	06/16/14 08:38	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*24 - 110*	*06/12/14 10:10*	*06/16/14 08:38*	*20*
2-Fluorophenol (Surr)	*64*		*24 - 110*	*06/12/14 10:10*	*06/16/14 08:38*	*20*
2,4,6-Tribromophenol (Surr)	*53*		*10 - 110*	*06/12/14 10:10*	*06/16/14 08:38*	*20*
Nitrobenzene-d5 (Surr)	*54*		*20 - 110*	*06/12/14 10:10*	*06/16/14 08:38*	*20*
Phenol-d5 (Surr)	*70*		*26 - 110*	*06/12/14 10:10*	*06/16/14 08:38*	*20*
Terphenyl-d14 (Surr)	*106*		*36 - 110*	*06/12/14 10:10*	*06/16/14 08:38*	*20*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		34	12	ug/Kg	☼	06/12/14 10:46	06/16/14 22:48	20
4,4'-DDE	**72**		34	7.8	ug/Kg	☼	06/12/14 10:46	06/16/14 22:48	20
4,4'-DDT	**62**		34	13	ug/Kg	☼	06/12/14 10:46	06/16/14 22:48	20
Aldrin	ND		34	24	ug/Kg	☼	06/12/14 10:46	06/16/14 22:48	20
alpha-BHC	ND		34	15	ug/Kg	☼	06/12/14 10:46	06/16/14 22:48	20
alpha-Chlordane	ND		34	19	ug/Kg	☼	06/12/14 10:46	06/16/14 22:48	20
beta-BHC	ND		34	22	ug/Kg	☼	06/12/14 10:46	06/16/14 22:48	20
delta-BHC	ND		34	24	ug/Kg	☼	06/12/14 10:46	06/16/14 22:48	20
Dieldrin	ND		34	9.4	ug/Kg	☼	06/12/14 10:46	06/16/14 22:48	20
Endosulfan I	ND		34	10	ug/Kg	☼	06/12/14 10:46	06/16/14 22:48	20
Endosulfan II	ND		34	16	ug/Kg	☼	06/12/14 10:46	06/16/14 22:48	20
Endosulfan sulfate	ND		34	17	ug/Kg	☼	06/12/14 10:46	06/16/14 22:48	20
Endrin	ND		34	10	ug/Kg	☼	06/12/14 10:46	06/16/14 22:48	20
Endrin aldehyde	ND		34	20	ug/Kg	☼	06/12/14 10:46	06/16/14 22:48	20
Endrin ketone	ND		34	13	ug/Kg	☼	06/12/14 10:46	06/16/14 22:48	20
gamma-BHC (Lindane)	ND		34	15	ug/Kg	☼	06/12/14 10:46	06/16/14 22:48	20
gamma-Chlordane	ND		34	8.4	ug/Kg	☼	06/12/14 10:46	06/16/14 22:48	20
Heptachlor	ND		34	22	ug/Kg	☼	06/12/14 10:46	06/16/14 22:48	20
Heptachlor epoxide	ND		34	16	ug/Kg	☼	06/12/14 10:46	06/16/14 22:48	20
Methoxychlor	ND		66	30	ug/Kg	☼	06/12/14 10:46	06/16/14 22:48	20
Toxaphene	ND		1300	380	ug/Kg	☼	06/12/14 10:46	06/16/14 22:48	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*965*	*X*	*41 - 157*	*06/12/14 10:46*	*06/16/14 22:48*	
DCB Decachlorobiphenyl	*158*	*p X*	*41 - 157*	*06/12/14 10:46*	*06/16/14 22:48*	
Tetrachloro-m-xylene	*99*		*40 - 149*	*06/12/14 10:46*	*06/16/14 22:48*	*20*

Client Sample ID: C-SS-DU-4
Date Collected: 06/02/14 14:45
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156-6
Matrix: Solid
Percent Solids: 98.8

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*120*		*40 - 149*	*06/12/14 10:46*	*06/16/14 22:48*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		33	4.1	ug/Kg	☼	06/12/14 10:40	06/16/14 02:35	1
Aroclor-1221	ND		33	4.0	ug/Kg	☼	06/12/14 10:40	06/16/14 02:35	1
Aroclor-1232	ND		33	7.8	ug/Kg	☼	06/12/14 10:40	06/16/14 02:35	1
Aroclor-1242	ND		33	4.6	ug/Kg	☼	06/12/14 10:40	06/16/14 02:35	1
Aroclor-1248	ND		33	4.5	ug/Kg	☼	06/12/14 10:40	06/16/14 02:35	1
Aroclor-1254	30	J	33	4.7	ug/Kg	☼	06/12/14 10:40	06/16/14 02:35	1
Aroclor-1260	ND		33	4.0	ug/Kg	☼	06/12/14 10:40	06/16/14 02:35	1
Aroclor-1262	ND		33	5.9	ug/Kg	☼	06/12/14 10:40	06/16/14 02:35	1
Aroclor-1268	ND		33	7.5	ug/Kg	☼	06/12/14 10:40	06/16/14 02:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*58*		*29 - 151*	*06/12/14 10:40*	*06/16/14 02:35*	*1*
DCB Decachlorobiphenyl	*138*		*14 - 163*	*06/12/14 10:40*	*06/16/14 02:35*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5100000		13000	430	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Antimony	110	J B	520	23	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Arsenic	5100	B	1300	15	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Barium	47000	B	1300	140	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Beryllium	270	B	260	6.4	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Calcium	43000000	B	260000	8100	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Cadmium	250	J B	260	5.8	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Cobalt	4400	B	260	4.9	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Chromium	12000	B	520	77	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Copper	13000	B	520	100	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Iron	9800000	B	26000	1900	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Magnesium	9900000	B	260000	15000	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Potassium	800000	B	260000	2800	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Manganese	260000	B	1300	190	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Molybdenum	1100	J	2600	140	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Nickel	12000	B	520	100	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Lead	27000	B	260	33	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Selenium	730	J B	1300	71	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Strontium	58000	B	2600	33	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Thallium	120	J	520	21	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Vanadium	14000		1300	26	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Zinc	58000	B	5200	1700	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Boron	4600	J	5200	710	ug/Kg	☼	06/17/14 08:18	06/18/14 17:08	5
Silver	34	J	260	2.8	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Sodium	88000	J B	260000	7000	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5
Titanium	97000		2600	120	ug/Kg	☼	06/17/14 08:18	06/17/14 21:28	5

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.038	J	0.10	0.015	mg/Kg	☼	06/17/14 11:10	06/17/14 17:42	1

Client: Michigan Dept. of Environmental Quality
Project/Site: 5250 Conner Detroit

TestAmerica Job ID: 240-38156-1

Client Sample ID: C-SS-DU-4
Date Collected: 06/02/14 14:45
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156
Matrix: Soil
Percent Solids: 98.8

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.11	J B	0.48	0.096	mg/Kg	☼	06/13/14 09:06	06/13/14 11:46	1

Client Sample ID: C-SS-DU-5
Date Collected: 06/03/14 09:00
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156-7
Matrix: Solid
Percent Solids: 98.2

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**250**		61	7.0	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Acenaphthylene	**280**		61	3.2	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Anthracene	**720**		61	7.1	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Benzo[a]anthracene	**2800**		61	5.8	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Benzo[b]fluoranthene	**3300**		61	5.4	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Benzo[k]fluoranthene	**1200**		61	6.2	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Benzo[g,h,i]perylene	**1500**		61	3.2	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Benzo[a]pyrene	**2400**		61	5.9	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Butyl benzyl phthalate	ND		640	92	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Bis(2-chloroethoxy)methane	ND		920	200	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Bis(2-chloroethyl)ether	ND		920	18	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Bis(2-ethylhexyl) phthalate	ND		640	170	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
4-Bromophenyl phenyl ether	ND		460	120	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Carbazole	**290**	J	460	250	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
4-Chloro-3-methylphenol	ND		1400	190	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
2-Chloronaphthalene	ND		460	4.1	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
2-Chlorophenol	ND		460	75	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
4-Chlorophenyl phenyl ether	ND		460	120	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Chrysene	**2500**		61	10	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
2-Methylnaphthalene	**75**		61	4.6	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
& 4 Methylphenol	ND		3700	180	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
benz(a,h)anthracene	**430**		61	6.0	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Dibenzofuran	**150**	J	460	6.0	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
2,4-Dichlorophenol	ND		1400	180	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Diethyl phthalate	ND		640	150	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
2,4-Dimethylphenol	ND		1400	180	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Dimethyl phthalate	ND		640	160	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
4,6-Dinitro-2-methylphenol	ND		1400	84	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
2,4-Dinitrophenol	ND		3000	190	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
2,4-Dinitrotoluene	ND		1800	160	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Di-n-butyl phthalate	ND		640	140	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Di-n-octyl phthalate	ND		640	72	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Fluoranthene	**5800**		61	5.0	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Fluorene	**270**		61	4.9	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Hexachlorobenzene	ND		61	19	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Hexachlorobutadiene	ND		460	51	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Hexachlorocyclopentadiene	ND		3000	74	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Hexachloroethane	ND		460	82	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Indeno[1,2,3-cd]pyrene	**1400**		61	3.2	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Isophorone	ND		460	120	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
2-Methylphenol	ND		1800	100	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Naphthalene	**150**		61	7.5	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
2-Nitroaniline	ND		1800	83	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
3-Nitroaniline	ND		1800	150	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
4-Nitroaniline	ND		1800	240	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Nitrobenzene	ND		920	20	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
2-Nitrophenol	ND		460	76	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
4-Nitrophenol	ND		3000	160	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
N-Nitrosodimethylamine	ND		920	150	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10

Client Sample ID: C-SS-DU-5
Date Collected: 06/03/14 09:00
Date Received: 06/05/14 09:45

Lab Sample ID: 240-3815[illegible]
Matrix: So[illegible]
Percent Solids: 98.2

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		460	190	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
N-Nitrosodi-n-propylamine	ND		460	58	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
2,2'-oxybis[1-chloropropane]	ND		920	87	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Pentachlorophenol	ND		1400	83	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Phenanthrene	**2600**		61	6.7	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Phenol	**110**	J B	460	67	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Pyridine	ND		920	32	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
1,2,4-Trichlorobenzene	ND		460	32	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
2,4,5-Trichlorophenol	ND		1400	230	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
2,4,6-Trichlorophenol	ND		1400	82	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Azobenzene	ND		3000	180	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
2,6-Dinitrotoluene	ND		1800	190	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10
Pyrene	**4400**		61	4.0	ug/Kg	☼	06/12/14 10:10	06/16/14 11:04	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*24 - 110*	*06/12/14 10:10*	*06/16/14 11:04*	*10*
2-Fluorophenol (Surr)	*79*		*24 - 110*	*06/12/14 10:10*	*06/16/14 11:04*	*10*
2,4,6-Tribromophenol (Surr)	*44*		*10 - 110*	*06/12/14 10:10*	*06/16/14 11:04*	*10*
Nitrobenzene-d5 (Surr)	*68*		*20 - 110*	*06/12/14 10:10*	*06/16/14 11:04*	*10*
Phenol-d5 (Surr)	*78*		*26 - 110*	*06/12/14 10:10*	*06/16/14 11:04*	*10*
Terphenyl-d14 (Surr)	*86*		*36 - 110*	*06/12/14 10:10*	*06/16/14 11:04*	*10*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		32	12	ug/Kg	☼	06/12/14 10:46	06/16/14 23:09	20
4,4'-DDE	**220**		32	7.4	ug/Kg	☼	06/12/14 10:46	06/16/14 23:09	20
4,4'-DDT	**79**		32	12	ug/Kg	☼	06/12/14 10:46	06/16/14 23:09	20
Aldrin	ND		32	23	ug/Kg	☼	06/12/14 10:46	06/16/14 23:09	20
alpha-BHC	ND		32	14	ug/Kg	☼	06/12/14 10:46	06/16/14 23:09	20
alpha-Chlordane	ND		32	18	ug/Kg	☼	06/12/14 10:46	06/16/14 23:09	20
beta-BHC	ND		32	21	ug/Kg	☼	06/12/14 10:46	06/16/14 23:09	20
delta-BHC	ND		32	23	ug/Kg	☼	06/12/14 10:46	06/16/14 23:09	20
Dieldrin	ND		32	8.9	ug/Kg	☼	06/12/14 10:46	06/16/14 23:09	20
Endosulfan I	ND		32	9.8	ug/Kg	☼	06/12/14 10:46	06/16/14 23:09	20
Endosulfan II	ND		32	16	ug/Kg	☼	06/12/14 10:46	06/16/14 23:09	20
Endosulfan sulfate	ND		32	16	ug/Kg	☼	06/12/14 10:46	06/16/14 23:09	20
Endrin	ND		32	9.5	ug/Kg	☼	06/12/14 10:46	06/16/14 23:09	20
Endrin aldehyde	ND		32	19	ug/Kg	☼	06/12/14 10:46	06/16/14 23:09	20
Endrin ketone	ND		32	12	ug/Kg	☼	06/12/14 10:46	06/16/14 23:09	20
gamma-BHC (Lindane)	ND		32	14	ug/Kg	☼	06/12/14 10:46	06/16/14 23:09	20
gamma-Chlordane	ND		32	7.9	ug/Kg	☼	06/12/14 10:46	06/16/14 23:09	20
Heptachlor	ND		32	21	ug/Kg	☼	06/12/14 10:46	06/16/14 23:09	20
Heptachlor epoxide	ND		32	15	ug/Kg	☼	06/12/14 10:46	06/16/14 23:09	20
Methoxychlor	ND		62	28	ug/Kg	☼	06/12/14 10:46	06/16/14 23:09	20
Toxaphene	ND		1300	360	ug/Kg	☼	06/12/14 10:46	06/16/14 23:09	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*479*	*X*	*41 - 157*	*06/12/14 10:46*	*06/16/14 23:09*	*[illegible]*
DCB Decachlorobiphenyl	*48*	*p*	*41 - 157*	*06/12/14 10:46*	*06/16/14 23:09*	
Tetrachloro-m-xylene	*101*		*40 - 149*	*06/12/14 10:46*	*06/16/14 23:09*	*20*

Client Sample ID: C-SS-DU-5
Date Collected: 06/03/14 09:00
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156-7
Matrix: Solid
Percent Solids: 98.2

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*110*		*40 - 149*	*06/12/14 10:46*	*06/16/14 23:09*	*20*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		31	3.9	ug/Kg	☼	06/12/14 10:40	06/16/14 02:52	1
Aroclor-1221	ND		31	3.7	ug/Kg	☼	06/12/14 10:40	06/16/14 02:52	1
Aroclor-1232	ND		31	7.4	ug/Kg	☼	06/12/14 10:40	06/16/14 02:52	1
Aroclor-1242	ND		31	4.4	ug/Kg	☼	06/12/14 10:40	06/16/14 02:52	1
Aroclor-1248	**130**		31	4.3	ug/Kg	☼	06/12/14 10:40	06/16/14 02:52	1
Aroclor-1254	ND		31	4.5	ug/Kg	☼	06/12/14 10:40	06/16/14 02:52	1
Aroclor-1260	ND		31	3.8	ug/Kg	☼	06/12/14 10:40	06/16/14 02:52	1
Aroclor-1262	ND		31	5.6	ug/Kg	☼	06/12/14 10:40	06/16/14 02:52	1
Aroclor-1268	ND		31	7.1	ug/Kg	☼	06/12/14 10:40	06/16/14 02:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*50*		*29 - 151*	*06/12/14 10:40*	*06/16/14 02:52*	*1*
DCB Decachlorobiphenyl	*72*		*14 - 163*	*06/12/14 10:40*	*06/16/14 02:52*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7800000		13000	430	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
ıtimony	150	J B	520	23	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Arsenic	6300	B	1300	16	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Barium	67000	B	1300	140	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Beryllium	430	B	260	6.5	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Calcium	30000000	B	260000	8100	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Cadmium	430	B	260	5.8	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Cobalt	6400	B	260	4.9	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Chromium	20000	B	520	78	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Copper	21000	B	520	100	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Iron	15000000	B	26000	1900	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Magnesium	9700000	B	260000	16000	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Potassium	1200000	B	260000	2800	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Manganese	370000	B	1300	190	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Molybdenum	1300	J	2600	140	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Nickel	19000	B	520	100	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Lead	52000	B	260	34	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Selenium	1000	J B	1300	71	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Strontium	92000	B	2600	34	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Thallium	160	J	520	21	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Vanadium	22000		1300	26	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Zinc	72000	B	5200	1700	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Boron	5800		5200	710	ug/Kg	☼	06/17/14 08:18	06/18/14 17:15	5
Silver	82	J	260	2.9	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Sodium	80000	J B	260000	7100	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5
Titanium	120000		2600	120	ug/Kg	☼	06/17/14 08:18	06/17/14 21:32	5

ethod: 7471A - Mercury (CVAA)

ınalyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.050	J	0.11	0.016	mg/Kg	☼	06/17/14 11:10	06/17/14 17:44	1

Client: Michigan Dept. of Environmental Quality
Project/Site: 5250 Conner Detroit

TestAmerica Job ID: 240-38156-1

Client Sample ID: C-SS-DU-5
Date Collected: 06/03/14 09:00
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156
Matrix: Soil
Percent Solids: 98.2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.14	J B	0.54	0.11	mg/Kg	☼	06/13/14 09:06	06/13/14 11:46	1

Surrogate Summary

Client: Michigan Dept. of Environmental Quality
Project/Site: 5250 Conner Detroit

TestAmerica Job ID: 240-38156-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(24-110)	(24-110)	(10-110)	(20-110)	(26-110)	(36-110)
240-38156-1	C-SS-DU-1	69	73	46	61	69	82
240-38156-2	C-SS-DU-2	67	69	56	59	69	82
240-38156-3	C-SS-DU-2D	58	50	49	41	57	71
240-38156-4	C-SS-DU-2T	68	72	60	66	73	80
240-38156-5	C-SS-DU-3	43	40	17	36	41	51
240-38156-5 MS	C-SS-DU-3	66	54	65	52	62	81
240-38156-5 MSD	C-SS-DU-3	69	68	50	57	73	86
240-38156-6	C-SS-DU-4	74	64	53	54	70	106
240-38156-7	C-SS-DU-5	74	79	44	68	78	86
LCS 240-134405/22-A	Lab Control Sample	65	61	49	60	65	84
MB 240-134405/21-A	Method Blank	61	64	34	65	66	86

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCB1	DCB2	TCX1	TCX2
Lab Sample ID	Client Sample ID	(41-157)	(41-157)	(40-149)	(40-149)
240-38156-1	C-SS-DU-1	547 X	102 p	128	102
240-38156-2	C-SS-DU-2	545 X	66 p	97	99
240-38156-3	C-SS-DU-2D	363 X	84 p	94	94
240-38156-4	C-SS-DU-2T	752 X	52 p	130	93
240-38156-5	C-SS-DU-3	774 X	118 p	85	110
240-38156-5 MS	C-SS-DU-3	732 X	71 p	120	101
240-38156-5 MSD	C-SS-DU-3	788 X	78 p	100	106
240-38156-6	C-SS-DU-4	965 X	158 p X	99	120
240-38156-7	C-SS-DU-5	479 X	48 p	101	110
LCS 240-134411/22-A	Lab Control Sample	91	90	116 p	305 X
MB 240-134411/21-A	Method Blank	93	97	113 p	246 X

Surrogate Legend

DCB = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCB1
Lab Sample ID	Client Sample ID	(29-151)	(14-163)
240-38156-1	C-SS-DU-1	54	171 X
240-38156-2	C-SS-DU-2	53	78

Surrogate Summary

Client: Michigan Dept. of Environmental Quality
Project/Site: 5250 Conner Detroit

TestAmerica Job ID: 240-38156-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX1 (29-151)	DCB1 (14-163)
240-38156-3	C-SS-DU-2D	51	57
240-38156-4	C-SS-DU-2T	49	68
240-38156-5	C-SS-DU-3	54	114
240-38156-5 MS	C-SS-DU-3	51	133
240-38156-5 MSD	C-SS-DU-3	64	119
240-38156-6	C-SS-DU-4	58	138
240-38156-7	C-SS-DU-5	50	72
LCS 240-134409/22-A	Lab Control Sample	85	70
MB 240-134409/21-A	Method Blank	86	67

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

thod: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-134405/21-A
Matrix: Solid
Analysis Batch: 134745

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134405

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		6.7	0.76	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Acenaphthylene	ND		6.7	0.35	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Anthracene	ND		6.7	0.78	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Benzo[a]anthracene	ND		6.7	0.63	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Benzo[b]fluoranthene	ND		6.7	0.59	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Benzo[k]fluoranthene	ND		6.7	0.68	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Benzo[g,h,i]perylene	ND		6.7	0.35	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Benzo[a]pyrene	ND		6.7	0.64	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Butyl benzyl phthalate	ND		70	10	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Bis(2-chloroethoxy)methane	ND		100	22	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Bis(2-chloroethyl)ether	ND		100	2.0	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Bis(2-ethylhexyl) phthalate	ND		70	19	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
4-Bromophenyl phenyl ether	ND		50	13	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Carbazole	ND		50	27	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
4-Chloro-3-methylphenol	ND		150	21	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
2-Chloronaphthalene	ND		50	0.45	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
2-Chlorophenol	ND		50	8.2	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
4-Chlorophenyl phenyl ether	ND		50	13	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Chrysene	ND		6.7	1.1	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Methylnaphthalene	ND		6.7	0.50	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
& 4 Methylphenol	ND		400	20	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Dibenz(a,h)anthracene	ND		6.7	0.66	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Dibenzofuran	ND		50	0.66	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
2,4-Dichlorophenol	ND		150	20	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Diethyl phthalate	ND		70	16	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
2,4-Dimethylphenol	ND		150	20	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Dimethyl phthalate	ND		70	17	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
4,6-Dinitro-2-methylphenol	ND		150	9.2	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
2,4-Dinitrophenol	ND		330	21	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
2,4-Dinitrotoluene	ND		200	17	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Di-n-butyl phthalate	ND		70	15	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Di-n-octyl phthalate	ND		70	7.9	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Fluoranthene	ND		6.7	0.55	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Fluorene	ND		6.7	0.53	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Hexachlorobenzene	ND		6.7	2.1	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Hexachlorobutadiene	ND		50	5.6	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Hexachlorocyclopentadiene	ND		330	8.1	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Hexachloroethane	ND		50	9.0	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Indeno[1,2,3-cd]pyrene	ND		6.7	0.35	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Isophorone	ND		50	13	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
2-Methylphenol	ND		200	11	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Naphthalene	ND		6.7	0.82	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
2-Nitroaniline	ND		200	9.1	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
3-Nitroaniline	ND		200	16	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
4-Nitroaniline	ND		200	26	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
trobenzene	ND		100	2.2	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
-Nitrophenol	ND		50	8.3	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
4-Nitrophenol	ND		330	17	ug/Kg		06/12/14 10:10	06/16/14 07:48	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-134405/21-A
Matrix: Solid
Analysis Batch: 134745

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134405

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodimethylamine	ND		100	16	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
N-Nitrosodiphenylamine	ND		50	21	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
N-Nitrosodi-n-propylamine	ND		50	6.3	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
2,2'-oxybis[1-chloropropane]	ND		100	9.5	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Pentachlorophenol	ND		150	9.1	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Phenanthrene	ND		6.7	0.73	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Phenol	8.60	J	50	7.3	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Pyridine	ND		100	3.5	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
1,2,4-Trichlorobenzene	ND		50	3.5	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
2,4,5-Trichlorophenol	ND		150	25	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
2,4,6-Trichlorophenol	ND		150	8.9	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Azobenzene	ND		330	20	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
2,6-Dinitrotoluene	ND		200	21	ug/Kg		06/12/14 10:10	06/16/14 07:48	1
Pyrene	ND		6.7	0.44	ug/Kg		06/12/14 10:10	06/16/14 07:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*61*		*24 - 110*	*06/12/14 10:10*	*06/16/14 07:48*	*1*
2-Fluorophenol (Surr)	*64*		*24 - 110*	*06/12/14 10:10*	*06/16/14 07:48*	*1*
2,4,6-Tribromophenol (Surr)	*34*		*10 - 110*	*06/12/14 10:10*	*06/16/14 07:48*	*1*
Nitrobenzene-d5 (Surr)	*65*		*20 - 110*	*06/12/14 10:10*	*06/16/14 07:48*	*1*
Phenol-d5 (Surr)	*66*		*26 - 110*	*06/12/14 10:10*	*06/16/14 07:48*	*1*
Terphenyl-d14 (Surr)	*86*		*36 - 110*	*06/12/14 10:10*	*06/16/14 07:48*	*1*

Lab Sample ID: LCS 240-134405/22-A
Matrix: Solid
Analysis Batch: 134745

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134405

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	667	452		ug/Kg		68	38 - 110
Acenaphthylene	667	423		ug/Kg		63	40 - 110
Acetophenone	667	411		ug/Kg		62	40 - 110
Anthracene	667	472		ug/Kg		71	48 - 110
Benzo[a]anthracene	667	476		ug/Kg		71	50 - 110
Benzo[b]fluoranthene	667	508		ug/Kg		76	43 - 110
Benzo[k]fluoranthene	667	462		ug/Kg		69	38 - 105
Benzo[g,h,i]perylene	667	523		ug/Kg		78	51 - 110
Benzo[a]pyrene	667	485		ug/Kg		73	44 - 110
Butyl benzyl phthalate	667	477		ug/Kg		72	51 - 110
Bis(2-chloroethoxy)methane	667	458		ug/Kg		69	32 - 110
Bis(2-chloroethyl)ether	667	405		ug/Kg		61	34 - 110
Bis(2-ethylhexyl) phthalate	667	490		ug/Kg		73	50 - 110
4-Bromophenyl phenyl ether	667	448		ug/Kg		67	39 - 110
Carbazole	667	502		ug/Kg		75	50 - 110
4-Chloro-3-methylphenol	667	493		ug/Kg		74	48 - 110
2-Chloronaphthalene	667	446		ug/Kg		67	32 - 110
2-Chlorophenol	667	412		ug/Kg		62	37 - 110
4-Chlorophenyl phenyl ether	667	465		ug/Kg		70	40 - 110
Chrysene	667	478		ug/Kg		72	50 - 110

thod: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-134405/22-A
Matrix: Solid
Analysis Batch: 134745

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134405

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	667	437		ug/Kg		66	36 - 110
3 & 4 Methylphenol	667	464		ug/Kg		70	40 - 110
Dibenz(a,h)anthracene	667	526		ug/Kg		79	51 - 110
Dibenzofuran	667	462		ug/Kg		69	43 - 110
2,4-Dichlorophenol	667	469		ug/Kg		70	39 - 110
Diethyl phthalate	667	482		ug/Kg		72	52 - 110
2,4-Dimethylphenol	667	402		ug/Kg		60	29 - 110
Dimethyl phthalate	667	481		ug/Kg		72	50 - 110
4,6-Dinitro-2-methylphenol	1330	726		ug/Kg		54	10 - 110
2,4-Dinitrophenol	1330	463		ug/Kg		35	10 - 110
2,4-Dinitrotoluene	667	523		ug/Kg		78	48 - 110
Di-n-butyl phthalate	667	495		ug/Kg		74	51 - 110
Di-n-octyl phthalate	667	484		ug/Kg		73	48 - 110
Fluoranthene	667	502		ug/Kg		75	51 - 110
Fluorene	667	458		ug/Kg		69	46 - 110
Hexachlorobenzene	667	450		ug/Kg		68	43 - 110
Hexachlorobutadiene	667	422		ug/Kg		63	29 - 110
Hexachlorocyclopentadiene	667	236	J	ug/Kg		35	12 - 110
Hexachloroethane	667	376		ug/Kg		56	30 - 110
deno[1,2,3-cd]pyrene	667	517		ug/Kg		78	50 - 110
ophorone	667	438		ug/Kg		66	36 - 110
2-Methylphenol	667	417		ug/Kg		63	41 - 110
Naphthalene	667	409		ug/Kg		61	36 - 110
2-Nitroaniline	667	501		ug/Kg		75	45 - 110
3-Nitroaniline	667	488		ug/Kg		73	44 - 110
4-Nitroaniline	667	493		ug/Kg		74	48 - 110
Nitrobenzene	667	432		ug/Kg		65	32 - 110
2-Nitrophenol	667	435		ug/Kg		65	34 - 110
4-Nitrophenol	1330	1000		ug/Kg		75	28 - 110
N-Nitrosodimethylamine	667	427		ug/Kg		64	31 - 110
N-Nitrosodiphenylamine	1330	922		ug/Kg		69	46 - 110
N-Nitrosodi-n-propylamine	667	419		ug/Kg		63	38 - 110
2,2'-oxybis[1-chloropropane]	667	389		ug/Kg		58	29 - 110
Pentachlorophenol	1330	734		ug/Kg		55	10 - 110
Phenanthrene	667	466		ug/Kg		70	49 - 110
Phenol	667	454		ug/Kg		68	38 - 110
Pyridine	667	319		ug/Kg		48	22 - 110
1,2,4-Trichlorobenzene	667	408		ug/Kg		61	28 - 110
2,4,5-Trichlorophenol	667	427		ug/Kg		64	25 - 110
2,4,6-Trichlorophenol	667	359		ug/Kg		54	12 - 110
2,6-Dinitrotoluene	667	487		ug/Kg		73	45 - 110
Pyrene	667	499		ug/Kg		75	49 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*65*		*24 - 110*
Fluorophenol (Surr)	*61*		*24 - 110*
2,4,6-Tribromophenol (Surr)	*49*		*10 - 110*
Nitrobenzene-d5 (Surr)	*60*		*20 - 110*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-134405/22-A
Matrix: Solid
Analysis Batch: 134745

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134405

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Phenol-d5 (Surr)	65		26 - 110
Terphenyl-d14 (Surr)	84		36 - 110

Lab Sample ID: 240-38156-5 MS
Matrix: Solid
Analysis Batch: 134745

Client Sample ID: C-SS-DU-3
Prep Type: Total/NA
Prep Batch: 134405

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	850		667	1620	F1	ug/Kg	☼	115	22 - 110
Acenaphthylene	ND		667	477		ug/Kg	☼	71	24 - 110
Acetophenone	ND		667	364	J	ug/Kg	☼	55	31 - 110
Anthracene	1800		667	3090	F1	ug/Kg	☼	197	20 - 110
Benzo[a]anthracene	3100		667	4880	4	ug/Kg	☼	262	10 - 122
Benzo[b]fluoranthene	3500		667	5610	4	ug/Kg	☼	323	12 - 118
Benzo[k]fluoranthene	1400		667	2670	F1	ug/Kg	☼	189	10 - 121
Benzo[g,h,i]perylene	1500		667	3040	F1	ug/Kg	☼	225	10 - 117
Benzo[a]pyrene	2500		667	4190	F1	ug/Kg	☼	256	10 - 110
Butyl benzyl phthalate	ND		667	458	J	ug/Kg	☼	69	44 - 110
Bis(2-chloroethoxy)methane	ND		667	402	J	ug/Kg	☼	60	26 - 110
Bis(2-chloroethyl)ether	ND		667	303	J	ug/Kg	☼	45	21 - 110
Bis(2-ethylhexyl) phthalate	ND		667	543	J	ug/Kg	☼	81	40 - 110
4-Bromophenyl phenyl ether	ND		667	415	J	ug/Kg	☼	62	33 - 110
Carbazole	990		667	1880	F1	ug/Kg	☼	133	34 - 110
4-Chloro-3-methylphenol	ND		667	444	J	ug/Kg	☼	66	25 - 110
2-Chloronaphthalene	ND		667	425	J	ug/Kg	☼	64	28 - 110
2-Chlorophenol	ND		667	377	J	ug/Kg	☼	57	10 - 110
4-Chlorophenyl phenyl ether	ND		667	501		ug/Kg	☼	75	32 - 110
Chrysene	3100		667	5220	4	ug/Kg	☼	320	10 - 125
2-Methylnaphthalene	260		667	774		ug/Kg	☼	78	10 - 133
3 & 4 Methylphenol	ND		667	475	J	ug/Kg	☼	71	25 - 110
Dibenz(a,h)anthracene	370		667	1150	F1	ug/Kg	☼	116	14 - 113
Dibenzofuran	680		667	1390		ug/Kg	☼	107	29 - 110
2,4-Dichlorophenol	ND		667	456	J	ug/Kg	☼	68	10 - 110
Diethyl phthalate	ND		667	482	J	ug/Kg	☼	72	42 - 110
2,4-Dimethylphenol	ND		667	478	J	ug/Kg	☼	72	10 - 110
Dimethyl phthalate	ND		667	488	J	ug/Kg	☼	73	41 - 110
4,6-Dinitro-2-methylphenol	ND		1330	812	J	ug/Kg	☼	61	10 - 110
2,4-Dinitrophenol	ND		1330	ND	F1	ug/Kg	☼	0	10 - 110
2,4-Dinitrotoluene	ND		667	436	J	ug/Kg	☼	65	32 - 110
Di-n-butyl phthalate	ND		667	494	J	ug/Kg	☼	74	43 - 110
Di-n-octyl phthalate	ND		667	418	J	ug/Kg	☼	63	24 - 119
Fluoranthene	7800		667	12300	4	ug/Kg	☼	678	10 - 110
Fluorene	1000		667	1900	F1	ug/Kg	☼	133	23 - 110
Hexachlorobenzene	ND		667	438		ug/Kg	☼	66	34 - 110
Hexachlorobutadiene	ND		667	370	J	ug/Kg	☼	55	25 - 110
Hexachlorocyclopentadiene	ND		667	ND	F1	ug/Kg	☼	0	10 - 110
Hexachloroethane	ND		667	258	J	ug/Kg	☼	39	12 - 110
Indeno[1,2,3-cd]pyrene	1400		667	2840	F1	ug/Kg	☼	219	10 - 114

thod: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-38156-5 MS
Matrix: Solid
Analysis Batch: 134745

Client Sample ID: C-SS-DU-3
Prep Type: Total/NA
Prep Batch: 134405

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Isophorone	ND		667	390	J	ug/Kg	☼	58	29 - 110
2-Methylphenol	ND		667	437	J	ug/Kg	☼	65	24 - 110
Naphthalene	750		667	1220		ug/Kg	☼	70	10 - 111
2-Nitroaniline	ND		667	432	J	ug/Kg	☼	65	39 - 110
3-Nitroaniline	ND		667	350	J	ug/Kg	☼	52	10 - 110
4-Nitroaniline	ND		667	475	J	ug/Kg	☼	71	10 - 110
Nitrobenzene	ND		667	360	J	ug/Kg	☼	54	23 - 110
2-Nitrophenol	ND		667	365	J	ug/Kg	☼	55	10 - 110
4-Nitrophenol	ND		1330	826	J	ug/Kg	☼	62	10 - 113
N-Nitrosodimethylamine	ND		667	235	J	ug/Kg	☼	35	20 - 110
N-Nitrosodiphenylamine	ND		1330	882		ug/Kg	☼	66	22 - 110
N-Nitrosodi-n-propylamine	ND		667	363	J	ug/Kg	☼	54	26 - 110
2,2'-oxybis[1-chloropropane]	ND		667	316	J	ug/Kg	☼	47	11 - 110
Pentachlorophenol	ND		1330	212	J	ug/Kg	☼	16	10 - 110
Phenanthrene	7000		667	10700	4	ug/Kg	☼	554	10 - 166
Phenol	100	J B	667	533		ug/Kg	☼	65	17 - 110
Pyridine	ND		667	157	J	ug/Kg	☼	23	10 - 110
1,2,4-Trichlorobenzene	ND		667	368	J	ug/Kg	☼	55	27 - 110
2,4,5-Trichlorophenol	ND		667	450	J	ug/Kg	☼	67	10 - 117
2,4,6-Trichlorophenol	ND		667	429	J	ug/Kg	☼	64	10 - 110
2,6-Dinitrotoluene	ND		667	408	J	ug/Kg	☼	61	35 - 110
Pyrene	5600		667	9020	4	ug/Kg	☼	509	10 - 147

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*66*		*24 - 110*
2-Fluorophenol (Surr)	*54*		*24 - 110*
2,4,6-Tribromophenol (Surr)	*65*		*10 - 110*
Nitrobenzene-d5 (Surr)	*52*		*20 - 110*
Phenol-d5 (Surr)	*62*		*26 - 110*
Terphenyl-d14 (Surr)	*81*		*36 - 110*

Lab Sample ID: 240-38156-5 MSD
Matrix: Solid
Analysis Batch: 134745

Client Sample ID: C-SS-DU-3
Prep Type: Total/NA
Prep Batch: 134405

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	850		688	1610	F1	ug/Kg	☼	111	22 - 110	0	99
Acenaphthylene	ND		688	511		ug/Kg	☼	74	24 - 110	7	99
Acetophenone	ND		688	482	J	ug/Kg	☼	70	31 - 110	28	43
Anthracene	1800		688	3150	F1	ug/Kg	☼	200	20 - 110	2	99
Benzo[a]anthracene	3100		688	5360	4	ug/Kg	☼	323	10 - 122	9	99
Benzo[b]fluoranthene	3500		688	5730	4	ug/Kg	☼	330	12 - 118	2	99
Benzo[k]fluoranthene	1400		688	2780	F1	ug/Kg	☼	199	10 - 121	4	99
Benzo[g,h,i]perylene	1500		688	3170	F1	ug/Kg	☼	236	10 - 117	4	99
Benzo[a]pyrene	2500		688	4270	F1	ug/Kg	☼	260	10 - 110	2	99
Butyl benzyl phthalate	ND		688	546	J	ug/Kg	☼	79	44 - 110	18	30
Bis(2-chloroethoxy)methane	ND		688	459	J	ug/Kg	☼	67	26 - 110	13	37
Bis(2-chloroethyl)ether	ND		688	467	J	ug/Kg	☼	68	21 - 110	43	55

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-38156-5 MSD
Matrix: Solid
Analysis Batch: 134745

Client Sample ID: C-SS-DU-3
Prep Type: Total/NA
Prep Batch: 134405

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate	ND		688	635	J	ug/Kg	☼	92	40 - 110	16	30
4-Bromophenyl phenyl ether	ND		688	480	J	ug/Kg	☼	70	33 - 110	15	30
Carbazole	990		688	1950	F1	ug/Kg	☼	140	34 - 110	4	30
4-Chloro-3-methylphenol	ND		688	523	J	ug/Kg	☼	76	25 - 110	16	54
2-Chloronaphthalene	ND		688	488	J	ug/Kg	☼	71	28 - 110	14	30
2-Chlorophenol	ND		688	500	J	ug/Kg	☼	73	10 - 110	28	47
4-Chlorophenyl phenyl ether	ND		688	498	J	ug/Kg	☼	72	32 - 110	1	30
Chrysene	3100		688	5220	4	ug/Kg	☼	310	10 - 125	0	99
2-Methylnaphthalene	260		688	787		ug/Kg	☼	77	10 - 133	2	42
3 & 4 Methylphenol	ND		688	537	J	ug/Kg	☼	78	25 - 110	12	50
Dibenz(a,h)anthracene	370		688	1170	F1	ug/Kg	☼	115	14 - 113	2	99
Dibenzofuran	680		688	1380		ug/Kg	☼	101	29 - 110	1	30
2,4-Dichlorophenol	ND		688	504	J	ug/Kg	☼	73	10 - 110	10	34
Diethyl phthalate	ND		688	530	J	ug/Kg	☼	77	42 - 110	9	30
2,4-Dimethylphenol	ND		688	486	J	ug/Kg	☼	71	10 - 110	2	31
Dimethyl phthalate	ND		688	529	J	ug/Kg	☼	77	41 - 110	8	30
4,6-Dinitro-2-methylphenol	ND		1380	914	J	ug/Kg	☼	66	10 - 110	12	55
2,4-Dinitrophenol	ND		1380	338	J	ug/Kg	☼	25	10 - 110	NC	99
2,4-Dinitrotoluene	ND		688	465	J	ug/Kg	☼	68	32 - 110	6	30
Di-n-butyl phthalate	ND		688	562	J	ug/Kg	☼	82	43 - 110	13	
Di-n-octyl phthalate	ND		688	476	J	ug/Kg	☼	69	24 - 119	13	
Fluoranthene	7800		688	12600	4	ug/Kg	☼	694	10 - 110	2	99
Fluorene	1000		688	1860	F1	ug/Kg	☼	124	23 - 110	2	99
Hexachlorobenzene	ND		688	473		ug/Kg	☼	69	34 - 110	8	30
Hexachlorobutadiene	ND		688	473	J	ug/Kg	☼	69	25 - 110	25	34
Hexachlorocyclopentadiene	ND		688	ND	F1	ug/Kg	☼	0	10 - 110	NC	79
Hexachloroethane	ND		688	387	J	ug/Kg	☼	56	12 - 110	40	50
Indeno[1,2,3-cd]pyrene	1400		688	2850	F1	ug/Kg	☼	214	10 - 114	1	99
Isophorone	ND		688	452	J	ug/Kg	☼	66	29 - 110	15	38
2-Methylphenol	ND		688	505	J	ug/Kg	☼	73	24 - 110	15	51
Naphthalene	750		688	1300		ug/Kg	☼	79	10 - 111	6	99
2-Nitroaniline	ND		688	521	J	ug/Kg	☼	76	39 - 110	18	31
3-Nitroaniline	ND		688	430	J	ug/Kg	☼	62	10 - 110	20	30
4-Nitroaniline	ND		688	570	J	ug/Kg	☼	83	10 - 110	18	48
Nitrobenzene	ND		688	432	J	ug/Kg	☼	63	23 - 110	18	41
2-Nitrophenol	ND		688	413	J	ug/Kg	☼	60	10 - 110	12	49
4-Nitrophenol	ND		1380	904	J	ug/Kg	☼	66	10 - 113	9	49
N-Nitrosodimethylamine	ND		688	403	J F2	ug/Kg	☼	59	20 - 110	53	46
N-Nitrosodiphenylamine	ND		1380	988		ug/Kg	☼	72	22 - 110	11	30
N-Nitrosodi-n-propylamine	ND		688	480	J	ug/Kg	☼	70	26 - 110	28	42
2,2'-oxybis[1-chloropropane]	ND		688	455	J	ug/Kg	☼	66	11 - 110	36	42
Pentachlorophenol	ND		1380	149	J	ug/Kg	☼	11	10 - 110	34	50
Phenanthrene	7000		688	10400	4	ug/Kg	☼	497	10 - 166	3	99
Phenol	100	J B	688	638		ug/Kg	☼	78	17 - 110	18	53
Pyridine	ND		688	290	J F2	ug/Kg	☼	42	10 - 110	60	52
1,2,4-Trichlorobenzene	ND		688	445	J	ug/Kg	☼	65	27 - 110	19	
2,4,5-Trichlorophenol	ND		688	471	J	ug/Kg	☼	68	10 - 117	5	
2,4,6-Trichlorophenol	ND		688	400	J	ug/Kg	☼	58	10 - 110	7	38

thod: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-38156-5 MSD
Matrix: Solid
Analysis Batch: 134745

Client Sample ID: C-SS-DU-3
Prep Type: Total/NA
Prep Batch: 134405

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,6-Dinitrotoluene	ND		688	464	J	ug/Kg	☼	67	35 - 110	13	30
Pyrene	5600		688	9210	4	ug/Kg	☼	521	10 - 147	2	99

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*69*		*24 - 110*
2-Fluorophenol (Surr)	*68*		*24 - 110*
2,4,6-Tribromophenol (Surr)	*50*		*10 - 110*
Nitrobenzene-d5 (Surr)	*57*		*20 - 110*
Phenol-d5 (Surr)	*73*		*26 - 110*
Terphenyl-d14 (Surr)	*86*		*36 - 110*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 240-134411/21-A
Matrix: Solid
Analysis Batch: 134757

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134411

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.7	0.62	ug/Kg		06/12/14 10:46	06/17/14 04:39	1
4,4'-DDE	ND		1.7	0.39	ug/Kg		06/12/14 10:46	06/17/14 04:39	1
4,4'-DDT	ND		1.7	0.63	ug/Kg		06/12/14 10:46	06/17/14 04:39	1
Aldrin	ND		1.7	1.2	ug/Kg		06/12/14 10:46	06/17/14 04:39	1
alpha-BHC	ND		1.7	0.73	ug/Kg		06/12/14 10:46	06/17/14 04:39	1
alpha-Chlordane	ND		1.7	0.94	ug/Kg		06/12/14 10:46	06/17/14 04:39	1
beta-BHC	ND		1.7	1.1	ug/Kg		06/12/14 10:46	06/17/14 04:39	1
delta-BHC	ND		1.7	1.2	ug/Kg		06/12/14 10:46	06/17/14 04:39	1
Dieldrin	ND		1.7	0.47	ug/Kg		06/12/14 10:46	06/17/14 04:39	1
Endosulfan I	ND		1.7	0.52	ug/Kg		06/12/14 10:46	06/17/14 04:39	1
Endosulfan II	ND		1.7	0.82	ug/Kg		06/12/14 10:46	06/17/14 04:39	1
Endosulfan sulfate	ND		1.7	0.87	ug/Kg		06/12/14 10:46	06/17/14 04:39	1
Endrin	ND		1.7	0.50	ug/Kg		06/12/14 10:46	06/17/14 04:39	1
Endrin aldehyde	ND		1.7	1.0	ug/Kg		06/12/14 10:46	06/17/14 04:39	1
Endrin ketone	ND		1.7	0.63	ug/Kg		06/12/14 10:46	06/17/14 04:39	1
gamma-BHC (Lindane)	ND		1.7	0.74	ug/Kg		06/12/14 10:46	06/17/14 04:39	1
gamma-Chlordane	ND		1.7	0.42	ug/Kg		06/12/14 10:46	06/17/14 04:39	1
Heptachlor	ND		1.7	1.1	ug/Kg		06/12/14 10:46	06/17/14 04:39	1
Heptachlor epoxide	ND		1.7	0.80	ug/Kg		06/12/14 10:46	06/17/14 04:39	1
Methoxychlor	ND		3.3	1.5	ug/Kg		06/12/14 10:46	06/17/14 04:39	1
Toxaphene	ND		67	19	ug/Kg		06/12/14 10:46	06/17/14 04:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*93*		*41 - 157*	*06/12/14 10:46*	*06/17/14 04:39*	*1*
DCB Decachlorobiphenyl	*97*		*41 - 157*	*06/12/14 10:46*	*06/17/14 04:39*	*1*
Tetrachloro-m-xylene	*113*	*p*	*40 - 149*	*06/12/14 10:46*	*06/17/14 04:39*	*1*
Tetrachloro-m-xylene	*246*	*X*	*40 - 149*	*06/12/14 10:46*	*06/17/14 04:39*	*1*

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 240-134411/22-A
Matrix: Solid
Analysis Batch: 134757

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134411

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	33.3	44.4		ug/Kg		133	53 - 160
4,4'-DDE	33.3	36.1		ug/Kg		108	46 - 143
4,4'-DDT	33.3	39.3		ug/Kg		118	40 - 157
Aldrin	33.3	34.8		ug/Kg		105	40 - 145
alpha-BHC	33.3	34.8		ug/Kg		104	50 - 153
alpha-Chlordane	33.3	33.4		ug/Kg		100	42 - 150
beta-BHC	33.3	32.5		ug/Kg		98	43 - 153
delta-BHC	33.3	34.5		ug/Kg		104	54 - 152
Dieldrin	33.3	33.8		ug/Kg		101	51 - 154
Endosulfan I	33.3	23.1		ug/Kg		69	40 - 148
Endosulfan II	33.3	24.4		ug/Kg		73	42 - 137
Endosulfan sulfate	33.3	33.0		ug/Kg		99	50 - 153
Endrin	33.3	37.5		ug/Kg		113	55 - 147
Endrin aldehyde	33.3	32.9		ug/Kg		99	43 - 158
Endrin ketone	33.3	30.3		ug/Kg		91	41 - 142
gamma-BHC (Lindane)	33.3	33.9		ug/Kg		102	44 - 160
gamma-Chlordane	33.3	33.9		ug/Kg		102	47 - 156
Heptachlor	33.3	33.5		ug/Kg		101	47 - 137
Heptachlor epoxide	33.3	33.6		ug/Kg		101	53 - 153
Methoxychlor	33.3	37.0		ug/Kg		111	40 - 152

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*91*		*41 - 157*
DCB Decachlorobiphenyl	*90*		*41 - 157*
Tetrachloro-m-xylene	*116*	*p*	*40 - 149*
Tetrachloro-m-xylene	*305*	*X*	*40 - 149*

Lab Sample ID: 240-38156-5 MS
Matrix: Solid
Analysis Batch: 134757

Client Sample ID: C-SS-DU-3
Prep Type: Total/NA
Prep Batch: 134411

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		34.9	44.0		ug/Kg	☼	126	16 - 160
4,4'-DDE	260		34.9	272	4	ug/Kg	☼	43	37 - 150
4,4'-DDT	100		34.9	129		ug/Kg	☼	77	24 - 160
Aldrin	ND		34.9	ND	F1	ug/Kg	☼	0	41 - 137
alpha-BHC	ND		34.9	27.9	J	ug/Kg	☼	80	22 - 160
alpha-Chlordane	ND		34.9	30.5	J	ug/Kg	☼	87	38 - 145
beta-BHC	ND		34.9	30.9	J p	ug/Kg	☼	88	27 - 160
delta-BHC	ND		34.9	ND	F1	ug/Kg	☼	0	10 - 160
Dieldrin	ND		34.9	27.1	J	ug/Kg	☼	78	37 - 160
Endosulfan I	ND		34.9	17.4	J	ug/Kg	☼	50	10 - 160
Endosulfan II	ND		34.9	ND	F1	ug/Kg	☼	0	16 - 150
Endosulfan sulfate	ND		34.9	19.2	J p	ug/Kg	☼	55	10 - 160
Endrin	ND		34.9	23.8	J	ug/Kg	☼	68	41 - 160
Endrin aldehyde	ND		34.9	ND	F1	ug/Kg	☼	0	10 - 160
Endrin ketone	ND		34.9	24.6	J p	ug/Kg	☼	71	11 - 160
gamma-BHC (Lindane)	ND		34.9	28.3	J	ug/Kg	☼	81	18 - 160

thod: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 240-38156-5 MS
Matrix: Solid
Analysis Batch: 134757

Client Sample ID: C-SS-DU-3
Prep Type: Total/NA
Prep Batch: 134411

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
gamma-Chlordane	ND		34.9	26.9	J	ug/Kg	☼	77	33 - 160
Heptachlor	ND		34.9	26.5	J	ug/Kg	☼	76	26 - 160
Heptachlor epoxide	ND		34.9	27.9	J	ug/Kg	☼	80	43 - 160
Methoxychlor	ND		34.9	ND	F1	ug/Kg	☼	0	10 - 160

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*732*	*X*	*41 - 157*
DCB Decachlorobiphenyl	*71*	*p*	*41 - 157*
Tetrachloro-m-xylene	*120*		*40 - 149*
Tetrachloro-m-xylene	*101*		*40 - 149*

Lab Sample ID: 240-38156-5 MSD
Matrix: Solid
Analysis Batch: 134757

Client Sample ID: C-SS-DU-3
Prep Type: Total/NA
Prep Batch: 134411

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		34.7	46.2		ug/Kg	☼	133	16 - 160	5	40
4,4'-DDE	260		34.7	311	4	ug/Kg	☼	156	37 - 150	10	40
4,4'-DDT	100		34.7	142		ug/Kg	☼	115	24 - 160	9	40
drin	ND		34.7	ND	F1	ug/Kg	☼	0	41 - 137	NC	40
alpha-BHC	ND		34.7	26.3	J	ug/Kg	☼	76	22 - 160	6	40
alpha-Chlordane	ND		34.7	33.6	J	ug/Kg	☼	97	38 - 145	10	40
beta-BHC	ND		34.7	31.9	J p	ug/Kg	☼	92	27 - 160	3	40
delta-BHC	ND		34.7	ND	F1	ug/Kg	☼	0	10 - 160	NC	40
Dieldrin	ND		34.7	32.5	J	ug/Kg	☼	94	37 - 160	18	40
Endosulfan I	ND		34.7	21.2	J	ug/Kg	☼	61	10 - 160	20	40
Endosulfan II	ND		34.7	ND	F1	ug/Kg	☼	0	16 - 150	NC	40
Endosulfan sulfate	ND		34.7	18.6	J p	ug/Kg	☼	54	10 - 160	3	40
Endrin	ND		34.7	28.9	J p	ug/Kg	☼	83	41 - 160	20	40
Endrin aldehyde	ND		34.7	ND	F1	ug/Kg	☼	0	10 - 160	NC	38
Endrin ketone	ND		34.7	28.2	J p	ug/Kg	☼	81	11 - 160	13	40
gamma-BHC (Lindane)	ND		34.7	26.4	J	ug/Kg	☼	76	18 - 160	7	40
gamma-Chlordane	ND		34.7	28.6	J	ug/Kg	☼	82	33 - 160	6	40
Heptachlor	ND		34.7	27.1	J	ug/Kg	☼	78	26 - 160	2	40
Heptachlor epoxide	ND		34.7	28.9	J	ug/Kg	☼	83	43 - 160	4	29
Methoxychlor	ND		34.7	ND	F1	ug/Kg	☼	0	10 - 160	NC	39

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*788*	*X*	*41 - 157*
DCB Decachlorobiphenyl	*78*	*p*	*41 - 157*
Tetrachloro-m-xylene	*100*		*40 - 149*
Tetrachloro-m-xylene	*106*		*40 - 149*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-134409/21-A
Matrix: Solid
Analysis Batch: 134738

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134409

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		33	4.1	ug/Kg		06/12/14 10:40	06/16/14 03:25	1
Aroclor-1221	ND		33	4.0	ug/Kg		06/12/14 10:40	06/16/14 03:25	1
Aroclor-1232	ND		33	7.8	ug/Kg		06/12/14 10:40	06/16/14 03:25	1
Aroclor-1242	ND		33	4.7	ug/Kg		06/12/14 10:40	06/16/14 03:25	1
Aroclor-1248	ND		33	4.5	ug/Kg		06/12/14 10:40	06/16/14 03:25	1
Aroclor-1254	ND		33	4.8	ug/Kg		06/12/14 10:40	06/16/14 03:25	1
Aroclor-1260	ND		33	4.0	ug/Kg		06/12/14 10:40	06/16/14 03:25	1
Aroclor-1262	ND		33	5.9	ug/Kg		06/12/14 10:40	06/16/14 03:25	1
Aroclor-1268	ND		33	7.5	ug/Kg		06/12/14 10:40	06/16/14 03:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*29 - 151*	*06/12/14 10:40*	*06/16/14 03:25*	*1*
DCB Decachlorobiphenyl	*67*		*14 - 163*	*06/12/14 10:40*	*06/16/14 03:25*	*1*

Lab Sample ID: LCS 240-134409/22-A
Matrix: Solid
Analysis Batch: 134738

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134409

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	333	268		ug/Kg		80	62 - 120
Aroclor-1260	333	263		ug/Kg		79	56 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*85*		*29 - 151*
DCB Decachlorobiphenyl	*70*		*14 - 163*

Lab Sample ID: 240-38156-5 MS
Matrix: Solid
Analysis Batch: 134738

Client Sample ID: C-SS-DU-3
Prep Type: Total/NA
Prep Batch: 134409

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	ND		335	197		ug/Kg	☼	59	22 - 157
Aroclor-1260	8.2	J	335	160		ug/Kg	☼	45	13 - 161

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*51*		*29 - 151*
DCB Decachlorobiphenyl	*133*		*14 - 163*

Lab Sample ID: 240-38156-5 MSD
Matrix: Solid
Analysis Batch: 134738

Client Sample ID: C-SS-DU-3
Prep Type: Total/NA
Prep Batch: 134409

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND		357	201		ug/Kg	☼	56	22 - 157	2	30
Aroclor-1260	8.2	J	357	143		ug/Kg	☼	38	13 - 161	11	

ethod: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 240-38156-5 MSD
Matrix: Solid
Analysis Batch: 134738

Client Sample ID: C-SS-DU-3
Prep Type: Total/NA
Prep Batch: 134409

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	*64*		*29 - 151*
DCB Decachlorobiphenyl	*119*		*14 - 163*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-134947/1-A ^2
Matrix: Solid
Analysis Batch: 135144

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134947

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		5000	170	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Antimony	9.00	J	200	9.0	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Arsenic	20.8	J	500	6.0	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Barium	150	J	500	55	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Calcium	27600	J	100000	3100	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Cadmium	3.70	J	100	2.3	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Cobalt	3.20	J	100	1.9	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Chromium	109	J	200	30	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Copper	62.3	J	200	40	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
›n	3310	J	10000	730	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Magnesium	6620	J	100000	6000	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Potassium	3440	J	100000	1100	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Manganese	427	J	500	75	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Molybdenum	ND		1000	53	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Nickel	64.0	J	200	40	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Lead	24.3	J	100	13	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Selenium	34.9	J	500	28	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Strontium	70.5	J	1000	13	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Thallium	ND		200	8.1	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Vanadium	ND		500	10	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Zinc	719	J	2000	660	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Silver	ND		100	1.1	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Sodium	7950	J	100000	2700	ug/Kg		06/17/14 08:18	06/17/14 20:15	2
Titanium	ND		1000	46	ug/Kg		06/17/14 08:18	06/17/14 20:15	2

Lab Sample ID: MB 240-134947/1-A ^2
Matrix: Solid
Analysis Batch: 135266

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134947

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		100	2.5	ug/Kg		06/17/14 08:18	06/18/14 13:08	2

Lab Sample ID: MB 240-134947/1-A ^2
Matrix: Solid
Analysis Batch: 135284

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134947

..nalyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		2000	280	ug/Kg		06/17/14 08:18	06/18/14 15:07	2

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-134947/2-A ^2
Matrix: Solid
Analysis Batch: 135144

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134947

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	500000	498000		ug/Kg		100	80 - 120
Antimony	5000	5050		ug/Kg		101	68 - 113
Arsenic	50000	49200		ug/Kg		98	73 - 110
Barium	50000	54300		ug/Kg		109	70 - 110
Calcium	500000	551000		ug/Kg		110	80 - 120
Cadmium	50000	51500		ug/Kg		103	74 - 110
Cobalt	50000	51400		ug/Kg		103	74 - 110
Chromium	50000	51600		ug/Kg		103	70 - 110
Copper	50000	52100		ug/Kg		104	73 - 110
Iron	500000	520000		ug/Kg		104	80 - 120
Magnesium	500000	515000		ug/Kg		103	80 - 120
Potassium	500000	515000		ug/Kg		103	80 - 120
Manganese	50000	51100		ug/Kg		102	80 - 120
Molybdenum	5000	4890		ug/Kg		98	30 - 140
Nickel	50000	54300		ug/Kg		109	75 - 110
Lead	50000	49900		ug/Kg		100	75 - 110
Selenium	50000	47600		ug/Kg		95	65 - 110
Strontium	50000	53100		ug/Kg		106	80 - 120
Thallium	12500	12500		ug/Kg		100	71 - 110
Vanadium	50000	51700		ug/Kg		103	72 - 110
Zinc	50000	50500		ug/Kg		101	72 - 113
Silver	5000	4960		ug/Kg		99	60 - 114
Sodium	500000	507000		ug/Kg		101	80 - 120
Titanium	5000	4830		ug/Kg		97	80 - 120

Lab Sample ID: LCS 240-134947/2-A ^2
Matrix: Solid
Analysis Batch: 135266

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134947

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	50000	49300		ug/Kg		99	79 - 110

Lab Sample ID: LCS 240-134947/2-A ^2
Matrix: Solid
Analysis Batch: 135284

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134947

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	5000	4510		ug/Kg		90	80 - 120

Lab Sample ID: 240-38156-5 MS
Matrix: Solid
Analysis Batch: 135144

Client Sample ID: C-SS-DU-3
Prep Type: Total/NA
Prep Batch: 134947

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7200000		513000	8790000	4	ug/Kg	☼	311	70 - 130
Antimony	230	J B	5130	1570	F1	ug/Kg	☼	26	75 - 125
Arsenic	6600	B	51300	56500		ug/Kg	☼	97	23 - 131
Barium	67000	B	51300	123000		ug/Kg	☼	110	10 - 199
Beryllium	390	B	51300	53300		ug/Kg	☼	103	58 - 112

thod: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-38156-5 MS — **Client Sample ID: C-SS-DU-3**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 135144 — **Prep Batch: 134947**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	34000000	B	513000	34600000	4	ug/Kg	☼	53	70 - 130
Cadmium	430	B	51300	51200		ug/Kg	☼	99	58 - 110
Cobalt	6200	B	51300	54300		ug/Kg	☼	94	55 - 110
Chromium	18000	B	51300	68500		ug/Kg	☼	98	10 - 199
Copper	23000	B	51300	71600		ug/Kg	☼	94	10 - 199
Iron	14000000	B	513000	14300000	4	ug/Kg	☼	106	70 - 130
Magnesium	11000000	B	513000	11400000	4	ug/Kg	☼	21	70 - 130
Potassium	1100000	B	513000	1760000	F1	ug/Kg	☼	138	70 - 130
Manganese	320000	B	51300	364000	4	ug/Kg	☼	92	10 - 199
Molybdenum	1500	J	5130	6280		ug/Kg	☼	94	10 - 199
Nickel	18000	B	51300	65900		ug/Kg	☼	94	10 - 176
Lead	36000	B	51300	86500		ug/Kg	☼	98	10 - 199
Selenium	980	J B	51300	49200		ug/Kg	☼	94	39 - 116
Strontium	130000	B	51300	161000		ug/Kg	☼	63	52 - 110
Thallium	150	J	12800	12600		ug/Kg	☼	97	62 - 110
Vanadium	20000		51300	72800		ug/Kg	☼	103	39 - 129
Zinc	71000	B	51300	121000		ug/Kg	☼	97	10 - 199
Silver	62	J	5130	5000		ug/Kg	☼	96	75 - 125
Sodium	95000	J B	513000	591000		ug/Kg	☼	97	70 - 130
Titanium	120000		5130	139000	4	ug/Kg	☼	353	75 - 125

Lab Sample ID: 240-38156-5 MS — **Client Sample ID: C-SS-DU-3**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 135284 — **Prep Batch: 134947**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	6200		5130	12800	F1	ug/Kg	☼	130	80 - 120

Lab Sample ID: 240-38156-5 MSD — **Client Sample ID: C-SS-DU-3**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 135144 — **Prep Batch: 134947**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	7200000		513000	9010000	4	ug/Kg	☼	355	70 - 130	3	20
Antimony	230	J B	5130	1650	F1	ug/Kg	☼	28	75 - 125	5	20
Arsenic	6600	B	51300	58500		ug/Kg	☼	101	23 - 131	3	20
Barium	67000	B	51300	124000		ug/Kg	☼	112	10 - 199	1	20
Beryllium	390	B	51300	49600		ug/Kg	☼	96	58 - 112	7	20
Calcium	34000000	B	513000	35600000	4	ug/Kg	☼	257	70 - 130	3	20
Cadmium	430	B	51300	52600		ug/Kg	☼	102	58 - 110	3	20
Cobalt	6200	B	51300	56100		ug/Kg	☼	97	55 - 110	3	20
Chromium	18000	B	51300	69500		ug/Kg	☼	100	10 - 199	1	20
Copper	23000	B	51300	73100		ug/Kg	☼	97	10 - 199	2	20
Iron	14000000	B	513000	14800000	4	ug/Kg	☼	206	70 - 130	4	20
Magnesium	11000000	B	513000	11900000	4	ug/Kg	☼	116	70 - 130	4	20
Potassium	1100000	B	513000	1810000	F1	ug/Kg	☼	148	70 - 130	3	20
Manganese	320000	B	51300	352000	4	ug/Kg	☼	69	10 - 199	3	20
Molybdenum	1500	J	5130	6400		ug/Kg	☼	96	10 - 199	2	20
Nickel	18000	B	51300	66900		ug/Kg	☼	96	10 - 176	2	20

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-38156-5 MSD — **Client Sample ID: C-SS-DU-3**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 135144 — **Prep Batch: 134947**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	36000	B	51300	89500		ug/Kg	☼	104	10 - 199	3	20
Selenium	980	J B	51300	50400		ug/Kg	☼	96	39 - 116	3	20
Strontium	130000	B	51300	168000		ug/Kg	☼	77	52 - 110	4	20
Thallium	150	J	12800	12900		ug/Kg	☼	100	62 - 110	3	20
Vanadium	20000		51300	75300		ug/Kg	☼	108	39 - 129	3	20
Zinc	71000	B	51300	121000		ug/Kg	☼	97	10 - 199	0	20
Silver	62	J	5130	5110		ug/Kg	☼	98	75 - 125	2	20
Sodium	95000	J B	513000	603000		ug/Kg	☼	99	70 - 130	2	20
Titanium	120000		5130	145000	4	ug/Kg	☼	469	75 - 125	4	20

Lab Sample ID: 240-38156-5 MSD — **Client Sample ID: C-SS-DU-3**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 135284 — **Prep Batch: 134947**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	6200		5130	12700	F1	ug/Kg	☼	128	80 - 120	1	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 240-134954/1-A — **Client Sample ID: Method Bla**
Matrix: Solid — **Prep Type: Total/**
Analysis Batch: 135139 — **Prep Batch: 134954**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.10	0.015	mg/Kg		06/17/14 11:10	06/17/14 17:06	1

Lab Sample ID: LCS 240-134954/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 135139 — **Prep Batch: 134954**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.909		mg/Kg		109	73 - 121

Lab Sample ID: 240-38156-5 MS — **Client Sample ID: C-SS-DU-3**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 135139 — **Prep Batch: 134954**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.057	J	0.188	0.267		mg/Kg	☼	112	11 - 192

Lab Sample ID: 240-38156-5 MSD — **Client Sample ID: C-SS-DU-3**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 135139 — **Prep Batch: 134954**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.057	J	0.188	0.254		mg/Kg	☼	105	11 - 192	5	20

thod: 9012A - Cyanide, Total and/or Amenable

Lab Sample ID: MB 240-134565/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 134657 — **Prep Batch: 134565**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.179	J	0.50	0.10	mg/Kg		06/13/14 09:06	06/13/14 11:40	1

Lab Sample ID: LCS 240-134565/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 134657 — **Prep Batch: 134565**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	4.00	4.32		mg/Kg		108	68 - 123

Lab Sample ID: 240-38156-5 MS — **Client Sample ID: C-SS-DU-3**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 134657 — **Prep Batch: 134565**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.48	J B	9.69	9.10		mg/Kg	☼	89	50 - 134

Lab Sample ID: 240-38156-5 MSD — **Client Sample ID: C-SS-DU-3**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 134657 — **Prep Batch: 134565**

ıalyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.48	J B	9.69	9.13		mg/Kg	☼	89	50 - 134	0	20

Lab Sample ID: MRL 240-134657/6 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 134657

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0100	0.0102		mg/L		102	70 - 130

GC/MS Semi VOA

ISM Prep Batch: 134257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-38156-1	C-SS-DU-1	Total/NA	Solid	Increment, Prep	
240-38156-2	C-SS-DU-2	Total/NA	Solid	Increment, Prep	
240-38156-3	C-SS-DU-2D	Total/NA	Solid	Increment, Prep	
240-38156-4	C-SS-DU-2T	Total/NA	Solid	Increment, Prep	
240-38156-5	C-SS-DU-3	Total/NA	Solid	Increment, Prep	
240-38156-5 MS	C-SS-DU-3	Total/NA	Solid	Increment, Prep	
240-38156-5 MSD	C-SS-DU-3	Total/NA	Solid	Increment, Prep	
240-38156-6	C-SS-DU-4	Total/NA	Solid	Increment, Prep	
240-38156-7	C-SS-DU-5	Total/NA	Solid	Increment, Prep	

Prep Batch: 134405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-38156-1	C-SS-DU-1	Total/NA	Solid	3540C	134257
240-38156-2	C-SS-DU-2	Total/NA	Solid	3540C	134257
240-38156-3	C-SS-DU-2D	Total/NA	Solid	3540C	134257
240-38156-4	C-SS-DU-2T	Total/NA	Solid	3540C	134257
240-38156-5	C-SS-DU-3	Total/NA	Solid	3540C	134257
240-38156-5 MS	C-SS-DU-3	Total/NA	Solid	3540C	134257
240-38156-5 MSD	C-SS-DU-3	Total/NA	Solid	3540C	134257
240-38156-6	C-SS-DU-4	Total/NA	Solid	3540C	134257
240-38156-7	C-SS-DU-5	Total/NA	Solid	3540C	134257
LCS 240-134405/22-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-134405/21-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 134745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-38156-1	C-SS-DU-1	Total/NA	Solid	8270C	134405
240-38156-2	C-SS-DU-2	Total/NA	Solid	8270C	134405
240-38156-3	C-SS-DU-2D	Total/NA	Solid	8270C	134405
240-38156-4	C-SS-DU-2T	Total/NA	Solid	8270C	134405
240-38156-5	C-SS-DU-3	Total/NA	Solid	8270C	134405
240-38156-5 MS	C-SS-DU-3	Total/NA	Solid	8270C	134405
240-38156-5 MSD	C-SS-DU-3	Total/NA	Solid	8270C	134405
240-38156-6	C-SS-DU-4	Total/NA	Solid	8270C	134405
240-38156-7	C-SS-DU-5	Total/NA	Solid	8270C	134405
LCS 240-134405/22-A	Lab Control Sample	Total/NA	Solid	8270C	134405
MB 240-134405/21-A	Method Blank	Total/NA	Solid	8270C	134405

GC Semi VOA

ISM Prep Batch: 134257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-38156-1	C-SS-DU-1	Total/NA	Solid	Increment, Prep	
240-38156-2	C-SS-DU-2	Total/NA	Solid	Increment, Prep	
240-38156-3	C-SS-DU-2D	Total/NA	Solid	Increment, Prep	
240-38156-4	C-SS-DU-2T	Total/NA	Solid	Increment, Prep	
240-38156-5	C-SS-DU-3	Total/NA	Solid	Increment, Prep	
240-38156-5 MS	C-SS-DU-3	Total/NA	Solid	Increment, Prep	
240-38156-5 MSD	C-SS-DU-3	Total/NA	Solid	Increment, Prep	
240-38156-6	C-SS-DU-4	Total/NA	Solid	Increment, Prep	

Semi VOA (Continued)

ISM Prep Batch: 134257 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-38156-7	C-SS-DU-5	Total/NA	Solid	Increment, Prep	

Prep Batch: 134409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-38156-1	C-SS-DU-1	Total/NA	Solid	3540C	134257
240-38156-2	C-SS-DU-2	Total/NA	Solid	3540C	134257
240-38156-3	C-SS-DU-2D	Total/NA	Solid	3540C	134257
240-38156-4	C-SS-DU-2T	Total/NA	Solid	3540C	134257
240-38156-5	C-SS-DU-3	Total/NA	Solid	3540C	134257
240-38156-5 MS	C-SS-DU-3	Total/NA	Solid	3540C	134257
240-38156-5 MSD	C-SS-DU-3	Total/NA	Solid	3540C	134257
240-38156-6	C-SS-DU-4	Total/NA	Solid	3540C	134257
240-38156-7	C-SS-DU-5	Total/NA	Solid	3540C	134257
LCS 240-134409/22-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-134409/21-A	Method Blank	Total/NA	Solid	3540C	

Prep Batch: 134411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-38156-1	C-SS-DU-1	Total/NA	Solid	3540C	134257
240-38156-2	C-SS-DU-2	Total/NA	Solid	3540C	134257
240-38156-3	C-SS-DU-2D	Total/NA	Solid	3540C	134257
240-38156-4	C-SS-DU-2T	Total/NA	Solid	3540C	134257
0-38156-5	C-SS-DU-3	Total/NA	Solid	3540C	134257
240-38156-5 MS	C-SS-DU-3	Total/NA	Solid	3540C	134257
240-38156-5 MSD	C-SS-DU-3	Total/NA	Solid	3540C	134257
240-38156-6	C-SS-DU-4	Total/NA	Solid	3540C	134257
240-38156-7	C-SS-DU-5	Total/NA	Solid	3540C	134257
LCS 240-134411/22-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-134411/21-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 134738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-38156-1	C-SS-DU-1	Total/NA	Solid	8082	134409
240-38156-2	C-SS-DU-2	Total/NA	Solid	8082	134409
240-38156-3	C-SS-DU-2D	Total/NA	Solid	8082	134409
240-38156-4	C-SS-DU-2T	Total/NA	Solid	8082	134409
240-38156-5	C-SS-DU-3	Total/NA	Solid	8082	134409
240-38156-5 MS	C-SS-DU-3	Total/NA	Solid	8082	134409
240-38156-5 MSD	C-SS-DU-3	Total/NA	Solid	8082	134409
240-38156-6	C-SS-DU-4	Total/NA	Solid	8082	134409
240-38156-7	C-SS-DU-5	Total/NA	Solid	8082	134409
LCS 240-134409/22-A	Lab Control Sample	Total/NA	Solid	8082	134409
MB 240-134409/21-A	Method Blank	Total/NA	Solid	8082	134409

Analysis Batch: 134757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-38156-1	C-SS-DU-1	Total/NA	Solid	8081A	134411
240-38156-2	C-SS-DU-2	Total/NA	Solid	8081A	134411
0-38156-3	C-SS-DU-2D	Total/NA	Solid	8081A	134411
240-38156-4	C-SS-DU-2T	Total/NA	Solid	8081A	134411
240-38156-5	C-SS-DU-3	Total/NA	Solid	8081A	134411

GC Semi VOA (Continued)

Analysis Batch: 134757 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-38156-5 MS	C-SS-DU-3	Total/NA	Solid	8081A	134411
240-38156-5 MSD	C-SS-DU-3	Total/NA	Solid	8081A	134411
240-38156-6	C-SS-DU-4	Total/NA	Solid	8081A	134411
240-38156-7	C-SS-DU-5	Total/NA	Solid	8081A	134411
LCS 240-134411/22-A	Lab Control Sample	Total/NA	Solid	8081A	134411
MB 240-134411/21-A	Method Blank	Total/NA	Solid	8081A	134411

Metals

ISM Prep Batch: 134257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-38156-1	C-SS-DU-1	Total/NA	Solid	Increment, Prep	
240-38156-2	C-SS-DU-2	Total/NA	Solid	Increment, Prep	
240-38156-3	C-SS-DU-2D	Total/NA	Solid	Increment, Prep	
240-38156-4	C-SS-DU-2T	Total/NA	Solid	Increment, Prep	
240-38156-5	C-SS-DU-3	Total/NA	Solid	Increment, Prep	
240-38156-5 MS	C-SS-DU-3	Total/NA	Solid	Increment, Prep	
240-38156-5 MSD	C-SS-DU-3	Total/NA	Solid	Increment, Prep	
240-38156-6	C-SS-DU-4	Total/NA	Solid	Increment, Prep	
240-38156-7	C-SS-DU-5	Total/NA	Solid	Increment, Prep	

Prep Batch: 134947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Ba
240-38156-1	C-SS-DU-1	Total/NA	Solid	3050B	134257
240-38156-2	C-SS-DU-2	Total/NA	Solid	3050B	134257
240-38156-3	C-SS-DU-2D	Total/NA	Solid	3050B	134257
240-38156-4	C-SS-DU-2T	Total/NA	Solid	3050B	134257
240-38156-5	C-SS-DU-3	Total/NA	Solid	3050B	134257
240-38156-5 MS	C-SS-DU-3	Total/NA	Solid	3050B	134257
240-38156-5 MSD	C-SS-DU-3	Total/NA	Solid	3050B	134257
240-38156-6	C-SS-DU-4	Total/NA	Solid	3050B	134257
240-38156-7	C-SS-DU-5	Total/NA	Solid	3050B	134257
LCS 240-134947/2-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
MB 240-134947/1-A ^2	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 134954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-38156-1	C-SS-DU-1	Total/NA	Solid	7471A	134257
240-38156-2	C-SS-DU-2	Total/NA	Solid	7471A	134257
240-38156-3	C-SS-DU-2D	Total/NA	Solid	7471A	134257
240-38156-4	C-SS-DU-2T	Total/NA	Solid	7471A	134257
240-38156-5	C-SS-DU-3	Total/NA	Solid	7471A	134257
240-38156-5 MS	C-SS-DU-3	Total/NA	Solid	7471A	134257
240-38156-5 MSD	C-SS-DU-3	Total/NA	Solid	7471A	134257
240-38156-6	C-SS-DU-4	Total/NA	Solid	7471A	134257
240-38156-7	C-SS-DU-5	Total/NA	Solid	7471A	134257
LCS 240-134954/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 240-134954/1-A	Method Blank	Total/NA	Solid	7471A	

tals (Continued)

Analysis Batch: 135139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-38156-1	C-SS-DU-1	Total/NA	Solid	7471A	134954
240-38156-2	C-SS-DU-2	Total/NA	Solid	7471A	134954
240-38156-3	C-SS-DU-2D	Total/NA	Solid	7471A	134954
240-38156-4	C-SS-DU-2T	Total/NA	Solid	7471A	134954
240-38156-5	C-SS-DU-3	Total/NA	Solid	7471A	134954
240-38156-5 MS	C-SS-DU-3	Total/NA	Solid	7471A	134954
240-38156-5 MSD	C-SS-DU-3	Total/NA	Solid	7471A	134954
240-38156-6	C-SS-DU-4	Total/NA	Solid	7471A	134954
240-38156-7	C-SS-DU-5	Total/NA	Solid	7471A	134954
LCS 240-134954/2-A	Lab Control Sample	Total/NA	Solid	7471A	134954
MB 240-134954/1-A	Method Blank	Total/NA	Solid	7471A	134954

Analysis Batch: 135144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-38156-1	C-SS-DU-1	Total/NA	Solid	6020	134947
240-38156-2	C-SS-DU-2	Total/NA	Solid	6020	134947
240-38156-3	C-SS-DU-2D	Total/NA	Solid	6020	134947
240-38156-4	C-SS-DU-2T	Total/NA	Solid	6020	134947
240-38156-5	C-SS-DU-3	Total/NA	Solid	6020	134947
240-38156-5 MS	C-SS-DU-3	Total/NA	Solid	6020	134947
240-38156-5 MSD	C-SS-DU-3	Total/NA	Solid	6020	134947
240-38156-6	C-SS-DU-4	Total/NA	Solid	6020	134947
0-38156-7	C-SS-DU-5	Total/NA	Solid	6020	134947
LCS 240-134947/2-A ^2	Lab Control Sample	Total/NA	Solid	6020	134947
MB 240-134947/1-A ^2	Method Blank	Total/NA	Solid	6020	134947

Analysis Batch: 135266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-134947/2-A ^2	Lab Control Sample	Total/NA	Solid	6020	134947
MB 240-134947/1-A ^2	Method Blank	Total/NA	Solid	6020	134947

Analysis Batch: 135284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-38156-1	C-SS-DU-1	Total/NA	Solid	6020	134947
240-38156-2	C-SS-DU-2	Total/NA	Solid	6020	134947
240-38156-3	C-SS-DU-2D	Total/NA	Solid	6020	134947
240-38156-4	C-SS-DU-2T	Total/NA	Solid	6020	134947
240-38156-5	C-SS-DU-3	Total/NA	Solid	6020	134947
240-38156-5 MS	C-SS-DU-3	Total/NA	Solid	6020	134947
240-38156-5 MSD	C-SS-DU-3	Total/NA	Solid	6020	134947
240-38156-6	C-SS-DU-4	Total/NA	Solid	6020	134947
240-38156-7	C-SS-DU-5	Total/NA	Solid	6020	134947
LCS 240-134947/2-A ^2	Lab Control Sample	Total/NA	Solid	6020	134947
MB 240-134947/1-A ^2	Method Blank	Total/NA	Solid	6020	134947

General Chemistry

ISM Prep Batch: 134257

b Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-38156-1	C-SS-DU-1	Total/NA	Solid	Increment, Prep	

General Chemistry (Continued)

ISM Prep Batch: 134257 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-38156-2	C-SS-DU-2	Total/NA	Solid	Increment, Prep	
240-38156-3	C-SS-DU-2D	Total/NA	Solid	Increment, Prep	
240-38156-4	C-SS-DU-2T	Total/NA	Solid	Increment, Prep	
240-38156-5	C-SS-DU-3	Total/NA	Solid	Increment, Prep	
240-38156-5 DU	C-SS-DU-3	Total/NA	Solid	Increment, Prep	
240-38156-5 MS	C-SS-DU-3	Total/NA	Solid	Increment, Prep	
240-38156-5 MSD	C-SS-DU-3	Total/NA	Solid	Increment, Prep	
240-38156-6	C-SS-DU-4	Total/NA	Solid	Increment, Prep	
240-38156-7	C-SS-DU-5	Total/NA	Solid	Increment, Prep	

Analysis Batch: 134408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-38156-1	C-SS-DU-1	Total/NA	Solid	Moisture	134257
240-38156-2	C-SS-DU-2	Total/NA	Solid	Moisture	134257
240-38156-3	C-SS-DU-2D	Total/NA	Solid	Moisture	134257
240-38156-4	C-SS-DU-2T	Total/NA	Solid	Moisture	134257
240-38156-5	C-SS-DU-3	Total/NA	Solid	Moisture	134257
240-38156-5 DU	C-SS-DU-3	Total/NA	Solid	Moisture	134257
240-38156-6	C-SS-DU-4	Total/NA	Solid	Moisture	134257
240-38156-7	C-SS-DU-5	Total/NA	Solid	Moisture	134257

Prep Batch: 134565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-38156-1	C-SS-DU-1	Total/NA	Solid	9012A	134257
240-38156-2	C-SS-DU-2	Total/NA	Solid	9012A	134257
240-38156-3	C-SS-DU-2D	Total/NA	Solid	9012A	134257
240-38156-4	C-SS-DU-2T	Total/NA	Solid	9012A	134257
240-38156-5	C-SS-DU-3	Total/NA	Solid	9012A	134257
240-38156-5 MS	C-SS-DU-3	Total/NA	Solid	9012A	134257
240-38156-5 MSD	C-SS-DU-3	Total/NA	Solid	9012A	134257
240-38156-6	C-SS-DU-4	Total/NA	Solid	9012A	134257
240-38156-7	C-SS-DU-5	Total/NA	Solid	9012A	134257
LCS 240-134565/2-A	Lab Control Sample	Total/NA	Solid	9012A	
MB 240-134565/1-A	Method Blank	Total/NA	Solid	9012A	

Analysis Batch: 134657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-38156-1	C-SS-DU-1	Total/NA	Solid	9012A	134565
240-38156-2	C-SS-DU-2	Total/NA	Solid	9012A	134565
240-38156-3	C-SS-DU-2D	Total/NA	Solid	9012A	134565
240-38156-4	C-SS-DU-2T	Total/NA	Solid	9012A	134565
240-38156-5	C-SS-DU-3	Total/NA	Solid	9012A	134565
240-38156-5 MS	C-SS-DU-3	Total/NA	Solid	9012A	134565
240-38156-5 MSD	C-SS-DU-3	Total/NA	Solid	9012A	134565
240-38156-6	C-SS-DU-4	Total/NA	Solid	9012A	134565
240-38156-7	C-SS-DU-5	Total/NA	Solid	9012A	134565
LCS 240-134565/2-A	Lab Control Sample	Total/NA	Solid	9012A	134565
MB 240-134565/1-A	Method Blank	Total/NA	Solid	9012A	134565
MRL 240-134657/6	Lab Control Sample	Total/NA	Solid	9012A	

Lab Chronicle

Client: Michigan Dept. of Environmental Quality
Project/Site: 5250 Conner Detroit

TestAmerica Job ID: 240-38156-1

ent Sample ID: C-SS-DU-1 — **Lab Sample ID: 240-38156-1**
Date Collected: 06/03/14 09:30 — **Matrix: Solid**
Date Received: 06/05/14 09:45 — **Percent Solids: 97.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3540C			134405	06/12/14 10:10	MAT	TAL CAN
Total/NA	Analysis	8270C		10	134745	06/16/14 10:15	MRU	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3540C			134411	06/12/14 10:46	MAT	TAL CAN
Total/NA	Analysis	8081A		20	134757	06/16/14 20:08	BPM	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3540C			134409	06/12/14 10:40	MAT	TAL CAN
Total/NA	Analysis	8082		1	134738	06/16/14 08:20	HMB	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3050B			134947	06/17/14 08:18	ADS	TAL CAN
Total/NA	Analysis	6020		5	135144	06/17/14 21:05	RKT	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3050B			134947	06/17/14 08:18	ADS	TAL CAN
Total/NA	Analysis	6020		5	135284	06/18/14 16:40	KLC	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	7471A			134954	06/17/14 11:10	ADS	TAL CAN
Total/NA	Analysis	7471A		1	135139	06/17/14 17:32	AMM2	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	9012A			134565	06/13/14 09:06	NJE	TAL CAN
Total/NA	Analysis	9012A		1	134657	06/13/14 11:41	NJE	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	134408	06/12/14 10:29	WAL	TAL CAN

Client Sample ID: C-SS-DU-2 — **Lab Sample ID: 240-38156-2**
Date Collected: 06/03/14 10:20 — **Matrix: Solid**
Date Received: 06/05/14 09:45 — **Percent Solids: 97.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3540C			134405	06/12/14 10:10	MAT	TAL CAN
Total/NA	Analysis	8270C		6.6667	134745	06/16/14 11:28	MRU	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3540C			134411	06/12/14 10:46	MAT	TAL CAN
Total/NA	Analysis	8081A		20	134757	06/16/14 20:31	BPM	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3540C			134409	06/12/14 10:40	MAT	TAL CAN
Total/NA	Analysis	8082		1	134738	06/16/14 07:31	HMB	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3050B			134947	06/17/14 08:18	ADS	TAL CAN
Total/NA	Analysis	6020		5	135144	06/17/14 21:17	RKT	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3050B			134947	06/17/14 08:18	ADS	TAL CAN
Total/NA	Analysis	6020		5	135284	06/18/14 16:47	KLC	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN

Lab Chronicle

Client: Michigan Dept. of Environmental Quality
Project/Site: 5250 Conner Detroit

TestAmerica Job ID: 240-38156-1

Client Sample ID: C-SS-DU-2

Lab Sample ID: 240-38156

Date Collected: 06/03/14 10:20
Matrix: Solid
Date Received: 06/05/14 09:45
Percent Solids: 97.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			134954	06/17/14 11:10	ADS	TAL CAN
Total/NA	Analysis	7471A		1	135139	06/17/14 17:35	AMM2	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	9012A			134565	06/13/14 09:06	NJE	TAL CAN
Total/NA	Analysis	9012A		1	134657	06/13/14 11:41	NJE	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	134408	06/12/14 10:29	WAL	TAL CAN

Client Sample ID: C-SS-DU-2D

Lab Sample ID: 240-38156-3

Date Collected: 06/03/14 10:20
Matrix: Solid
Date Received: 06/05/14 09:45
Percent Solids: 97.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3540C			134405	06/12/14 10:10	MAT	TAL CAN
Total/NA	Analysis	8270C		5	134745	06/16/14 11:53	MRU	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3540C			134411	06/12/14 10:46	MAT	TAL CAN
Total/NA	Analysis	8081A		20	134757	06/16/14 20:54	BPM	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3540C			134409	06/12/14 10:40	MAT	TAL CAN
Total/NA	Analysis	8082		1	134738	06/16/14 08:37	HMB	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3050B			134947	06/17/14 08:18	ADS	TAL CAN
Total/NA	Analysis	6020		5	135144	06/17/14 21:21	RKT	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3050B			134947	06/17/14 08:18	ADS	TAL CAN
Total/NA	Analysis	6020		5	135284	06/18/14 16:54	KLC	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	7471A			134954	06/17/14 11:10	ADS	TAL CAN
Total/NA	Analysis	7471A		1	135139	06/17/14 17:37	AMM2	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	9012A			134565	06/13/14 09:06	NJE	TAL CAN
Total/NA	Analysis	9012A		1	134657	06/13/14 11:46	NJE	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	134408	06/12/14 10:29	WAL	TAL CAN

Client Sample ID: C-SS-DU-2T

Lab Sample ID: 240-38156-4

Date Collected: 06/03/14 10:20
Matrix: Solid
Date Received: 06/05/14 09:45
Percent Solids: 98.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3540C			134405	06/12/14 10:10	MAT	TAL CAN

ent Sample ID: C-SS-DU-2T — **Lab Sample ID: 240-38156-4**

Date Collected: 06/03/14 10:20 — **Matrix: Solid**

Date Received: 06/05/14 09:45 — **Percent Solids: 98.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		10	134745	06/16/14 10:40	MRU	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3540C			134411	06/12/14 10:46	MAT	TAL CAN
Total/NA	Analysis	8081A		20	134757	06/16/14 21:16	BPM	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3540C			134409	06/12/14 10:40	MAT	TAL CAN
Total/NA	Analysis	8082		1	134738	06/16/14 01:30	HMB	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3050B			134947	06/17/14 08:18	ADS	TAL CAN
Total/NA	Analysis	6020		5	135144	06/17/14 21:24	RKT	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3050B			134947	06/17/14 08:18	ADS	TAL CAN
Total/NA	Analysis	6020		5	135284	06/18/14 17:01	KLC	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	7471A			134954	06/17/14 11:10	ADS	TAL CAN
Total/NA	Analysis	7471A		1	135139	06/17/14 17:40	AMM2	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	9012A			134565	06/13/14 09:06	NJE	TAL CAN
Total/NA	Analysis	9012A		1	134657	06/13/14 11:41	NJE	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	134408	06/12/14 10:29	WAL	TAL CAN

Client Sample ID: C-SS-DU-3 — **Lab Sample ID: 240-38156-5**

Date Collected: 06/03/14 11:15 — **Matrix: Solid**

Date Received: 06/05/14 09:45 — **Percent Solids: 98.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3540C			134405	06/12/14 10:10	MAT	TAL CAN
Total/NA	Analysis	8270C		10	134745	06/16/14 09:02	MRU	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3540C			134411	06/12/14 10:46	MAT	TAL CAN
Total/NA	Analysis	8081A		20	134757	06/16/14 21:39	BPM	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3540C			134409	06/12/14 10:40	MAT	TAL CAN
Total/NA	Analysis	8082		1	134738	06/16/14 01:46	HMB	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3050B			134947	06/17/14 08:18	ADS	TAL CAN
Total/NA	Analysis	6020		5	135144	06/17/14 20:31	RKT	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3050B			134947	06/17/14 08:18	ADS	TAL CAN
Total/NA	Analysis	6020		5	135284	06/18/14 15:21	KLC	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	7471A			134954	06/17/14 11:10	ADS	TAL CAN
Total/NA	Analysis	7471A		1	135139	06/17/14 17:11	AMM2	TAL CAN

Lab Chronicle

Client: Michigan Dept. of Environmental Quality
Project/Site: 5250 Conner Detroit

TestAmerica Job ID: 240-38156-1

Client Sample ID: C-SS-DU-3

Lab Sample ID: 240-38156
Matrix: Solid
Percent Solids: 98.3

Date Collected: 06/03/14 11:15
Date Received: 06/05/14 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	9012A			134565	06/13/14 09:06	NJE	TAL CAN
Total/NA	Analysis	9012A		1	134657	06/13/14 11:41	NJE	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	134408	06/12/14 10:29	WAL	TAL CAN

Client Sample ID: C-SS-DU-4

Lab Sample ID: 240-38156-6
Matrix: Solid
Percent Solids: 98.8

Date Collected: 06/02/14 14:45
Date Received: 06/05/14 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3540C			134405	06/12/14 10:10	MAT	TAL CAN
Total/NA	Analysis	8270C		20	134745	06/16/14 08:38	MRU	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3540C			134411	06/12/14 10:46	MAT	TAL CAN
Total/NA	Analysis	8081A		20	134757	06/16/14 22:48	BPM	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3540C			134409	06/12/14 10:40	MAT	TAL CAN
Total/NA	Analysis	8082		1	134738	06/16/14 02:35	HMB	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3050B			134947	06/17/14 08:18	ADS	TAL CAN
Total/NA	Analysis	6020		5	135144	06/17/14 21:28	RKT	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3050B			134947	06/17/14 08:18	ADS	TAL CAN
Total/NA	Analysis	6020		5	135284	06/18/14 17:08	KLC	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	7471A			134954	06/17/14 11:10	ADS	TAL CAN
Total/NA	Analysis	7471A		1	135139	06/17/14 17:42	AMM2	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	9012A			134565	06/13/14 09:06	NJE	TAL CAN
Total/NA	Analysis	9012A		1	134657	06/13/14 11:46	NJE	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	134408	06/12/14 10:29	WAL	TAL CAN

Client Sample ID: C-SS-DU-5

Lab Sample ID: 240-38156-7
Matrix: Solid
Percent Solids: 98.2

Date Collected: 06/03/14 09:00
Date Received: 06/05/14 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3540C			134405	06/12/14 10:10	MAT	TAL CAN
Total/NA	Analysis	8270C		10	134745	06/16/14 11:04	MRU	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN

Lab Chronicle

Client: Michigan Dept. of Environmental Quality
Project/Site: 5250 Conner Detroit

TestAmerica Job ID: 240-38156-1

ent Sample ID: C-SS-DU-5
Date Collected: 06/03/14 09:00
Date Received: 06/05/14 09:45

Lab Sample ID: 240-38156-7
Matrix: Solid
Percent Solids: 98.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			134411	06/12/14 10:46	MAT	TAL CAN
Total/NA	Analysis	8081A		20	134757	06/16/14 23:09	BPM	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3540C			134409	06/12/14 10:40	MAT	TAL CAN
Total/NA	Analysis	8082		1	134738	06/16/14 02:52	HMB	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3050B			134947	06/17/14 08:18	ADS	TAL CAN
Total/NA	Analysis	6020		5	135144	06/17/14 21:32	RKT	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	3050B			134947	06/17/14 08:18	ADS	TAL CAN
Total/NA	Analysis	6020		5	135284	06/18/14 17:15	KLC	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	7471A			134954	06/17/14 11:10	ADS	TAL CAN
Total/NA	Analysis	7471A		1	135139	06/17/14 17:44	AMM2	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Prep	9012A			134565	06/13/14 09:06	NJE	TAL CAN
Total/NA	Analysis	9012A		1	134657	06/13/14 11:46	NJE	TAL CAN
Total/NA	ISM Prep	Increment, Prep			134257	06/06/14 13:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	134408	06/12/14 10:29	WAL	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Michigan Dept. of Environmental Quality
Project/Site: 5250 Conner Detroit

TestAmerica Job ID: 240-38156-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

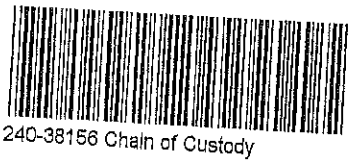
Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
Connecticut	State Program	1	PH-0590	12-31-14
Florida	NELAP	4	E87225	06-30-14 *
Georgia	State Program	4	N/A	06-30-14 *
Illinois	NELAP	5	200004	07-31-14 *
Kansas	NELAP	7	E-10336	01-31-15
Kentucky (UST)	State Program	4	58	06-30-14 *
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-14
Nevada	State Program	9	OH-000482008A	07-31-14 *
New Jersey	NELAP	2	OH001	06-30-14 *
New York	NELAP	2	10975	03-31-15
Ohio VAP	State Program	5	CL0024	10-31-15
Pennsylvania	NELAP	3	68-00340	08-31-14 *
Texas	NELAP	6		08-31-14
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-15
West Virginia DEP	State Program	3	210	12-31-14
Wisconsin	State Program	5	999518190	08-31-14 *

* Certification renewal pending - certification considered valid.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS


240-38156 Chain of Custody

TestAmerica Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other:

Client Contact	Project Manager: John E. Spielberg	Site Contact:	Date: 6/4/14	COC No:
Michigan Department of Environmental Quality	Cell #: 517-242-8640	Lab Contact:	Carrier:	___ of ___ COCs
525 W Allegan St, Constitution Hall 5S	Analysis Turnaround Time			For Lab Use Only:
Lansing, MI 48933-7926	☑ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(517) 284-5155 office	TAT if different from Below ___			Lab Sampling:
(517) 335-4887 fax	☐ 2 weeks			
Project Name: 5250 Conner Detroit	☑ 1 week			Job / SDG No.:
Site:	☐ 2 days			
P O # 44092-30701-456999-19	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Semi-volatile	Pesticide	PCB	Total metals	Total cyanide	Sample Specific Notes:
C-SS-DU-1	6/3/14	0930	C	Soil	1		X	X	X	X	X	X	
C-SS-DU-2	6/3/14	1020											
C-SS-DU-2D		1020											
C-SS-DU-2T		1020											
C-SS-DU-3		1115											
C-SS-DU-4	6/2/14	1445											
C-SS-DU-5	6/3/14	0900											

Page 70 of 70

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for ___ Months

Special Instructions/QC Requirements & Comments: 1) samples will be delivered to TestAmerica lab in Brighton, MI 2) analyze per incremental sampling protocols

* One (1) 2-gal. zip lock plastic bag

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: ___ Corr'd: ___ Therm ID No.: ___

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
John E. Spielberg	MDEQ	6/4/14-1500	Jeri Harlin	TAL	6/4/14 1500
Relinquished by: Jeri Harlin	Company: TAL	Date/Time: 6-4-14 1800	Received by:	Company: FA	Date/Time: 6-5-14 945
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.1, 02/20/2013

9/19/2014

TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 38156

Client Michigan Dept. Env. Site Name

Cooler unpacked by:

Cooler Received on 6-5-14 Opened on 6-6-14

FedEx: 1st (Grd) Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other

TestAmerica Cooler # Foam Box Client Cooler Box (Other)

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

~~IR GUN# A (CF +2 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C~~

IR GUN# 4 (CF -2 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C ☑ See Multiple Cooler Form

IR GUN# 5 (CF +0 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

IR GUN# 8 (CF +0 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 4 (Yes) No

-Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA

-Were custody seals on the bottle(s)? Yes (No)

3. Shippers' packing slip attached to the cooler(s)? (Yes) No

4. Did custody papers accompany the sample(s)? (Yes) No

5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No

6. Did all bottles arrive in good condition (Unbroken)? (Yes) No

7. Could all bottle labels be reconciled with the COC? (Yes) No

8. Were correct bottle(s) used for the test(s) indicated? (Yes) No

9. Sufficient quantity received to perform indicated analyses? (Yes) No

10. Were sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# HC302587

11. Were VOAs on the COC? Yes (No)

12. Were air bubbles >6 mm in any VOA vials? Yes No (NA)

13. Was a trip blank present in the cooler(s)? Yes (No)

Contacted PM Date by via Verbal Voice Mail Other

Concerning

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

Per Client MS/MSD = C-SS-04-3

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.

Sample(s) were received in a broken container.

Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.

Time preserved: Preservative(s) added/Lot number(s):

TestAmerica Multiple Cooler Receipt Form/Narrative
Canton Facility

Login # : 381560

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
Client	8	1.2	1.2	Ice
"	"	1.4	1.4	"
"	"	2.0	2.0	"
"	"	1.2	1.2	"

STATE OF MICHIGAN
MENT 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

01 July 2014

Work Order: 1406007

Price: $13,938.00

John Spielberg
MDEQ-RRD-LANSING
525 W. Allegan Street
Lansing, MI 48909

RE: 5250 CONNER DETROIT

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

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

Project: 5250 CONNER DETROIT
Site Code: RRDSF184
Project Manager: John Spielberg

Reported:
07/01/2014

Analytical Report for Samples

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Qualifier
C-SB-01	1406007-01	Soil/Sediment	06/02/2014	06/03/2014	
C-SB-02	1406007-02	Soil/Sediment	06/02/2014	06/03/2014	
C-SB-02-DUP	1406007-03	Soil/Sediment	06/02/2014	06/03/2014	
C-SB-03	1406007-04	Soil/Sediment	06/02/2014	06/03/2014	
C-SB-04	1406007-05	Soil/Sediment	06/02/2014	06/03/2014	
C-SB-05	1406007-06	Soil/Sediment	06/02/2014	06/03/2014	
C-SB-06	1406007-07	Soil/Sediment	06/02/2014	06/03/2014	
C-SB-07	1406007-08	Soil/Sediment	06/02/2014	06/03/2014	
C-SB-08	1406007-09	Soil/Sediment	06/02/2014	06/03/2014	
C-SB-09	1406007-10	Soil/Sediment	06/02/2014	06/03/2014	
C-SB-10	1406007-11	Soil/Sediment	06/02/2014	06/03/2014	
C-SB-11	1406007-12	Soil/Sediment	06/02/2014	06/03/2014	
C-SB-12	1406007-13	Soil/Sediment	06/02/2014	06/03/2014	
C-SB-03 MS	1406007-14	Soil/Sediment	06/02/2014	06/03/2014	
C-SB-03 MSD	1406007-15	Soil/Sediment	06/02/2014	06/03/2014	
TRIP BLANK	1406007-16	Soil/Sediment	05/30/2014	06/03/2014	

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Notes and Definitions

Y26	Sample was not covered with methanol. Results are estimated.
Y20	Reporting Limits (RL) raised due to matrix.
X3	Spike recovery is not applicable due to large target analyte concentration in the source sample.
X	Methods 8260 & 624 are used to analyze volatile organics that have boiling points below 200 °C. 2-Methylnaphthalene & naphthalene have boiling points above 200 °C 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.
A03	Result(s) and reporting limit(s) are estimated due to low matrix spike recovery.
100	Aroclors not spiked.
ND	Indicates compound analyzed for but not detected
RL	Reporting Limit
NA	Not Applicable
dry	Sample results reported on a dry weight basis

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

Client ID: C-SB-01

Lab ID: 1406007-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
71-55-6	1,1,1-Trichloroethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
79-00-5	1,1,2-Trichloroethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-34-3	1,1-Dichloroethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-35-4	1,1-Dichloroethylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
96-18-4	1,2,3-Trichloropropane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
106-93-4	1,2-Dibromoethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
95-50-1	1,2-Dichlorobenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
107-06-2	1,2-Dichloroethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
78-87-5	1,2-Dichloropropane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
541-73-1	1,3-Dichlorobenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
106-46-7	1,4-Dichlorobenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
78-93-3	2-Butanone (MEK)	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
591-78-6	2-Hexanone	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
91-57-6	2-Methylnaphthalene	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	X
67-64-1	2-Propanone (acetone)	ND	1500	ug/kg dry	50	06/06/14	B4F1719	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
107-13-1	Acrylonitrile	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
71-43-2	Benzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
108-86-1	Bromobenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
74-97-5	Bromochloromethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-27-4	Bromodichloromethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-25-2	Bromoform	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
74-83-9	Bromomethane	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
75-15-0	Carbon disulfide	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
56-23-5	Carbon tetrachloride	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
108-90-7	Chlorobenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-00-3	Chloroethane	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
67-66-3	Chloroform	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
74-87-3	Chloromethane	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
110-82-7	Cyclohexane	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
124-48-1	Dibromochloromethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	

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TEL: (517) 335-9800
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Client ID: C-SB-01

Lab ID: 1406007-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-71-8	Dichlorodifluoromethane	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	A05
60-29-7	Diethyl ether	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	A05
108-20-3	Diisopropyl Ether	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
100-41-4	Ethylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
637-92-3	Ethyltertiarybutylether	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
67-72-1	Hexachloroethane	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
98-82-8	Isopropylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
1330-20-7	m & p - Xylene	ND	150	ug/kg dry	50	06/06/14	B4F1719	8260	
74-88-4	Methyl iodide	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	A05
75-09-2	Methylene chloride	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
1634-04-4	Methyltertiarybutylether	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
91-20-3	Naphthalene	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	X
104-51-8	n-Butylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
103-65-1	n-Propylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
95-47-6	o-Xylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
[illegible]6	p-Isopropyl toluene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
135-98-8	sec-Butylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
100-42-5	Styrene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
98-06-6	tert-Butylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-65-0	tertiary Butyl Alcohol	ND	3800	ug/kg dry	50	06/06/14	B4F1719	8260	
994-05-8	tertiaryAmylmethylether	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
127-18-4	Tetrachloroethylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
109-99-9	Tetrahydrofuran	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
108-88-3	Toluene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
79-01-6	Trichloroethylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-69-4	Trichlorofluoromethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-01-4	Vinyl chloride	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
Surrogate: Bromofluorobenzene			*128 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Dibromofluoromethane			*128 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Toluene-d8			*128 %*	*50-150*		*06/06/14*	B4F1719	*8260*	

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Client ID: C-SB-01

Lab ID: 1406007-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
120-82-1	1,2,4-Trichlorobenzene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
95-95-4	2,4,5-Trichlorophenol	ND	830	ug/kg dry	1	06/16/14	B4F0915	8270	
88-06-2	2,4,6-Trichlorophenol	ND	830	ug/kg dry	1	06/16/14	B4F0915	8270	
120-83-2	2,4-Dichlorophenol	ND	830	ug/kg dry	1	06/16/14	B4F0915	8270	
105-67-9	2,4-Dimethylphenol	ND	830	ug/kg dry	1	06/16/14	B4F0915	8270	
51-28-5	2,4-Dinitrophenol	ND	4300	ug/kg dry	1	06/16/14	B4F0915	8270	
121-14-2	2,4-Dinitrotoluene	ND	630	ug/kg dry	1	06/16/14	B4F0915	8270	
606-20-2	2,6-Dinitrotoluene	ND	630	ug/kg dry	1	06/16/14	B4F0915	8270	
91-58-7	2-Chloronaphthalene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
95-57-8	2-Chlorophenol	ND	830	ug/kg dry	1	06/16/14	B4F0915	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	4300	ug/kg dry	1	06/16/14	B4F0915	8270	
91-57-6	2-Methylnaphthalene	ND	630	ug/kg dry	1	06/16/14	B4F0915	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	830	ug/kg dry	1	06/16/14	B4F0915	8270	
88-74-4	2-Nitroaniline	ND	1300	ug/kg dry	1	06/16/14	B4F0915	8270	
88-75-5	2-Nitrophenol	ND	830	ug/kg dry	1	06/16/14	B4F0915	8270	
108394,106445	3 & 4-Methylphenol	ND	1700	ug/kg dry	1	06/16/14	B4F0915	8270	
99-09-2	3-Nitroaniline	ND	1300	ug/kg dry	1	06/16/14	B4F0915	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
7005-72-3	4-Chlorodiphenylether	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
100-01-6	4-Nitroaniline	ND	1300	ug/kg dry	1	06/16/14	B4F0915	8270	
100-02-7	4-Nitrophenol	ND	4300	ug/kg dry	1	06/16/14	B4F0915	8270	
83-32-9	Acenaphthene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
208-96-8	Acenaphthylene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
120-12-7	Anthracene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
103-33-3	Azobenzene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
56-55-3	Benz[a]anthracene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
50-32-8	Benzo[a]pyrene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
205-99-2	Benzo[b]fluoranthene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
191-24-2	Benzo[g,h,i]perylene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
207-08-9	Benzo[k]fluoranthene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
100-51-6	Benzyl Alcohol	ND	6300	ug/kg dry	1	06/16/14	B4F0915	8270	A05
111-91-1	Bis(2-chloroethoxy)methane	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	A05
117-81-7	Bis(2-ethylhexyl)phthalate	ND	630	ug/kg dry	1	06/16/14	B4F0915	8270	
85-68-7	Butyl benzyl phthalate	ND	630	ug/kg dry	1	06/16/14	B4F0915	8270	
86-74-8	Carbazole	ND	630	ug/kg dry	1	06/16/14	B4F0915	8270	
218-01-9	Chrysene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
53-70-3	Dibenz[a,h]anthracene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
132-64-9	Dibenzofuran	ND	630	ug/kg dry	1	06/16/14	B4F0915	8270	

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Client ID: C-SB-01

Lab ID: 1406007-01

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
84-66-2	Diethylphthalate	ND	630	ug/kg dry	1	06/16/14	B4F0915	8270	
131-11-3	Dimethyl phthalate	ND	630	ug/kg dry	1	06/16/14	B4F0915	8270	
84-74-2	Di-n-butyl phthalate	ND	630	ug/kg dry	1	06/16/14	B4F0915	8270	
117-84-0	Di-n-octyl phthalate	ND	630	ug/kg dry	1	06/16/14	B4F0915	8270	
206-44-0	Fluoranthene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
86-73-7	Fluorene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
118-74-1	Hexachlorobenzene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
87-68-3	Hexachlorobutadiene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
77-47-4	Hexachlorocyclopentadiene	ND	2500	ug/kg dry	1	06/16/14	B4F0915	8270	
67-72-1	Hexachloroethane	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
78-59-1	Isophorone	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
91-20-3	Naphthalene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
98-95-3	Nitrobenzene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
67-75-9	N-Nitrosodimethylamine	ND	630	ug/kg dry	1	06/16/14	B4F0915	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
[illegible]5	N-Nitrosodiphenylamine	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
87-86-5	Pentachlorophenol	ND	4300	ug/kg dry	1	06/16/14	B4F0915	8270	
85-01-8	Phenanthrene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
108-95-2	Phenol	ND	830	ug/kg dry	1	06/16/14	B4F0915	8270	
129-00-0	Pyrene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
Surrogate: 2,4,6-Tribromophenol			*65.5 %*	*20.3-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: 2-Fluorobiphenyl			*67.5 %*	*32.9-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: 2-Fluorophenol			*40.9 %*	*23.7-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: Nitrobenzene-d5			*49.5 %*	*31.8-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: Phenol-d6			*48.1 %*	*29.3-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: p-Terphenyl-d14			*71.7 %*	*38.5-115*		*06/16/14*	B4F0915	*8270*	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Pesticides									
789-02-6	2,4'-DDT	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-54-8	4,4'-DDD	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-55-9	4,4'-DDE	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
50-29-3	4,4'-DDT	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-84-6	a-BHC	ND	13	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
5103-71-9	a-Chlordane	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
309-00-2	Aldrin	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-85-7	b-BHC	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-86-8	d-BHC	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
60-57-1	Dieldrin	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
959-98-8	Endosulfan I	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
33213-65-9	Endosulfan II	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
1031-07-8	Endosulfan sulfate	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-20-8	Endrin	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
7421-93-4	Endrin aldehyde	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
53494-70-5	Endrin ketone	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
58-89-9	g-BHC (Lindane)	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
5103-74-2	g-Chlordane	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
76-44-8	Heptachlor	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
1024-57-3	Heptachlor epoxide	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
87-82-1	Hexabromobenzene	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-43-5	Methoxychlor	ND	63	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
2385-85-5	Mirex	ND	63	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
59080-40-9	PBB (BP-6)	ND	310	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
8001-35-2	Toxaphene	ND	210	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*79.8 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*50.6 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	

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Organics-PCBs as Aroclors									
12674-11-2	Aroclor 1016	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11104-28-2	Aroclor 1221	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11141-16-5	Aroclor 1232	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
53469-21-9	Aroclor 1242	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
12672-29-6	Aroclor 1248	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11097-69-1	Aroclor 1254	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11096-82-5	Aroclor 1260	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
37324-23-5	Aroclor 1262	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11100-14-4	Aroclor 1268	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*89.0 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*53.7 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Inorganics-General Chemistry									
TS	**% Total Solids**	**80.0**	0.1	%	1	06/03/14	B4F0319	2540 B	
57-12-5	Total Cyanide	ND	0.13	mg/kg dry	1	06/12/14	B4F1005	ASTM D 7511-09	
Inorganics-Metals									
7440-36-0	**Antimony**	**0.4**	0.3	mg/kg dry	10	06/18/14	B4F0904	6020/200.8	
7440-38-2	**Arsenic**	**15**	0.5	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-39-3	**Barium**	**60**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-41-7	**Beryllium**	**0.6**	0.2	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-43-9	Cadmium	ND	0.2	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-47-3	**Chromium**	**19**	2.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-48-4	**Cobalt**	**8.2**	0.5	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-50-8	**Copper**	**22**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7439-89-6	**Iron**	**37000**	5.0	mg/kg dry	10	06/19/14	B4F0901	6010/200.7	A09
7439-92-1	**Lead**	**11**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7439-96-5	**Manganese**	**190**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7439-97-6	Mercury	ND	0.06	mg/kg dry	1	06/19/14	B4F1721	7471/245.5	
7439-98-7	**Molybdenum**	**3.0**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-02-0	**Nickel**	**23**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7782-49-2	**Selenium**	**0.3**	0.2	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-22-4	Silver	ND	0.1	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-28-0	Thallium	ND	0.5	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-62-2	**Vanadium**	**32**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-66-6	**Zinc**	**49**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	

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Client ID: C-SB-02

Lab ID: 1406007-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
71-55-6	1,1,1-Trichloroethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
79-00-5	1,1,2-Trichloroethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
75-34-3	1,1-Dichloroethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
75-35-4	1,1-Dichloroethylene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
96-18-4	1,2,3-Trichloropropane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
106-93-4	1,2-Dibromoethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
95-50-1	1,2-Dichlorobenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
107-06-2	1,2-Dichloroethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
78-87-5	1,2-Dichloropropane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
541-73-1	1,3-Dichlorobenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
106-46-7	1,4-Dichlorobenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
78-93-3	2-Butanone (MEK)	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
591-78-6	2-Hexanone	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
91-57-6	2-Methylnaphthalene	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	X
67-64-1	2-Propanone (acetone)	ND	1400	ug/kg dry	50	06/06/14	B4F1719	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
107-13-1	Acrylonitrile	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
71-43-2	Benzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
108-86-1	Bromobenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
74-97-5	Bromochloromethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
75-27-4	Bromodichloromethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
75-25-2	Bromoform	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
74-83-9	Bromomethane	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
75-15-0	Carbon disulfide	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
56-23-5	Carbon tetrachloride	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
108-90-7	Chlorobenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
75-00-3	Chloroethane	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
67-66-3	Chloroform	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
74-87-3	Chloromethane	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
110-82-7	Cyclohexane	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
124-48-1	Dibromochloromethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	

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Organics-Volatiles									
74-95-3	Dibromomethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
75-71-8	Dichlorodifluoromethane	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	A05
60-29-7	Diethyl ether	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	A05
108-20-3	Diisopropyl Ether	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
100-41-4	Ethylbenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
637-92-3	Ethyltertiarybutylether	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
67-72-1	Hexachloroethane	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
98-82-8	Isopropylbenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
1330-20-7	m & p - Xylene	ND	140	ug/kg dry	50	06/06/14	B4F1719	8260	
74-88-4	Methyl iodide	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	A05
75-09-2	Methylene chloride	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
1634-04-4	Methyltertiarybutylether	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
91-20-3	Naphthalene	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	X
104-51-8	n-Butylbenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
103-65-1	n-Propylbenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
95-47-6	o-Xylene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
6	p-Isopropyl toluene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
135-98-8	sec-Butylbenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
100-42-5	Styrene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
98-06-6	tert-Butylbenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
75-65-0	tertiary Butyl Alcohol	ND	3500	ug/kg dry	50	06/06/14	B4F1719	8260	
994-05-8	tertiaryAmylmethylether	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
127-18-4	Tetrachloroethylene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
109-99-9	Tetrahydrofuran	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
108-88-3	Toluene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
79-01-6	Trichloroethylene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
75-69-4	Trichlorofluoromethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
75-01-4	Vinyl chloride	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
Surrogate: Bromofluorobenzene			*106 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Dibromofluoromethane			*110 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Toluene-d8			*112 %*	*50-150*		*06/06/14*	B4F1719	*8260*	

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Client ID: C-SB-02

Lab ID: 1406007-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
120-82-1	1,2,4-Trichlorobenzene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
95-95-4	2,4,5-Trichlorophenol	ND	780	ug/kg dry	1	06/16/14	B4F0915	8270	
88-06-2	2,4,6-Trichlorophenol	ND	780	ug/kg dry	1	06/16/14	B4F0915	8270	
120-83-2	2,4-Dichlorophenol	ND	780	ug/kg dry	1	06/16/14	B4F0915	8270	
105-67-9	2,4-Dimethylphenol	ND	780	ug/kg dry	1	06/16/14	B4F0915	8270	
51-28-5	2,4-Dinitrophenol	ND	4000	ug/kg dry	1	06/16/14	B4F0915	8270	
121-14-2	2,4-Dinitrotoluene	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
606-20-2	2,6-Dinitrotoluene	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
91-58-7	2-Chloronaphthalene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
95-57-8	2-Chlorophenol	ND	780	ug/kg dry	1	06/16/14	B4F0915	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	4000	ug/kg dry	1	06/16/14	B4F0915	8270	
91-57-6	2-Methylnaphthalene	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	780	ug/kg dry	1	06/16/14	B4F0915	8270	
88-74-4	2-Nitroaniline	ND	1200	ug/kg dry	1	06/16/14	B4F0915	8270	
88-75-5	2-Nitrophenol	ND	780	ug/kg dry	1	06/16/14	B4F0915	8270	
108394,106445	3 & 4-Methylphenol	ND	1600	ug/kg dry	1	06/16/14	B4F0915	8270	
99-09-2	3-Nitroaniline	ND	1200	ug/kg dry	1	06/16/14	B4F0915	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
7005-72-3	4-Chlorodiphenylether	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
100-01-6	4-Nitroaniline	ND	1200	ug/kg dry	1	06/16/14	B4F0915	8270	
100-02-7	4-Nitrophenol	ND	4000	ug/kg dry	1	06/16/14	B4F0915	8270	
83-32-9	Acenaphthene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
208-96-8	Acenaphthylene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
120-12-7	Anthracene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
103-33-3	Azobenzene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
56-55-3	Benz[a]anthracene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
50-32-8	Benzo[a]pyrene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
205-99-2	Benzo[b]fluoranthene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
191-24-2	Benzo[g,h,i]perylene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
207-08-9	Benzo[k]fluoranthene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
100-51-6	Benzyl Alcohol	ND	5900	ug/kg dry	1	06/16/14	B4F0915	8270	A05
111-91-1	Bis(2-chloroethoxy)methane	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	A05
117-81-7	Bis(2-ethylhexyl)phthalate	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
85-68-7	Butyl benzyl phthalate	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
86-74-8	Carbazole	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
218-01-9	Chrysene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
53-70-3	Dibenz[a,h]anthracene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
132-64-9	Dibenzofuran	ND	590	ug/kg dry	1	06/16/14	B4F0915	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: C-SB-02

Lab ID: 1406007-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
84-66-2	Diethylphthalate	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
131-11-3	Dimethyl phthalate	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
84-74-2	Di-n-butyl phthalate	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
117-84-0	Di-n-octyl phthalate	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
206-44-0	Fluoranthene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
86-73-7	Fluorene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
118-74-1	Hexachlorobenzene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
87-68-3	Hexachlorobutadiene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
77-47-4	Hexachlorocyclopentadiene	ND	2400	ug/kg dry	1	06/16/14	B4F0915	8270	
67-72-1	Hexachloroethane	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
78-59-1	Isophorone	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
91-20-3	Naphthalene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
98-95-3	Nitrobenzene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
67-75-9	N-Nitrosodimethylamine	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
5	N-Nitrosodiphenylamine	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
87-86-5	Pentachlorophenol	ND	4000	ug/kg dry	1	06/16/14	B4F0915	8270	
85-01-8	Phenanthrene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
108-95-2	Phenol	ND	780	ug/kg dry	1	06/16/14	B4F0915	8270	
129-00-0	Pyrene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
Surrogate: 2,4,6-Tribromophenol			*84.3 %*	*20.3-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: 2-Fluorobiphenyl			*78.7 %*	*32.9-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: 2-Fluorophenol			*48.5 %*	*23.7-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: Nitrobenzene-d5			*59.8 %*	*31.8-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: Phenol-d6			*56.1 %*	*29.3-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: p-Terphenyl-d14			*84.8 %*	*38.5-115*		*06/16/14*	B4F0915	*8270*	

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Lab ID: 1406007-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Pesticides									
789-02-6	2,4'-DDT	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-54-8	4,4'-DDD	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-55-9	4,4'-DDE	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
50-29-3	4,4'-DDT	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-84-6	a-BHC	ND	12	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
5103-71-9	a-Chlordane	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
309-00-2	Aldrin	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-85-7	b-BHC	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-86-8	d-BHC	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
60-57-1	Dieldrin	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
959-98-8	Endosulfan I	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
33213-65-9	Endosulfan II	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
1031-07-8	Endosulfan sulfate	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-20-8	Endrin	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
7421-93-4	Endrin aldehyde	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
53494-70-5	Endrin ketone	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
58-89-9	g-BHC (Lindane)	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
5103-74-2	g-Chlordane	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
76-44-8	Heptachlor	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
1024-57-3	Heptachlor epoxide	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
87-82-1	Hexabromobenzene	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-43-5	Methoxychlor	ND	59	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
2385-85-5	Mirex	ND	59	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
59080-40-9	PBB (BP-6)	ND	300	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
8001-35-2	Toxaphene	ND	200	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*78.4 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*54.9 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	

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

Client ID: C-SB-02

Lab ID: 1406007-02

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-PCBs as Aroclors									
12674-11-2	Aroclor 1016	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11104-28-2	Aroclor 1221	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11141-16-5	Aroclor 1232	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
53469-21-9	Aroclor 1242	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
12672-29-6	Aroclor 1248	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11097-69-1	Aroclor 1254	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11096-82-5	Aroclor 1260	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
37324-23-5	Aroclor 1262	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11100-14-4	Aroclor 1268	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*87.5 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*58.7 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Inorganics-General Chemistry									
TS	**% Total Solids**	**84.4**	0.1	%	1	06/03/14	B4F0319	2540 B	
57-12-5	Total Cyanide	ND	0.12	mg/kg dry	1	06/12/14	B4F1005	ASTM D 7511-09	
Inorganics-Metals									
7440-36-0	Antimony	ND	0.3	mg/kg dry	10	06/18/14	B4F0904	6020/200.8	
7440-38-2	**Arsenic**	**2.4**	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-39-3	**Barium**	**49**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-41-7	**Beryllium**	**0.4**	0.2	mg/kg dry	10	06/19/14	B4F0902	6020/200.8	
7440-43-9	Cadmium	ND	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-47-3	**Chromium**	**13**	2.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-48-4	**Cobalt**	**4.8**	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-50-8	**Copper**	**5.7**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-89-6	**Iron**	**13000**	5.0	mg/kg dry	10	06/23/14	B4F0902	6010/200.7	
7439-92-1	**Lead**	**5.7**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-96-5	**Manganese**	**110**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-97-6	Mercury	ND	0.06	mg/kg dry	1	06/19/14	B4F1721	7471/245.5	
7439-98-7	**Molybdenum**	**1.1**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-02-0	**Nickel**	**11**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7782-49-2	**Selenium**	**0.2**	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-22-4	Silver	ND	0.1	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-28-0	Thallium	ND	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-62-2	**Vanadium**	**18**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-66-6	**Zinc**	**27**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	

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

Client ID: C-SB-02-DUP

Lab ID: 1406007-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									**See note Y26**
630-20-6	1,1,1,2-Tetrachloroethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
71-55-6	1,1,1-Trichloroethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
79-00-5	1,1,2-Trichloroethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
75-34-3	1,1-Dichloroethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
75-35-4	1,1-Dichloroethylene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
96-18-4	1,2,3-Trichloropropane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
106-93-4	1,2-Dibromoethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
95-50-1	1,2-Dichlorobenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
107-06-2	1,2-Dichloroethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
78-87-5	1,2-Dichloropropane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
541-73-1	1,3-Dichlorobenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
106-46-7	1,4-Dichlorobenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
78-93-3	2-Butanone (MEK)	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
591-78-6	2-Hexanone	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
91-57-6	2-Methylnaphthalene	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	X
67-64-1	2-Propanone (acetone)	ND	1400	ug/kg dry	50	06/06/14	B4F1719	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
107-13-1	Acrylonitrile	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
71-43-2	Benzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
108-86-1	Bromobenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
74-97-5	Bromochloromethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
75-27-4	Bromodichloromethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
75-25-2	Bromoform	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
74-83-9	Bromomethane	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
75-15-0	Carbon disulfide	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
56-23-5	Carbon tetrachloride	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
108-90-7	Chlorobenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
75-00-3	Chloroethane	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
67-66-3	Chloroform	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
74-87-3	Chloromethane	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
110-82-7	Cyclohexane	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
124-48-1	Dibromochloromethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	

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ENVIRONMENTAL LABORATORY

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

Client ID: C-SB-02-DUP

Lab ID: 1406007-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									**See note Y26**
74-95-3	Dibromomethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
75-71-8	Dichlorodifluoromethane	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	A05
60-29-7	Diethyl ether	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	A05
108-20-3	Diisopropyl Ether	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
100-41-4	Ethylbenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
637-92-3	Ethyltertiarybutylether	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
67-72-1	Hexachloroethane	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
98-82-8	Isopropylbenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
1330-20-7	m & p - Xylene	ND	140	ug/kg dry	50	06/06/14	B4F1719	8260	
74-88-4	Methyl iodide	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	A05
75-09-2	Methylene chloride	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
1634-04-4	Methyltertiarybutylether	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
91-20-3	Naphthalene	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	X
104-51-8	n-Butylbenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
103-65-1	n-Propylbenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
95-47-6	o-Xylene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
[illegible]5	p-Isopropyl toluene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
135-98-8	sec-Butylbenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
100-42-5	Styrene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
98-06-6	tert-Butylbenzene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
75-65-0	tertiary Butyl Alcohol	ND	3500	ug/kg dry	50	06/06/14	B4F1719	8260	
994-05-8	tertiaryAmylmethylether	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
127-18-4	Tetrachloroethylene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
109-99-9	Tetrahydrofuran	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
108-88-3	Toluene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	350	ug/kg dry	50	06/06/14	B4F1719	8260	
79-01-6	Trichloroethylene	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
75-69-4	Trichlorofluoromethane	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
75-01-4	Vinyl chloride	ND	71	ug/kg dry	50	06/06/14	B4F1719	8260	
Surrogate: Bromofluorobenzene			*94.6 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Dibromofluoromethane			*95.1 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Toluene-d8			*94.7 %*	*50-150*		*06/06/14*	B4F1719	*8260*	

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Client ID: C-SB-02-DUP

Lab ID: 1406007-03

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
120-82-1	1,2,4-Trichlorobenzene	ND	490	ug/kg dry	1	06/16/14	B4F0915	8270	
95-95-4	2,4,5-Trichlorophenol	ND	800	ug/kg dry	1	06/16/14	B4F0915	8270	
88-06-2	2,4,6-Trichlorophenol	ND	800	ug/kg dry	1	06/16/14	B4F0915	8270	
120-83-2	2,4-Dichlorophenol	ND	800	ug/kg dry	1	06/16/14	B4F0915	8270	
105-67-9	2,4-Dimethylphenol	ND	800	ug/kg dry	1	06/16/14	B4F0915	8270	
51-28-5	2,4-Dinitrophenol	ND	4100	ug/kg dry	1	06/16/14	B4F0915	8270	
121-14-2	2,4-Dinitrotoluene	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
606-20-2	2,6-Dinitrotoluene	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
91-58-7	2-Chloronaphthalene	ND	490	ug/kg dry	1	06/16/14	B4F0915	8270	
95-57-8	2-Chlorophenol	ND	800	ug/kg dry	1	06/16/14	B4F0915	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	4100	ug/kg dry	1	06/16/14	B4F0915	8270	
91-57-6	2-Methylnaphthalene	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	800	ug/kg dry	1	06/16/14	B4F0915	8270	
88-74-4	2-Nitroaniline	ND	1200	ug/kg dry	1	06/16/14	B4F0915	8270	
88-75-5	2-Nitrophenol	ND	800	ug/kg dry	1	06/16/14	B4F0915	8270	
108394,106445	3 & 4-Methylphenol	ND	1600	ug/kg dry	1	06/16/14	B4F0915	8270	
99-09-2	3-Nitroaniline	ND	1200	ug/kg dry	1	06/16/14	B4F0915	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	490	ug/kg dry	1	06/16/14	B4F0915	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	490	ug/kg dry	1	06/16/14	B4F0915	8270	
7005-72-3	4-Chlorodiphenylether	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
100-01-6	4-Nitroaniline	ND	1200	ug/kg dry	1	06/16/14	B4F0915	8270	
100-02-7	4-Nitrophenol	ND	4100	ug/kg dry	1	06/16/14	B4F0915	8270	
83-32-9	Acenaphthene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
208-96-8	Acenaphthylene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
120-12-7	Anthracene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
103-33-3	Azobenzene	ND	490	ug/kg dry	1	06/16/14	B4F0915	8270	
56-55-3	Benz[a]anthracene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
50-32-8	Benzo[a]pyrene	ND	490	ug/kg dry	1	06/16/14	B4F0915	8270	
205-99-2	Benzo[b]fluoranthene	ND	490	ug/kg dry	1	06/16/14	B4F0915	8270	
191-24-2	Benzo[g,h,i]perylene	ND	490	ug/kg dry	1	06/16/14	B4F0915	8270	
207-08-9	Benzo[k]fluoranthene	ND	490	ug/kg dry	1	06/16/14	B4F0915	8270	
100-51-6	Benzyl Alcohol	ND	6100	ug/kg dry	1	06/16/14	B4F0915	8270	A05
111-91-1	Bis(2-chloroethoxy)methane	ND	490	ug/kg dry	1	06/16/14	B4F0915	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	A05
117-81-7	Bis(2-ethylhexyl)phthalate	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
85-68-7	Butyl benzyl phthalate	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
86-74-8	Carbazole	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
218-01-9	Chrysene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
53-70-3	Dibenz[a,h]anthracene	ND	490	ug/kg dry	1	06/16/14	B4F0915	8270	
132-64-9	Dibenzofuran	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
84-66-2	Diethylphthalate	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
131-11-3	Dimethyl phthalate	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
84-74-2	Di-n-butyl phthalate	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
117-84-0	Di-n-octyl phthalate	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
206-44-0	Fluoranthene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
86-73-7	Fluorene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
118-74-1	Hexachlorobenzene	ND	490	ug/kg dry	1	06/16/14	B4F0915	8270	
87-68-3	Hexachlorobutadiene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
77-47-4	Hexachlorocyclopentadiene	ND	2400	ug/kg dry	1	06/16/14	B4F0915	8270	
67-72-1	Hexachloroethane	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	490	ug/kg dry	1	06/16/14	B4F0915	8270	
78-59-1	Isophorone	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
91-20-3	Naphthalene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
98-95-3	Nitrobenzene	ND	490	ug/kg dry	1	06/16/14	B4F0915	8270	
67-75-9	N-Nitrosodimethylamine	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	490	ug/kg dry	1	06/16/14	B4F0915	8270	
[illegible]5	N-Nitrosodiphenylamine	ND	490	ug/kg dry	1	06/16/14	B4F0915	8270	
87-86-5	Pentachlorophenol	ND	4100	ug/kg dry	1	06/16/14	B4F0915	8270	
85-01-8	Phenanthrene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
108-95-2	Phenol	ND	800	ug/kg dry	1	06/16/14	B4F0915	8270	
129-00-0	Pyrene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
Surrogate: 2,4,6-Tribromophenol			*70.7 %*	*20.3-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: 2-Fluorobiphenyl			*64.2 %*	*32.9-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: 2-Fluorophenol			*41.3 %*	*23.7-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: Nitrobenzene-d5			*49.7 %*	*31.8-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: Phenol-d6			*47.8 %*	*29.3-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: p-Terphenyl-d14			*70.8 %*	*38.5-115*		*06/16/14*	B4F0915	*8270*	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Pesticides									
789-02-6	2,4'-DDT	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-54-8	4,4'-DDD	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-55-9	4,4'-DDE	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
50-29-3	4,4'-DDT	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-84-6	a-BHC	ND	12	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
5103-71-9	a-Chlordane	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
309-00-2	Aldrin	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-85-7	b-BHC	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-86-8	d-BHC	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
60-57-1	Dieldrin	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
959-98-8	Endosulfan I	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
33213-65-9	Endosulfan II	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
1031-07-8	Endosulfan sulfate	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-20-8	Endrin	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
7421-93-4	Endrin aldehyde	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
53494-70-5	Endrin ketone	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
58-89-9	g-BHC (Lindane)	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
5103-74-2	g-Chlordane	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
76-44-8	Heptachlor	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
1024-57-3	Heptachlor epoxide	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
87-82-1	Hexabromobenzene	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-43-5	Methoxychlor	ND	61	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
2385-85-5	Mirex	ND	61	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
59080-40-9	PBB (BP-6)	ND	300	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
8001-35-2	Toxaphene	ND	210	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*70.3 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*49.2 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	

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Organics-PCBs as Aroclors									
12674-11-2	Aroclor 1016	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11104-28-2	Aroclor 1221	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11141-16-5	Aroclor 1232	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
53469-21-9	Aroclor 1242	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
12672-29-6	Aroclor 1248	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11097-69-1	Aroclor 1254	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11096-82-5	Aroclor 1260	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
37324-23-5	Aroclor 1262	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11100-14-4	Aroclor 1268	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*78.8 %*		*30-150*	*06/15/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*52.3 %*		*30-150*	*06/15/14*	B4F0618	*8081/8082*	
Inorganics-General Chemistry									
TS	**% Total Solids**	**82.3**	0.1	%	1	06/03/14	B4F0319	2540 B	
57-12-5	Total Cyanide	ND	0.12	mg/kg dry	1	06/12/14	B4F1005	ASTM D 7511-09	
Inorganics-Metals									
7440-36-0	Antimony	ND	0.3	mg/kg dry	10	06/18/14	B4F0904	6020/200.8	
7440-38-2	**Arsenic**	**4.7**	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-39-3	**Barium**	**54**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-41-7	**Beryllium**	**0.6**	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-43-9	Cadmium	ND	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-47-3	**Chromium**	**15**	2.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-48-4	**Cobalt**	**7.0**	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-50-8	**Copper**	**13**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-89-6	**Iron**	**20000**	5.0	mg/kg dry	10	06/23/14	B4F0902	6010/200.7	
7439-92-1	**Lead**	**7.0**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-96-5	**Manganese**	**150**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-97-6	Mercury	ND	0.06	mg/kg dry	1	06/19/14	B4F1721	7471/245.5	
7439-98-7	**Molybdenum**	**2.5**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-02-0	**Nickel**	**16**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7782-49-2	**Selenium**	**0.2**	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-22-4	Silver	ND	0.1	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-28-0	Thallium	ND	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-62-2	**Vanadium**	**24**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-66-6	**Zinc**	**36**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	

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Client ID: C-SB-03

Lab ID: 1406007-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
71-55-6	1,1,1-Trichloroethane	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
79-00-5	1,1,2-Trichloroethane	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-34-3	1,1-Dichloroethane	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-35-4	1,1-Dichloroethylene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	
96-18-4	1,2,3-Trichloropropane	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	
106-93-4	1,2-Dibromoethane	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
95-50-1	1,2-Dichlorobenzene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
107-06-2	1,2-Dichloroethane	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
78-87-5	1,2-Dichloropropane	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
541-73-1	1,3-Dichlorobenzene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
106-46-7	1,4-Dichlorobenzene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
78-93-3	2-Butanone (MEK)	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	
591-78-6	2-Hexanone	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	
91-57-6	2-Methylnaphthalene	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	X
67-64-1	2-Propanone (acetone)	ND	1300	ug/kg dry	50	06/06/14	B4F1719	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	
107-13-1	Acrylonitrile	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	
71-43-2	Benzene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
108-86-1	Bromobenzene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
74-97-5	Bromochloromethane	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-27-4	Bromodichloromethane	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-25-2	Bromoform	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
74-83-9	Bromomethane	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	
75-15-0	Carbon disulfide	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
56-23-5	Carbon tetrachloride	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
108-90-7	Chlorobenzene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-00-3	Chloroethane	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	
67-66-3	Chloroform	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
74-87-3	Chloromethane	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
110-82-7	Cyclohexane	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	
124-48-1	Dibromochloromethane	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	

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Lab ID: 1406007-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-71-8	Dichlorodifluoromethane	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	A05
60-29-7	Diethyl ether	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	A05
108-20-3	Diisopropyl Ether	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	
100-41-4	Ethylbenzene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
637-92-3	Ethyltertiarybutylether	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	
67-72-1	Hexachloroethane	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	
98-82-8	Isopropylbenzene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
1330-20-7	m & p - Xylene	ND	130	ug/kg dry	50	06/06/14	B4F1719	8260	
74-88-4	Methyl iodide	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	A05
75-09-2	Methylene chloride	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	
1634-04-4	Methyltertiarybutylether	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
91-20-3	Naphthalene	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	X
104-51-8	n-Butylbenzene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
103-65-1	n-Propylbenzene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
95-47-6	o-Xylene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
[illegible]6	p-Isopropyl toluene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
135-98-8	sec-Butylbenzene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
100-42-5	Styrene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
98-06-6	tert-Butylbenzene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-65-0	tertiary Butyl Alcohol	ND	3300	ug/kg dry	50	06/06/14	B4F1719	8260	
994-05-8	tertiaryAmylmethylether	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	
127-18-4	Tetrachloroethylene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
109-99-9	Tetrahydrofuran	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	
108-88-3	Toluene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	330	ug/kg dry	50	06/06/14	B4F1719	8260	
79-01-6	Trichloroethylene	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-69-4	Trichlorofluoromethane	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-01-4	Vinyl chloride	ND	66	ug/kg dry	50	06/06/14	B4F1719	8260	
Surrogate: Bromofluorobenzene			*116 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Dibromofluoromethane			*119 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Toluene-d8			*117 %*	*50-150*		*06/06/14*	B4F1719	*8260*	

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Lab ID: 1406007-04

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
120-82-1	1,2,4-Trichlorobenzene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
95-95-4	2,4,5-Trichlorophenol	ND	770	ug/kg dry	1	06/16/14	B4F0915	8270	
88-06-2	2,4,6-Trichlorophenol	ND	770	ug/kg dry	1	06/16/14	B4F0915	8270	
120-83-2	2,4-Dichlorophenol	ND	770	ug/kg dry	1	06/16/14	B4F0915	8270	
105-67-9	2,4-Dimethylphenol	ND	770	ug/kg dry	1	06/16/14	B4F0915	8270	
51-28-5	2,4-Dinitrophenol	ND	4000	ug/kg dry	1	06/16/14	B4F0915	8270	
121-14-2	2,4-Dinitrotoluene	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
606-20-2	2,6-Dinitrotoluene	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
91-58-7	2-Chloronaphthalene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
95-57-8	2-Chlorophenol	ND	770	ug/kg dry	1	06/16/14	B4F0915	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	4000	ug/kg dry	1	06/16/14	B4F0915	8270	
91-57-6	2-Methylnaphthalene	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	770	ug/kg dry	1	06/16/14	B4F0915	8270	
88-74-4	2-Nitroaniline	ND	1200	ug/kg dry	1	06/16/14	B4F0915	8270	
88-75-5	2-Nitrophenol	ND	770	ug/kg dry	1	06/16/14	B4F0915	8270	
108394,106445	3 & 4-Methylphenol	ND	1500	ug/kg dry	1	06/16/14	B4F0915	8270	
99-09-2	3-Nitroaniline	ND	1200	ug/kg dry	1	06/16/14	B4F0915	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
7005-72-3	4-Chlorodiphenylether	ND	230	ug/kg dry	1	06/16/14	B4F0915	8270	
100-01-6	4-Nitroaniline	ND	1200	ug/kg dry	1	06/16/14	B4F0915	8270	
100-02-7	4-Nitrophenol	ND	4000	ug/kg dry	1	06/16/14	B4F0915	8270	
83-32-9	Acenaphthene	ND	230	ug/kg dry	1	06/16/14	B4F0915	8270	
208-96-8	Acenaphthylene	ND	230	ug/kg dry	1	06/16/14	B4F0915	8270	
120-12-7	Anthracene	ND	230	ug/kg dry	1	06/16/14	B4F0915	8270	
103-33-3	Azobenzene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
56-55-3	Benz[a]anthracene	ND	230	ug/kg dry	1	06/16/14	B4F0915	8270	
50-32-8	Benzo[a]pyrene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
205-99-2	Benzo[b]fluoranthene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
191-24-2	Benzo[g,h,i]perylene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
207-08-9	Benzo[k]fluoranthene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
100-51-6	Benzyl Alcohol	ND	5900	ug/kg dry	1	06/16/14	B4F0915	8270	A05
111-91-1	Bis(2-chloroethoxy)methane	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	230	ug/kg dry	1	06/16/14	B4F0915	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	230	ug/kg dry	1	06/16/14	B4F0915	8270	A05
117-81-7	Bis(2-ethylhexyl)phthalate	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
85-68-7	Butyl benzyl phthalate	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
86-74-8	Carbazole	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
218-01-9	Chrysene	ND	230	ug/kg dry	1	06/16/14	B4F0915	8270	
53-70-3	Dibenz[a,h]anthracene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
132-64-9	Dibenzofuran	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
84-66-2	Diethylphthalate	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
131-11-3	Dimethyl phthalate	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
84-74-2	Di-n-butyl phthalate	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
117-84-0	Di-n-octyl phthalate	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
206-44-0	**Fluoranthene**	**300**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
86-73-7	Fluorene	ND	230	ug/kg dry	1	06/16/14	B4F0915	8270	
118-74-1	Hexachlorobenzene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
87-68-3	Hexachlorobutadiene	ND	230	ug/kg dry	1	06/16/14	B4F0915	8270	
77-47-4	Hexachlorocyclopentadiene	ND	2300	ug/kg dry	1	06/16/14	B4F0915	8270	
67-72-1	Hexachloroethane	ND	230	ug/kg dry	1	06/16/14	B4F0915	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
78-59-1	Isophorone	ND	230	ug/kg dry	1	06/16/14	B4F0915	8270	
91-20-3	Naphthalene	ND	230	ug/kg dry	1	06/16/14	B4F0915	8270	
98-95-3	Nitrobenzene	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
67-75-9	N-Nitrosodimethylamine	ND	590	ug/kg dry	1	06/16/14	B4F0915	8270	
[illegible]64-7	N-Nitrosodi-n-propylamine	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
[illegible]6	N-Nitrosodiphenylamine	ND	470	ug/kg dry	1	06/16/14	B4F0915	8270	
87-86-5	Pentachlorophenol	ND	4000	ug/kg dry	1	06/16/14	B4F0915	8270	
85-01-8	Phenanthrene	ND	230	ug/kg dry	1	06/16/14	B4F0915	8270	
108-95-2	Phenol	ND	770	ug/kg dry	1	06/16/14	B4F0915	8270	
129-00-0	Pyrene	ND	230	ug/kg dry	1	06/16/14	B4F0915	8270	
Surrogate: 2,4,6-Tribromophenol			*74.7 %*	*20.3-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: 2-Fluorobiphenyl			*76.6 %*	*32.9-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: 2-Fluorophenol			*50.4 %*	*23.7-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: Nitrobenzene-d5			*59.5 %*	*31.8-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: Phenol-d6			*57.9 %*	*29.3-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: p-Terphenyl-d14			*76.8 %*	*38.5-115*		*06/16/14*	B4F0915	*8270*	

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Organics-Pesticides									
789-02-6	2,4'-DDT	ND	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
72-54-8	4,4'-DDD	ND	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
72-55-9	4,4'-DDE	ND	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
50-29-3	4,4'-DDT	ND	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
319-84-6	a-BHC	ND	12	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
5103-71-9	a-Chlordane	ND	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
309-00-2	Aldrin	ND	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
319-85-7	b-BHC	ND	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
319-86-8	d-BHC	ND	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
60-57-1	Dieldrin	ND	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
959-98-8	Endosulfan I	ND	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
33213-65-9	Endosulfan II	ND	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
1031-07-8	Endosulfan sulfate	ND	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
72-20-8	Endrin	ND	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
7421-93-4	Endrin aldehyde	ND	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
53494-70-5	Endrin ketone	ND	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
58-89-9	g-BHC (Lindane)	ND	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
5103-74-2	g-Chlordane	ND	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
76-44-8	Heptachlor	ND	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
1024-57-3	Heptachlor epoxide	ND	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
87-82-1	Hexabromobenzene	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
72-43-5	Methoxychlor	ND	59	ug/kg dry	1	06/14/14	B4F0618	8081/8082	A03
2385-85-5	Mirex	ND	59	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
59080-40-9	PBB (BP-6)	ND	290	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
8001-35-2	Toxaphene	ND	200	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*60.9 %*	*30-150*		*06/14/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*60.0 %*	*30-150*		*06/14/14*	B4F0618	*8081/8082*	

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Organics-PCBs as Aroclors									
12674-11-2	Aroclor 1016	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
11104-28-2	Aroclor 1221	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
11141-16-5	Aroclor 1232	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
53469-21-9	Aroclor 1242	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
12672-29-6	Aroclor 1248	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
11097-69-1	Aroclor 1254	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
11096-82-5	Aroclor 1260	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
37324-23-5	Aroclor 1262	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
11100-14-4	Aroclor 1268	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl		*69.3 %*		*30-150*		*06/14/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene		*64.2 %*		*30-150*		*06/14/14*	B4F0618	*8081/8082*	
Inorganics-General Chemistry									
TS	**% Total Solids**	**85.3**	0.1	%	1	06/03/14	B4E0319	2540 B	
57-12-5	Total Cyanide	ND	0.12	mg/kg dry	1	06/12/14	B4F1005	ASTM D 7511-09	
Inorganics-Metals									
7440-36-0	Antimony	ND	0.3	mg/kg dry	10	06/18/14	B4F0904	6020/200.8	A05
7440-38-2	**Arsenic**	**2.4**	0.5	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-39-3	**Barium**	**18**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-41-7	Beryllium	ND	0.2	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-43-9	Cadmium	ND	0.2	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-47-3	**Chromium**	**5.8**	2.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-48-4	**Cobalt**	**2.4**	0.5	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-50-8	**Copper**	**4.6**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7439-89-6	**Iron**	**6900**	5.0	mg/kg dry	10	06/19/14	B4F0901	6010/200.7	A09, X3
7439-92-1	**Lead**	**6.6**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7439-96-5	**Manganese**	**120**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7439-97-6	**Mercury**	**0.1**	0.06	mg/kg dry	1	06/27/14	B4F2518	7471/245.5	
7439-98-7	Molybdenum	ND	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-02-0	**Nickel**	**5.9**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7782-49-2	Selenium	ND	0.2	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-22-4	Silver	ND	0.1	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-28-0	Thallium	ND	0.5	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-62-2	**Vanadium**	**9.1**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-66-6	**Zinc**	**22**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	

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Client ID: C-SB-04

Lab ID: 1406007-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									**See note Y26**
630-20-6	1,1,1,2-Tetrachloroethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
71-55-6	1,1,1-Trichloroethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
79-00-5	1,1,2-Trichloroethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-34-3	1,1-Dichloroethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-35-4	1,1-Dichloroethylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
96-18-4	1,2,3-Trichloropropane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
106-93-4	1,2-Dibromoethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
95-50-1	1,2-Dichlorobenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
107-06-2	1,2-Dichloroethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
78-87-5	1,2-Dichloropropane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
541-73-1	1,3-Dichlorobenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
106-46-7	1,4-Dichlorobenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
78-93-3	2-Butanone (MEK)	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
591-78-6	2-Hexanone	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
91-57-6	2-Methylnaphthalene	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	X
67-64-1	2-Propanone (acetone)	ND	1500	ug/kg dry	50	06/06/14	B4F1719	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
107-13-1	Acrylonitrile	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
71-43-2	Benzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
108-86-1	Bromobenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
74-97-5	Bromochloromethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-27-4	Bromodichloromethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-25-2	Bromoform	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
74-83-9	Bromomethane	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
75-15-0	Carbon disulfide	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
56-23-5	Carbon tetrachloride	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
108-90-7	Chlorobenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-00-3	Chloroethane	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
67-66-3	Chloroform	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
74-87-3	Chloromethane	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
110-82-7	Cyclohexane	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
124-48-1	Dibromochloromethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									**See note Y26**
74-95-3	Dibromomethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-71-8	Dichlorodifluoromethane	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	A05
60-29-7	Diethyl ether	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	A05
108-20-3	Diisopropyl Ether	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
100-41-4	Ethylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
637-92-3	Ethyltertiarybutylether	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
67-72-1	Hexachloroethane	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
98-82-8	Isopropylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
1330-20-7	m & p - Xylene	ND	150	ug/kg dry	50	06/06/14	B4F1719	8260	
74-88-4	Methyl iodide	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	A05
75-09-2	Methylene chloride	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
1634-04-4	Methyltertiarybutylether	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
91-20-3	Naphthalene	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	X
104-51-8	n-Butylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
103-65-1	n-Propylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
95-47-6	o-Xylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
[illegible]5	p-Isopropyl toluene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
135-98-8	sec-Butylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
100-42-5	Styrene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
98-06-6	tert-Butylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-65-0	tertiary Butyl Alcohol	ND	3800	ug/kg dry	50	06/06/14	B4F1719	8260	
994-05-8	tertiaryAmylmethylether	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
127-18-4	Tetrachloroethylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
109-99-9	Tetrahydrofuran	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
108-88-3	Toluene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
79-01-6	Trichloroethylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-69-4	Trichlorofluoromethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-01-4	Vinyl chloride	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
Surrogate: Bromofluorobenzene			*96.2 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Dibromofluoromethane			*99.6 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Toluene-d8			*100 %*	*50-150*		*06/06/14*	B4F1719	*8260*	

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Client ID: C-SB-04

Lab ID: 1406007-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
120-82-1	1,2,4-Trichlorobenzene	ND	510	ug/kg dry	1	06/16/14	B4F0915	8270	
95-95-4	2,4,5-Trichlorophenol	ND	850	ug/kg dry	1	06/16/14	B4F0915	8270	
88-06-2	2,4,6-Trichlorophenol	ND	850	ug/kg dry	1	06/16/14	B4F0915	8270	
120-83-2	2,4-Dichlorophenol	ND	850	ug/kg dry	1	06/16/14	B4F0915	8270	
105-67-9	2,4-Dimethylphenol	ND	850	ug/kg dry	1	06/16/14	B4F0915	8270	
51-28-5	2,4-Dinitrophenol	ND	4400	ug/kg dry	1	06/16/14	B4F0915	8270	
121-14-2	2,4-Dinitrotoluene	ND	640	ug/kg dry	1	06/16/14	B4F0915	8270	
606-20-2	2,6-Dinitrotoluene	ND	640	ug/kg dry	1	06/16/14	B4F0915	8270	
91-58-7	2-Chloronaphthalene	ND	510	ug/kg dry	1	06/16/14	B4F0915	8270	
95-57-8	2-Chlorophenol	ND	850	ug/kg dry	1	06/16/14	B4F0915	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	4400	ug/kg dry	1	06/16/14	B4F0915	8270	
91-57-6	2-Methylnaphthalene	ND	640	ug/kg dry	1	06/16/14	B4F0915	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	850	ug/kg dry	1	06/16/14	B4F0915	8270	
88-74-4	2-Nitroaniline	ND	1300	ug/kg dry	1	06/16/14	B4F0915	8270	
88-75-5	2-Nitrophenol	ND	850	ug/kg dry	1	06/16/14	B4F0915	8270	
108394,106445	3 & 4-Methylphenol	ND	1700	ug/kg dry	1	06/16/14	B4F0915	8270	
99-09-2	3-Nitroaniline	ND	1300	ug/kg dry	1	06/16/14	B4F0915	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	510	ug/kg dry	1	06/16/14	B4F0915	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	510	ug/kg dry	1	06/16/14	B4F0915	8270	
7005-72-3	4-Chlorodiphenylether	ND	260	ug/kg dry	1	06/16/14	B4F0915	8270	
100-01-6	4-Nitroaniline	ND	1300	ug/kg dry	1	06/16/14	B4F0915	8270	
100-02-7	4-Nitrophenol	ND	4400	ug/kg dry	1	06/16/14	B4F0915	8270	
83-32-9	Acenaphthene	ND	260	ug/kg dry	1	06/16/14	B4F0915	8270	
208-96-8	Acenaphthylene	ND	260	ug/kg dry	1	06/16/14	B4F0915	8270	
120-12-7	Anthracene	ND	260	ug/kg dry	1	06/16/14	B4F0915	8270	
103-33-3	Azobenzene	ND	510	ug/kg dry	1	06/16/14	B4F0915	8270	
56-55-3	Benz[a]anthracene	ND	260	ug/kg dry	1	06/16/14	B4F0915	8270	
50-32-8	Benzo[a]pyrene	ND	510	ug/kg dry	1	06/16/14	B4F0915	8270	
205-99-2	Benzo[b]fluoranthene	ND	510	ug/kg dry	1	06/16/14	B4F0915	8270	
191-24-2	Benzo[g,h,i]perylene	ND	510	ug/kg dry	1	06/16/14	B4F0915	8270	
207-08-9	Benzo[k]fluoranthene	ND	510	ug/kg dry	1	06/16/14	B4F0915	8270	
100-51-6	Benzyl Alcohol	ND	6400	ug/kg dry	1	06/16/14	B4F0915	8270	A05
111-91-1	Bis(2-chloroethoxy)methane	ND	510	ug/kg dry	1	06/16/14	B4F0915	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	260	ug/kg dry	1	06/16/14	B4F0915	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	260	ug/kg dry	1	06/16/14	B4F0915	8270	A05
117-81-7	Bis(2-ethylhexyl)phthalate	ND	640	ug/kg dry	1	06/16/14	B4F0915	8270	
85-68-7	Butyl benzyl phthalate	ND	640	ug/kg dry	1	06/16/14	B4F0915	8270	
86-74-8	Carbazole	ND	640	ug/kg dry	1	06/16/14	B4F0915	8270	
218-01-9	Chrysene	ND	260	ug/kg dry	1	06/16/14	B4F0915	8270	
53-70-3	Dibenz[a,h]anthracene	ND	510	ug/kg dry	1	06/16/14	B4F0915	8270	
132-64-9	Dibenzofuran	ND	640	ug/kg dry	1	06/16/14	B4F0915	8270	

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Organics-Semivolatiles									**See note Y20**
84-66-2	Diethylphthalate	ND	640	ug/kg dry	1	06/16/14	B4F0915	8270	
131-11-3	Dimethyl phthalate	ND	640	ug/kg dry	1	06/16/14	B4F0915	8270	
84-74-2	Di-n-butyl phthalate	ND	640	ug/kg dry	1	06/16/14	B4F0915	8270	
117-84-0	Di-n-octyl phthalate	ND	640	ug/kg dry	1	06/16/14	B4F0915	8270	
206-44-0	Fluoranthene	ND	260	ug/kg dry	1	06/16/14	B4F0915	8270	
86-73-7	Fluorene	ND	260	ug/kg dry	1	06/16/14	B4F0915	8270	
118-74-1	Hexachlorobenzene	ND	510	ug/kg dry	1	06/16/14	B4F0915	8270	
87-68-3	Hexachlorobutadiene	ND	260	ug/kg dry	1	06/16/14	B4F0915	8270	
77-47-4	Hexachlorocyclopentadiene	ND	2600	ug/kg dry	1	06/16/14	B4F0915	8270	
67-72-1	Hexachloroethane	ND	260	ug/kg dry	1	06/16/14	B4F0915	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	510	ug/kg dry	1	06/16/14	B4F0915	8270	
78-59-1	Isophorone	ND	260	ug/kg dry	1	06/16/14	B4F0915	8270	
91-20-3	Naphthalene	ND	260	ug/kg dry	1	06/16/14	B4F0915	8270	
98-95-3	Nitrobenzene	ND	510	ug/kg dry	1	06/16/14	B4F0915	8270	
67-75-9	N-Nitrosodimethylamine	ND	640	ug/kg dry	1	06/16/14	B4F0915	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	510	ug/kg dry	1	06/16/14	B4F0915	8270	
6	N-Nitrosodiphenylamine	ND	510	ug/kg dry	1	06/16/14	B4F0915	8270	
87-86-5	Pentachlorophenol	ND	4400	ug/kg dry	1	06/16/14	B4F0915	8270	
85-01-8	Phenanthrene	ND	260	ug/kg dry	1	06/16/14	B4F0915	8270	
108-95-2	Phenol	ND	850	ug/kg dry	1	06/16/14	B4F0915	8270	
129-00-0	Pyrene	ND	260	ug/kg dry	1	06/16/14	B4F0915	8270	
Surrogate: 2,4,6-Tribromophenol			*83.7 %*	*20.3-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: 2-Fluorobiphenyl			*79.4 %*	*32.9-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: 2-Fluorophenol			*50.6 %*	*23.7-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: Nitrobenzene-d5			*60.5 %*	*31.8-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: Phenol-d6			*58.2 %*	*29.3-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: p-Terphenyl-d14			*83.5 %*	*38.5-115*		*06/16/14*	B4F0915	*8270*	

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

Client ID: C-SB-04

Lab ID: 1406007-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Pesticides									
789-02-6	2,4'-DDT	ND	26	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-54-8	4,4'-DDD	ND	26	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-55-9	4,4'-DDE	ND	26	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
50-29-3	4,4'-DDT	ND	26	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-84-6	a-BHC	ND	13	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
5103-71-9	a-Chlordane	ND	26	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
309-00-2	Aldrin	ND	26	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-85-7	b-BHC	ND	26	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-86-8	d-BHC	ND	26	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
60-57-1	Dieldrin	ND	26	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
959-98-8	Endosulfan I	ND	26	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
33213-65-9	Endosulfan II	ND	26	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
1031-07-8	Endosulfan sulfate	ND	26	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-20-8	Endrin	ND	26	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
7421-93-4	Endrin aldehyde	ND	26	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
53494-70-5	Endrin ketone	ND	26	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
58-89-9	g-BHC (Lindane)	ND	26	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
5103-74-2	g-Chlordane	ND	26	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
76-44-8	Heptachlor	ND	26	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
1024-57-3	Heptachlor epoxide	ND	26	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
87-82-1	Hexabromobenzene	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-43-5	Methoxychlor	ND	64	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
2385-85-5	Mirex	ND	64	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
59080-40-9	PBB (BP-6)	ND	320	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
8001-35-2	Toxaphene	ND	220	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*60.1 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*62.6 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	

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Lab ID: 1406007-05

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-PCBs as Aroclors									
12674-11-2	Aroclor 1016	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11104-28-2	Aroclor 1221	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11141-16-5	Aroclor 1232	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
53469-21-9	Aroclor 1242	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
12672-29-6	Aroclor 1248	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11097-69-1	Aroclor 1254	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11096-82-5	Aroclor 1260	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
37324-23-5	Aroclor 1262	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11100-14-4	Aroclor 1268	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*68.3 %*		*30-150*	*06/15/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*67.3 %*		*30-150*	*06/15/14*	B4F0618	*8081/8082*	
Inorganics-General Chemistry									
TS	**% Total Solids**	**77.8**	0.1	%	1	06/03/14	B4F0319	2540 B	
57-12-5	Total Cyanide	ND	0.13	mg/kg dry	1	06/12/14	B4F1005	ASTM D 7511-09	
Inorganics-Metals									
7440-36-0	Antimony	ND	0.3	mg/kg dry	10	06/18/14	B4F0904	6020/200.8	
7440-38-2	**Arsenic**	**7.7**	0.5	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-39-3	**Barium**	**80**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-41-7	**Beryllium**	**0.7**	0.2	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-43-9	**Cadmium**	**0.2**	0.2	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-47-3	**Chromium**	**23**	2.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-48-4	**Cobalt**	**14**	0.5	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-50-8	**Copper**	**21**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7439-89-6	**Iron**	**32000**	5.0	mg/kg dry	10	06/19/14	B4F0901	6010/200.7	A09
7439-92-1	**Lead**	**8.8**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7439-96-5	**Manganese**	**620**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7439-97-6	Mercury	ND	0.06	mg/kg dry	1	06/19/14	B4F1721	7471/245.5	
7439-98-7	**Molybdenum**	**1.3**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-02-0	**Nickel**	**37**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7782-49-2	**Selenium**	**0.3**	0.2	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-22-4	Silver	ND	0.1	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-28-0	Thallium	ND	0.5	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-62-2	**Vanadium**	**30**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-66-6	**Zinc**	**54**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	

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Client ID: C-SB-05

Lab ID: 1406007-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									**See note Y26**
630-20-6	1,1,1,2-Tetrachloroethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
71-55-6	1,1,1-Trichloroethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
79-00-5	1,1,2-Trichloroethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
75-34-3	1,1-Dichloroethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
75-35-4	1,1-Dichloroethylene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
96-18-4	1,2,3-Trichloropropane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
106-93-4	1,2-Dibromoethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
95-50-1	1,2-Dichlorobenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
107-06-2	1,2-Dichloroethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
78-87-5	1,2-Dichloropropane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
541-73-1	1,3-Dichlorobenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
106-46-7	1,4-Dichlorobenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
78-93-3	2-Butanone (MEK)	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
591-78-6	2-Hexanone	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	X
67-64-1	2-Propanone (acetone)	ND	1500	ug/kg dry	50	06/06/14	B4F1719	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
107-13-1	Acrylonitrile	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
71-43-2	Benzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
108-86-1	Bromobenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
74-97-5	Bromochloromethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
75-27-4	Bromodichloromethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
75-25-2	Bromoform	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
74-83-9	Bromomethane	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
75-15-0	Carbon disulfide	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
56-23-5	Carbon tetrachloride	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
108-90-7	Chlorobenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
75-00-3	Chloroethane	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
67-66-3	Chloroform	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
74-87-3	Chloromethane	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
110-82-7	Cyclohexane	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
124-48-1	Dibromochloromethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									**See note Y26**
74-95-3	Dibromomethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
75-71-8	Dichlorodifluoromethane	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	A05
60-29-7	Diethyl ether	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	A05
108-20-3	Diisopropyl Ether	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
100-41-4	Ethylbenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
637-92-3	Ethyltertiarybutylether	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
67-72-1	Hexachloroethane	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
98-82-8	Isopropylbenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
1330-20-7	m & p - Xylene	ND	150	ug/kg dry	50	06/06/14	B4F1719	8260	
74-88-4	Methyl iodide	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	A05
75-09-2	Methylene chloride	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
1634-04-4	Methyltertiarybutylether	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
91-20-3	Naphthalene	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	X
104-51-8	n-Butylbenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
103-65-1	n-Propylbenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
95-47-6	o-Xylene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
99-87-6	p-Isopropyl toluene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
135-98-8	sec-Butylbenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
100-42-5	Styrene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
98-06-6	tert-Butylbenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
75-65-0	tertiary Butyl Alcohol	ND	3700	ug/kg dry	50	06/06/14	B4F1719	8260	
994-05-8	tertiaryAmylmethylether	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
127-18-4	Tetrachloroethylene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
109-99-9	Tetrahydrofuran	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
108-88-3	Toluene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
79-01-6	Trichloroethylene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
75-69-4	Trichlorofluoromethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
75-01-4	Vinyl chloride	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
Surrogate: Bromofluorobenzene			*103 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Dibromofluoromethane			*106 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Toluene-d8			*105 %*	*50-150*		*06/06/14*	B4F1719	*8260*	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
120-82-1	1,2,4-Trichlorobenzene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
95-95-4	2,4,5-Trichlorophenol	ND	820	ug/kg dry	1	06/16/14	B4F0915	8270	
88-06-2	2,4,6-Trichlorophenol	ND	820	ug/kg dry	1	06/16/14	B4F0915	8270	
120-83-2	2,4-Dichlorophenol	ND	820	ug/kg dry	1	06/16/14	B4F0915	8270	
105-67-9	2,4-Dimethylphenol	ND	820	ug/kg dry	1	06/16/14	B4F0915	8270	
51-28-5	2,4-Dinitrophenol	ND	4200	ug/kg dry	1	06/16/14	B4F0915	8270	
121-14-2	2,4-Dinitrotoluene	ND	620	ug/kg dry	1	06/16/14	B4F0915	8270	
606-20-2	2,6-Dinitrotoluene	ND	620	ug/kg dry	1	06/16/14	B4F0915	8270	
91-58-7	2-Chloronaphthalene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
95-57-8	2-Chlorophenol	ND	820	ug/kg dry	1	06/16/14	B4F0915	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	4200	ug/kg dry	1	06/16/14	B4F0915	8270	
91-57-6	2-Methylnaphthalene	ND	620	ug/kg dry	1	06/16/14	B4F0915	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	820	ug/kg dry	1	06/16/14	B4F0915	8270	
88-74-4	2-Nitroaniline	ND	1200	ug/kg dry	1	06/16/14	B4F0915	8270	
88-75-5	2-Nitrophenol	ND	820	ug/kg dry	1	06/16/14	B4F0915	8270	
108394,106445	3 & 4-Methylphenol	ND	1600	ug/kg dry	1	06/16/14	B4F0915	8270	
99-09-2	3-Nitroaniline	ND	1200	ug/kg dry	1	06/16/14	B4F0915	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
7005-72-3	4-Chlorodiphenylether	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
100-01-6	4-Nitroaniline	ND	1200	ug/kg dry	1	06/16/14	B4F0915	8270	
100-02-7	4-Nitrophenol	ND	4200	ug/kg dry	1	06/16/14	B4F0915	8270	
83-32-9	Acenaphthene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
208-96-8	Acenaphthylene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
120-12-7	Anthracene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
103-33-3	Azobenzene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
56-55-3	Benz[a]anthracene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
50-32-8	Benzo[a]pyrene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
205-99-2	Benzo[b]fluoranthene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
191-24-2	Benzo[g,h,i]perylene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
207-08-9	Benzo[k]fluoranthene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
100-51-6	Benzyl Alcohol	ND	6200	ug/kg dry	1	06/16/14	B4F0915	8270	A05
111-91-1	Bis(2-chloroethoxy)methane	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	A05
117-81-7	Bis(2-ethylhexyl)phthalate	ND	620	ug/kg dry	1	06/16/14	B4F0915	8270	
85-68-7	Butyl benzyl phthalate	ND	620	ug/kg dry	1	06/16/14	B4F0915	8270	
86-74-8	Carbazole	ND	620	ug/kg dry	1	06/16/14	B4F0915	8270	
218-01-9	Chrysene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
53-70-3	Dibenz[a,h]anthracene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
132-64-9	Dibenzofuran	ND	620	ug/kg dry	1	06/16/14	B4F0915	8270	

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ENVIRONMENTAL LABORATORY

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

Client ID: C-SB-05

Lab ID: 1406007-06

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
84-66-2	Diethylphthalate	ND	620	ug/kg dry	1	06/16/14	B4F0915	8270	
131-11-3	Dimethyl phthalate	ND	620	ug/kg dry	1	06/16/14	B4F0915	8270	
84-74-2	Di-n-butyl phthalate	ND	620	ug/kg dry	1	06/16/14	B4F0915	8270	
117-84-0	Di-n-octyl phthalate	ND	620	ug/kg dry	1	06/16/14	B4F0915	8270	
206-44-0	Fluoranthene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
86-73-7	Fluorene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
118-74-1	Hexachlorobenzene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
87-68-3	Hexachlorobutadiene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
77-47-4	Hexachlorocyclopentadiene	ND	2500	ug/kg dry	1	06/16/14	B4F0915	8270	
67-72-1	Hexachloroethane	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
78-59-1	Isophorone	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
91-20-3	Naphthalene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
98-95-3	Nitrobenzene	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
67-75-9	N-Nitrosodimethylamine	ND	620	ug/kg dry	1	06/16/14	B4F0915	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
6	N-Nitrosodiphenylamine	ND	500	ug/kg dry	1	06/16/14	B4F0915	8270	
87-86-5	Pentachlorophenol	ND	4200	ug/kg dry	1	06/16/14	B4F0915	8270	
85-01-8	Phenanthrene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
108-95-2	Phenol	ND	820	ug/kg dry	1	06/16/14	B4F0915	8270	
129-00-0	Pyrene	ND	250	ug/kg dry	1	06/16/14	B4F0915	8270	
Surrogate: 2,4,6-Tribromophenol			*81.5 %*	*20.3-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: 2-Fluorobiphenyl			*88.5 %*	*32.9-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: 2-Fluorophenol			*53.8 %*	*23.7-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: Nitrobenzene-d5			*66.7 %*	*31.8-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: Phenol-d6			*62.9 %*	*29.3-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: p-Terphenyl-d14			*88.4 %*	*38.5-115*		*06/16/14*	B4F0915	*8270*	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Pesticides									
789-02-6	2,4'-DDT	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-54-8	4,4'-DDD	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-55-9	4,4'-DDE	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
50-29-3	4,4'-DDT	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-84-6	a-BHC	ND	12	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
5103-71-9	a-Chlordane	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
309-00-2	Aldrin	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-85-7	b-BHC	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-86-8	d-BHC	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
60-57-1	Dieldrin	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
959-98-8	Endosulfan I	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
33213-65-9	Endosulfan II	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
1031-07-8	Endosulfan sulfate	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-20-8	Endrin	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
7421-93-4	Endrin aldehyde	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
53494-70-5	Endrin ketone	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
58-89-9	g-BHC (Lindane)	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
5103-74-2	g-Chlordane	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
76-44-8	Heptachlor	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
1024-57-3	Heptachlor epoxide	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
87-82-1	Hexabromobenzene	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-43-5	Methoxychlor	ND	62	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
2385-85-5	Mirex	ND	62	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
59080-40-9	PBB (BP-6)	ND	310	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
8001-35-2	Toxaphene	ND	210	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*77.6 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*53.8 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-PCBs as Aroclors									
12674-11-2	Aroclor 1016	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11104-28-2	Aroclor 1221	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11141-16-5	Aroclor 1232	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
53469-21-9	Aroclor 1242	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
12672-29-6	Aroclor 1248	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11097-69-1	Aroclor 1254	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11096-82-5	Aroclor 1260	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
37324-23-5	Aroclor 1262	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11100-14-4	Aroclor 1268	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*86.5 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*57.4 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Inorganics-General Chemistry									
TS	**% Total Solids**	**80.4**	0.1	%	1	06/03/14	B4F0319	2540 B	
57-12-5	Total Cyanide	ND	0.12	mg/kg dry	1	06/12/14	B4F1005	ASTM D 7511-09	
Inorganics-Metals									
7440-36-0	Antimony	ND	0.3	mg/kg dry	10	06/18/14	B4F0904	6020/200.8	
7440-38-2	**Arsenic**	**6.6**	0.5	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-39-3	**Barium**	**97**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	A04
7440-41-7	**Beryllium**	**0.8**	0.2	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-43-9	**Cadmium**	**0.3**	0.2	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-47-3	**Chromium**	**21**	2.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-48-4	**Cobalt**	**14**	0.5	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-50-8	**Copper**	**23**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7439-89-6	**Iron**	**33000**	5.0	mg/kg dry	10	06/19/14	B4F0901	6010/200.7	A09
7439-92-1	**Lead**	**10**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7439-96-5	**Manganese**	**500**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7439-97-6	Mercury	ND	0.06	mg/kg dry	1	06/19/14	B4F1721	7471/245.5	
7439-98-7	**Molybdenum**	**2.3**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-02-0	**Nickel**	**30**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7782-49-2	**Selenium**	**0.3**	0.2	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-22-4	Silver	ND	0.1	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-28-0	Thallium	ND	0.5	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-62-2	**Vanadium**	**32**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	
7440-66-6	**Zinc**	**55**	1.0	mg/kg dry	10	06/18/14	B4F0901	6020/200.8	

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Lansing, MI 48909
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Client ID: C-SB-06

Lab ID: 1406007-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									**See note Y26**
630-20-6	1,1,1,2-Tetrachloroethane	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
71-55-6	1,1,1-Trichloroethane	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
79-00-5	1,1,2-Trichloroethane	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
75-34-3	1,1-Dichloroethane	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
75-35-4	1,1-Dichloroethylene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	
96-18-4	1,2,3-Trichloropropane	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	
106-93-4	1,2-Dibromoethane	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
95-50-1	1,2-Dichlorobenzene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
107-06-2	1,2-Dichloroethane	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
78-87-5	1,2-Dichloropropane	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
541-73-1	1,3-Dichlorobenzene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
106-46-7	1,4-Dichlorobenzene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
78-93-3	2-Butanone (MEK)	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	
591-78-6	2-Hexanone	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	
91-57-6	2-Methylnaphthalene	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	X
67-64-1	2-Propanone (acetone)	ND	1400	ug/kg dry	50	06/06/14	B4F1719	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	
107-13-1	Acrylonitrile	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	
71-43-2	Benzene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
108-86-1	Bromobenzene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
74-97-5	Bromochloromethane	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
75-27-4	Bromodichloromethane	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
75-25-2	Bromoform	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
74-83-9	Bromomethane	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	
75-15-0	Carbon disulfide	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
56-23-5	Carbon tetrachloride	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
108-90-7	Chlorobenzene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
75-00-3	Chloroethane	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	
67-66-3	Chloroform	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
74-87-3	Chloromethane	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
110-82-7	Cyclohexane	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	
124-48-1	Dibromochloromethane	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	

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Organics-Volatiles									**See note Y26**
74-95-3	Dibromomethane	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
75-71-8	Dichlorodifluoromethane	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	A05
60-29-7	Diethyl ether	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	A05
108-20-3	Diisopropyl Ether	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	
100-41-4	Ethylbenzene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
637-92-3	Ethyltertiarybutylether	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	
67-72-1	Hexachloroethane	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	
98-82-8	Isopropylbenzene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
1330-20-7	m & p - Xylene	ND	140	ug/kg dry	50	06/06/14	B4F1719	8260	
74-88-4	Methyl iodide	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	A05
75-09-2	Methylene chloride	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	
1634-04-4	Methyltertiarybutylether	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
91-20-3	Naphthalene	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	X
104-51-8	n-Butylbenzene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
103-65-1	n-Propylbenzene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
95-47-6	o-Xylene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
[illegible]6	p-Isopropyl toluene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
135-98-8	sec-Butylbenzene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
100-42-5	Styrene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
98-06-6	tert-Butylbenzene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
75-65-0	tertiary Butyl Alcohol	ND	3600	ug/kg dry	50	06/06/14	B4F1719	8260	
994-05-8	tertiaryAmylmethylether	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	
127-18-4	Tetrachloroethylene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
109-99-9	Tetrahydrofuran	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	
108-88-3	Toluene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	360	ug/kg dry	50	06/06/14	B4F1719	8260	
79-01-6	Trichloroethylene	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
75-69-4	Trichlorofluoromethane	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
75-01-4	Vinyl chloride	ND	72	ug/kg dry	50	06/06/14	B4F1719	8260	
Surrogate: Bromofluorobenzene			*104 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Dibromofluoromethane			*105 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Toluene-d8			*105 %*	*50-150*		*06/06/14*	B4F1719	*8260*	

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

Client ID: C-SB-06

Lab ID: 1406007-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
120-82-1	1,2,4-Trichlorobenzene	ND	480	ug/kg dry	1	06/16/14	B4F0915	8270	
95-95-4	2,4,5-Trichlorophenol	ND	800	ug/kg dry	1	06/16/14	B4F0915	8270	
88-06-2	2,4,6-Trichlorophenol	ND	800	ug/kg dry	1	06/16/14	B4F0915	8270	
120-83-2	2,4-Dichlorophenol	ND	800	ug/kg dry	1	06/16/14	B4F0915	8270	
105-67-9	2,4-Dimethylphenol	ND	800	ug/kg dry	1	06/16/14	B4F0915	8270	
51-28-5	2,4-Dinitrophenol	ND	4100	ug/kg dry	1	06/16/14	B4F0915	8270	
121-14-2	2,4-Dinitrotoluene	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
606-20-2	2,6-Dinitrotoluene	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
91-58-7	2-Chloronaphthalene	ND	480	ug/kg dry	1	06/16/14	B4F0915	8270	
95-57-8	2-Chlorophenol	ND	800	ug/kg dry	1	06/16/14	B4F0915	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	4100	ug/kg dry	1	06/16/14	B4F0915	8270	
91-57-6	2-Methylnaphthalene	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	800	ug/kg dry	1	06/16/14	B4F0915	8270	
88-74-4	2-Nitroaniline	ND	1200	ug/kg dry	1	06/16/14	B4F0915	8270	
88-75-5	2-Nitrophenol	ND	800	ug/kg dry	1	06/16/14	B4F0915	8270	
108394,106445	3 & 4-Methylphenol	ND	1600	ug/kg dry	1	06/16/14	B4F0915	8270	
99-09-2	3-Nitroaniline	ND	1200	ug/kg dry	1	06/16/14	B4F0915	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	480	ug/kg dry	1	06/16/14	B4F0915	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	480	ug/kg dry	1	06/16/14	B4F0915	8270	
7005-72-3	4-Chlorodiphenylether	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
100-01-6	4-Nitroaniline	ND	1200	ug/kg dry	1	06/16/14	B4F0915	8270	
100-02-7	4-Nitrophenol	ND	4100	ug/kg dry	1	06/16/14	B4F0915	8270	
83-32-9	Acenaphthene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
208-96-8	Acenaphthylene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
120-12-7	Anthracene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
103-33-3	Azobenzene	ND	480	ug/kg dry	1	06/16/14	B4F0915	8270	
56-55-3	Benz[a]anthracene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
50-32-8	Benzo[a]pyrene	ND	480	ug/kg dry	1	06/16/14	B4F0915	8270	
205-99-2	Benzo[b]fluoranthene	ND	480	ug/kg dry	1	06/16/14	B4F0915	8270	
191-24-2	Benzo[g,h,i]perylene	ND	480	ug/kg dry	1	06/16/14	B4F0915	8270	
207-08-9	Benzo[k]fluoranthene	ND	480	ug/kg dry	1	06/16/14	B4F0915	8270	
100-51-6	Benzyl Alcohol	ND	6100	ug/kg dry	1	06/16/14	B4F0915	8270	A05
111-91-1	Bis(2-chloroethoxy)methane	ND	480	ug/kg dry	1	06/16/14	B4F0915	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	A05
117-81-7	Bis(2-ethylhexyl)phthalate	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
85-68-7	Butyl benzyl phthalate	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
86-74-8	Carbazole	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
218-01-9	Chrysene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
53-70-3	Dibenz[a,h]anthracene	ND	480	ug/kg dry	1	06/16/14	B4F0915	8270	
132-64-9	Dibenzofuran	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	

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Lab ID: 1406007-07

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
84-66-2	Diethylphthalate	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
131-11-3	Dimethyl phthalate	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
84-74-2	Di-n-butyl phthalate	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
117-84-0	Di-n-octyl phthalate	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
206-44-0	Fluoranthene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
86-73-7	Fluorene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
118-74-1	Hexachlorobenzene	ND	480	ug/kg dry	1	06/16/14	B4F0915	8270	
87-68-3	Hexachlorobutadiene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
77-47-4	Hexachlorocyclopentadiene	ND	2400	ug/kg dry	1	06/16/14	B4F0915	8270	
67-72-1	Hexachloroethane	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	480	ug/kg dry	1	06/16/14	B4F0915	8270	
78-59-1	Isophorone	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
91-20-3	Naphthalene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
98-95-3	Nitrobenzene	ND	480	ug/kg dry	1	06/16/14	B4F0915	8270	
67-75-9	N-Nitrosodimethylamine	ND	610	ug/kg dry	1	06/16/14	B4F0915	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	480	ug/kg dry	1	06/16/14	B4F0915	8270	
[illegible]6	N-Nitrosodiphenylamine	ND	480	ug/kg dry	1	06/16/14	B4F0915	8270	
87-86-5	Pentachlorophenol	ND	4100	ug/kg dry	1	06/16/14	B4F0915	8270	
85-01-8	Phenanthrene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
108-95-2	Phenol	ND	800	ug/kg dry	1	06/16/14	B4F0915	8270	
129-00-0	Pyrene	ND	240	ug/kg dry	1	06/16/14	B4F0915	8270	
Surrogate: 2,4,6-Tribromophenol			*78.8 %*	*20.3-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: 2-Fluorobiphenyl			*72.9 %*	*32.9-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: 2-Fluorophenol			*47.2 %*	*23.7-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: Nitrobenzene-d5			*54.7 %*	*31.8-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: Phenol-d6			*54.8 %*	*29.3-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: p-Terphenyl-d14			*85.0 %*	*38.5-115*		*06/16/14*	B4F0915	*8270*	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Pesticides									
789-02-6	2,4'-DDT	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-54-8	4,4'-DDD	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-55-9	4,4'-DDE	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
50-29-3	4,4'-DDT	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-84-6	a-BHC	ND	12	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
5103-71-9	a-Chlordane	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
309-00-2	Aldrin	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-85-7	b-BHC	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-86-8	d-BHC	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
60-57-1	Dieldrin	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
959-98-8	Endosulfan I	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
33213-65-9	Endosulfan II	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
1031-07-8	Endosulfan sulfate	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-20-8	Endrin	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
7421-93-4	Endrin aldehyde	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
53494-70-5	Endrin ketone	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
58-89-9	g-BHC (Lindane)	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
5103-74-2	g-Chlordane	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
76-44-8	Heptachlor	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
1024-57-3	Heptachlor epoxide	ND	24	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
87-82-1	Hexabromobenzene	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-43-5	Methoxychlor	ND	61	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
2385-85-5	Mirex	ND	61	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
59080-40-9	PBB (BP-6)	ND	300	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
8001-35-2	Toxaphene	ND	210	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*69.4 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*59.7 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-PCBs as Aroclors									
12674-11-2	Aroclor 1016	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11104-28-2	Aroclor 1221	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11141-16-5	Aroclor 1232	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
53469-21-9	Aroclor 1242	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
12672-29-6	Aroclor 1248	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11097-69-1	Aroclor 1254	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11096-82-5	Aroclor 1260	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
37324-23-5	Aroclor 1262	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11100-14-4	Aroclor 1268	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*77.6 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*63.2 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Inorganics-General Chemistry									
TS	**% Total Solids**	**82.5**	0.1	%	1	06/03/14	B4F0319	2540 B	
57-12-5	Total Cyanide	ND	0.12	mg/kg dry	1	06/12/14	B4F1005	ASTM D 7511-09	
Inorganics-Metals									
[illegible]6-0	Antimony	ND	0.5	mg/kg dry	10	06/18/14	B4F0904	6020/200.8	
7440-38-2	**Arsenic**	**11**	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-39-3	**Barium**	**130**	1.0	mg/kg dry	10	06/19/14	B4F0902	6020/200.8	
7440-41-7	**Beryllium**	**0.7**	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-43-9	**Cadmium**	**0.6**	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-47-3	**Chromium**	**19**	2.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-48-4	**Cobalt**	**12**	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-50-8	**Copper**	**19**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-89-6	**Iron**	**29000**	5.0	mg/kg dry	10	06/23/14	B4F0902	6010/200.7	
7439-92-1	**Lead**	**13**	1.0	mg/kg dry	10	06/19/14	B4F0902	6020/200.8	
7439-96-5	**Manganese**	**1900**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-97-6	Mercury	ND	0.06	mg/kg dry	1	06/19/14	B4F1721	7471/245.5	
7439-98-7	**Molybdenum**	**2.2**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-02-0	**Nickel**	**39**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7782-49-2	**Selenium**	**0.3**	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-22-4	Silver	ND	0.1	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-28-0	Thallium	ND	0.5	mg/kg dry	10	06/19/14	B4F0902	6020/200.8	
7440-62-2	**Vanadium**	**32**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-66-6	**Zinc**	**55**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	

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Client ID: C-SB-07

Lab ID: 1406007-08

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
71-55-6	1,1,1-Trichloroethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
79-00-5	1,1,2-Trichloroethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
75-34-3	1,1-Dichloroethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
75-35-4	1,1-Dichloroethylene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
96-18-4	1,2,3-Trichloropropane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
106-93-4	1,2-Dibromoethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
95-50-1	1,2-Dichlorobenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
107-06-2	1,2-Dichloroethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
78-87-5	1,2-Dichloropropane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
541-73-1	1,3-Dichlorobenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
106-46-7	1,4-Dichlorobenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
78-93-3	2-Butanone (MEK)	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
591-78-6	2-Hexanone	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	X
67-64-1	2-Propanone (acetone)	ND	1500	ug/kg dry	50	06/06/14	B4F1719	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
107-13-1	Acrylonitrile	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
71-43-2	Benzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
108-86-1	Bromobenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
74-97-5	Bromochloromethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
75-27-4	Bromodichloromethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
75-25-2	Bromoform	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
74-83-9	Bromomethane	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
75-15-0	Carbon disulfide	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
56-23-5	Carbon tetrachloride	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
108-90-7	Chlorobenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
75-00-3	Chloroethane	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
67-66-3	Chloroform	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
74-87-3	Chloromethane	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
110-82-7	Cyclohexane	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
124-48-1	Dibromochloromethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	

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Client ID: C-SB-07

Lab ID: 1406007-08

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
75-71-8	Dichlorodifluoromethane	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	A05
60-29-7	Diethyl ether	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	A05
108-20-3	Diisopropyl Ether	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
100-41-4	Ethylbenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
637-92-3	Ethyltertiarybutylether	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
67-72-1	Hexachloroethane	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
98-82-8	Isopropylbenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
1330-20-7	m & p - Xylene	ND	150	ug/kg dry	50	06/06/14	B4F1719	8260	
74-88-4	Methyl iodide	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	A05
75-09-2	Methylene chloride	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
1634-04-4	Methyltertiarybutylether	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
91-20-3	Naphthalene	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	X
104-51-8	n-Butylbenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
103-65-1	n-Propylbenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
95-47-6	o-Xylene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
6	p-Isopropyl toluene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
135-98-8	sec-Butylbenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
100-42-5	Styrene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
98-06-6	tert-Butylbenzene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
75-65-0	tertiary Butyl Alcohol	ND	3700	ug/kg dry	50	06/06/14	B4F1719	8260	
994-05-8	tertiaryAmylmethylether	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
127-18-4	Tetrachloroethylene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
109-99-9	Tetrahydrofuran	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
108-88-3	Toluene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
79-01-6	Trichloroethylene	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
75-69-4	Trichlorofluoromethane	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
75-01-4	Vinyl chloride	ND	74	ug/kg dry	50	06/06/14	B4F1719	8260	
Surrogate: Bromofluorobenzene			*120 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Dibromofluoromethane			*122 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Toluene-d8			*122 %*	*50-150*		*06/06/14*	B4F1719	*8260*	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
120-82-1	1,2,4-Trichlorobenzene	ND	510	ug/kg dry	1	06/17/14	B4F0915	8270	
95-95-4	2,4,5-Trichlorophenol	ND	840	ug/kg dry	1	06/17/14	B4F0915	8270	
88-06-2	2,4,6-Trichlorophenol	ND	840	ug/kg dry	1	06/17/14	B4F0915	8270	
120-83-2	2,4-Dichlorophenol	ND	840	ug/kg dry	1	06/17/14	B4F0915	8270	
105-67-9	2,4-Dimethylphenol	ND	840	ug/kg dry	1	06/17/14	B4F0915	8270	
51-28-5	2,4-Dinitrophenol	ND	4300	ug/kg dry	1	06/17/14	B4F0915	8270	
121-14-2	2,4-Dinitrotoluene	ND	640	ug/kg dry	1	06/17/14	B4F0915	8270	
606-20-2	2,6-Dinitrotoluene	ND	640	ug/kg dry	1	06/17/14	B4F0915	8270	
91-58-7	2-Chloronaphthalene	ND	510	ug/kg dry	1	06/17/14	B4F0915	8270	
95-57-8	2-Chlorophenol	ND	840	ug/kg dry	1	06/17/14	B4F0915	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	4300	ug/kg dry	1	06/17/14	B4F0915	8270	
91-57-6	2-Methylnaphthalene	ND	640	ug/kg dry	1	06/17/14	B4F0915	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	840	ug/kg dry	1	06/17/14	B4F0915	8270	
88-74-4	2-Nitroaniline	ND	1300	ug/kg dry	1	06/17/14	B4F0915	8270	
88-75-5	2-Nitrophenol	ND	840	ug/kg dry	1	06/17/14	B4F0915	8270	
108394,106445	3 & 4-Methylphenol	ND	1700	ug/kg dry	1	06/17/14	B4F0915	8270	
99-09-2	3-Nitroaniline	ND	1300	ug/kg dry	1	06/17/14	B4F0915	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	510	ug/kg dry	1	06/17/14	B4F0915	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	510	ug/kg dry	1	06/17/14	B4F0915	8270	
7005-72-3	4-Chlorodiphenylether	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
100-01-6	4-Nitroaniline	ND	1300	ug/kg dry	1	06/17/14	B4F0915	8270	
100-02-7	4-Nitrophenol	ND	4300	ug/kg dry	1	06/17/14	B4F0915	8270	
83-32-9	Acenaphthene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
208-96-8	Acenaphthylene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
120-12-7	Anthracene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
103-33-3	Azobenzene	ND	510	ug/kg dry	1	06/17/14	B4F0915	8270	
56-55-3	Benz[a]anthracene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
50-32-8	Benzo[a]pyrene	ND	510	ug/kg dry	1	06/17/14	B4F0915	8270	
205-99-2	Benzo[b]fluoranthene	ND	510	ug/kg dry	1	06/17/14	B4F0915	8270	
191-24-2	Benzo[g,h,i]perylene	ND	510	ug/kg dry	1	06/17/14	B4F0915	8270	
207-08-9	Benzo[k]fluoranthene	ND	510	ug/kg dry	1	06/17/14	B4F0915	8270	
100-51-6	Benzyl Alcohol	ND	6400	ug/kg dry	1	06/17/14	B4F0915	8270	A05
111-91-1	Bis(2-chloroethoxy)methane	ND	510	ug/kg dry	1	06/17/14	B4F0915	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	A05
117-81-7	Bis(2-ethylhexyl)phthalate	ND	640	ug/kg dry	1	06/17/14	B4F0915	8270	
85-68-7	Butyl benzyl phthalate	ND	640	ug/kg dry	1	06/17/14	B4F0915	8270	
86-74-8	Carbazole	ND	640	ug/kg dry	1	06/17/14	B4F0915	8270	
218-01-9	Chrysene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
53-70-3	Dibenz[a,h]anthracene	ND	510	ug/kg dry	1	06/17/14	B4F0915	8270	
132-64-9	Dibenzofuran	ND	640	ug/kg dry	1	06/17/14	B4F0915	8270	

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Organics-Semivolatiles									**See note Y20**
84-66-2	Diethylphthalate	ND	640	ug/kg dry	1	06/17/14	B4F0915	8270	
131-11-3	Dimethyl phthalate	ND	640	ug/kg dry	1	06/17/14	B4F0915	8270	
84-74-2	Di-n-butyl phthalate	ND	640	ug/kg dry	1	06/17/14	B4F0915	8270	
117-84-0	Di-n-octyl phthalate	ND	640	ug/kg dry	1	06/17/14	B4F0915	8270	
206-44-0	Fluoranthene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
86-73-7	Fluorene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
118-74-1	Hexachlorobenzene	ND	510	ug/kg dry	1	06/17/14	B4F0915	8270	
87-68-3	Hexachlorobutadiene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
77-47-4	Hexachlorocyclopentadiene	ND	2500	ug/kg dry	1	06/17/14	B4F0915	8270	
67-72-1	Hexachloroethane	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	510	ug/kg dry	1	06/17/14	B4F0915	8270	
78-59-1	Isophorone	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
91-20-3	Naphthalene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
98-95-3	Nitrobenzene	ND	510	ug/kg dry	1	06/17/14	B4F0915	8270	
67-75-9	N-Nitrosodimethylamine	ND	640	ug/kg dry	1	06/17/14	B4F0915	8270	A05
621-64-7	N-Nitrosodi-n-propylamine	ND	510	ug/kg dry	1	06/17/14	B4F0915	8270	
6	N-Nitrosodiphenylamine	ND	510	ug/kg dry	1	06/17/14	B4F0915	8270	
87-86-5	Pentachlorophenol	ND	4300	ug/kg dry	1	06/17/14	B4F0915	8270	
85-01-8	Phenanthrene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
108-95-2	Phenol	ND	840	ug/kg dry	1	06/17/14	B4F0915	8270	
129-00-0	Pyrene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
Surrogate: 2,4,6-Tribromophenol			*84.3 %*	*20.3-115*		*06/17/14*	B4F0915	*8270*	
Surrogate: 2-Fluorobiphenyl			*76.0 %*	*32.9-115*		*06/17/14*	B4F0915	*8270*	
Surrogate: 2-Fluorophenol			*44.6 %*	*23.7-115*		*06/17/14*	B4F0915	*8270*	
Surrogate: Nitrobenzene-d5			*57.7 %*	*31.8-115*		*06/17/14*	B4F0915	*8270*	
Surrogate: Phenol-d6			*53.6 %*	*29.3-115*		*06/17/14*	B4F0915	*8270*	
Surrogate: p-Terphenyl-d14			*88.6 %*	*38.5-115*		*06/17/14*	B4F0915	*8270*	

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Organics-Pesticides									
789-02-6	2,4'-DDT	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-54-8	4,4'-DDD	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-55-9	4,4'-DDE	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
50-29-3	4,4'-DDT	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-84-6	a-BHC	ND	13	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
5103-71-9	a-Chlordane	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
309-00-2	Aldrin	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-85-7	b-BHC	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-86-8	d-BHC	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
60-57-1	Dieldrin	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
959-98-8	Endosulfan I	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
33213-65-9	Endosulfan II	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
1031-07-8	Endosulfan sulfate	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-20-8	Endrin	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
7421-93-4	Endrin aldehyde	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
53494-70-5	Endrin ketone	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
58-89-9	g-BHC (Lindane)	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
5103-74-2	g-Chlordane	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
76-44-8	Heptachlor	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
1024-57-3	Heptachlor epoxide	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
87-82-1	Hexabromobenzene	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-43-5	Methoxychlor	ND	64	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
2385-85-5	Mirex	ND	64	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
59080-40-9	PBB (BP-6)	ND	320	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
8001-35-2	Toxaphene	ND	220	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*64.5 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*58.9 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	

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Organics-PCBs as Aroclors									
12674-11-2	Aroclor 1016	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11104-28-2	Aroclor 1221	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11141-16-5	Aroclor 1232	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
53469-21-9	Aroclor 1242	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
12672-29-6	Aroclor 1248	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11097-69-1	Aroclor 1254	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11096-82-5	Aroclor 1260	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
37324-23-5	Aroclor 1262	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11100-14-4	Aroclor 1268	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*72.3 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*63.2 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Inorganics-General Chemistry									
TS	**% Total Solids**	**78.5**	0.1	%	1	06/03/14	B4F0319	2540 B	
57-12-5	Total Cyanide	ND	0.13	mg/kg dry	1	06/12/14	B4F1005	ASTM D 7511-09	
Inorganics-Metals									
7440-36-0	Antimony	ND	0.3	mg/kg dry	10	06/18/14	B4F0904	6020/200.8	
7440-38-2	**Arsenic**	**5.3**	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-39-3	**Barium**	**78**	1.0	mg/kg dry	10	06/19/14	B4F0902	6020/200.8	
7440-41-7	**Beryllium**	**0.6**	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-43-9	**Cadmium**	**0.2**	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-47-3	**Chromium**	**20**	2.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-48-4	**Cobalt**	**11**	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-50-8	**Copper**	**22**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-89-6	**Iron**	**27000**	5.0	mg/kg dry	10	06/23/14	B4F0902	6010/200.7	
7439-92-1	**Lead**	**12**	1.0	mg/kg dry	10	06/19/14	B4F0902	6020/200.8	
7439-96-5	**Manganese**	**640**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-97-6	Mercury	ND	0.06	mg/kg dry	1	06/19/14	B4F1721	7471/245.5	
7439-98-7	Molybdenum	ND	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-02-0	**Nickel**	**29**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7782-49-2	Selenium	ND	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-22-4	Silver	ND	0.1	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-28-0	Thallium	ND	0.5	mg/kg dry	10	06/19/14	B4F0902	6020/200.8	
7440-62-2	**Vanadium**	**29**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-66-6	**Zinc**	**54**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	

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Client ID: C-SB-08

Lab ID: 1406007-09

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
71-55-6	1,1,1-Trichloroethane	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
79-00-5	1,1,2-Trichloroethane	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
75-34-3	1,1-Dichloroethane	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
75-35-4	1,1-Dichloroethylene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	
96-18-4	1,2,3-Trichloropropane	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	
106-93-4	1,2-Dibromoethane	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
95-50-1	1,2-Dichlorobenzene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
107-06-2	1,2-Dichloroethane	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
78-87-5	1,2-Dichloropropane	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
541-73-1	1,3-Dichlorobenzene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
106-46-7	1,4-Dichlorobenzene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
78-93-3	2-Butanone (MEK)	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	
591-78-6	2-Hexanone	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	
91-57-6	2-Methylnaphthalene	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	X
67-64-1	2-Propanone (acetone)	ND	1300	ug/kg dry	50	06/06/14	B4F1719	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	
107-13-1	Acrylonitrile	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	
71-43-2	Benzene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
108-86-1	Bromobenzene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
74-97-5	Bromochloromethane	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
75-27-4	Bromodichloromethane	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
75-25-2	Bromoform	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
74-83-9	Bromomethane	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	
75-15-0	Carbon disulfide	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
56-23-5	Carbon tetrachloride	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
108-90-7	Chlorobenzene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
75-00-3	Chloroethane	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	
67-66-3	Chloroform	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
74-87-3	Chloromethane	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
110-82-7	Cyclohexane	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	
124-48-1	Dibromochloromethane	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
75-71-8	Dichlorodifluoromethane	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	A05
60-29-7	Diethyl ether	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	A05
108-20-3	Diisopropyl Ether	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	
100-41-4	Ethylbenzene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
637-92-3	Ethyltertiarybutylether	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	
67-72-1	Hexachloroethane	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	
98-82-8	Isopropylbenzene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
1330-20-7	m & p - Xylene	ND	130	ug/kg dry	50	06/06/14	B4F1719	8260	
74-88-4	Methyl iodide	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	A05
75-09-2	Methylene chloride	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	
1634-04-4	Methyltertiarybutylether	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
91-20-3	Naphthalene	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	X
104-51-8	n-Butylbenzene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
103-65-1	n-Propylbenzene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
95-47-6	o-Xylene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
[illegible]5	p-Isopropyl toluene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
135-98-8	sec-Butylbenzene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
100-42-5	Styrene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
98-06-6	tert-Butylbenzene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
75-65-0	tertiary Butyl Alcohol	ND	3100	ug/kg dry	50	06/06/14	B4F1719	8260	
994-05-8	tertiaryAmylmethylether	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	
127-18-4	Tetrachloroethylene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
109-99-9	Tetrahydrofuran	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	
108-88-3	Toluene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	310	ug/kg dry	50	06/06/14	B4F1719	8260	
79-01-6	Trichloroethylene	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
75-69-4	Trichlorofluoromethane	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
75-01-4	Vinyl chloride	ND	63	ug/kg dry	50	06/06/14	B4F1719	8260	
Surrogate: Bromofluorobenzene			*104 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Dibromofluoromethane			*106 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Toluene-d8			*105 %*	*50-150*		*06/06/14*	B4F1719	*8260*	

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Lab ID: 1406007-09

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
120-82-1	1,2,4-Trichlorobenzene	ND	460	ug/kg dry	1	06/17/14	B4F0915	8270	
95-95-4	2,4,5-Trichlorophenol	ND	760	ug/kg dry	1	06/17/14	B4F0915	8270	
88-06-2	2,4,6-Trichlorophenol	ND	760	ug/kg dry	1	06/17/14	B4F0915	8270	
120-83-2	2,4-Dichlorophenol	ND	760	ug/kg dry	1	06/17/14	B4F0915	8270	
105-67-9	2,4-Dimethylphenol	ND	760	ug/kg dry	1	06/17/14	B4F0915	8270	
51-28-5	2,4-Dinitrophenol	ND	3900	ug/kg dry	1	06/17/14	B4F0915	8270	
121-14-2	2,4-Dinitrotoluene	ND	580	ug/kg dry	1	06/17/14	B4F0915	8270	
606-20-2	2,6-Dinitrotoluene	ND	580	ug/kg dry	1	06/17/14	B4F0915	8270	
91-58-7	2-Chloronaphthalene	ND	460	ug/kg dry	1	06/17/14	B4F0915	8270	
95-57-8	2-Chlorophenol	ND	760	ug/kg dry	1	06/17/14	B4F0915	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	3900	ug/kg dry	1	06/17/14	B4F0915	8270	
91-57-6	2-Methylnaphthalene	ND	580	ug/kg dry	1	06/17/14	B4F0915	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	760	ug/kg dry	1	06/17/14	B4F0915	8270	
88-74-4	2-Nitroaniline	ND	1200	ug/kg dry	1	06/17/14	B4F0915	8270	
88-75-5	2-Nitrophenol	ND	760	ug/kg dry	1	06/17/14	B4F0915	8270	
108394,106445	3 & 4-Methylphenol	ND	1500	ug/kg dry	1	06/17/14	B4F0915	8270	
99-09-2	3-Nitroaniline	ND	1200	ug/kg dry	1	06/17/14	B4F0915	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	460	ug/kg dry	1	06/17/14	B4F0915	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	460	ug/kg dry	1	06/17/14	B4F0915	8270	
7005-72-3	4-Chlorodiphenylether	ND	230	ug/kg dry	1	06/17/14	B4F0915	8270	
100-01-6	4-Nitroaniline	ND	1200	ug/kg dry	1	06/17/14	B4F0915	8270	
100-02-7	4-Nitrophenol	ND	3900	ug/kg dry	1	06/17/14	B4F0915	8270	
83-32-9	Acenaphthene	ND	230	ug/kg dry	1	06/17/14	B4F0915	8270	
208-96-8	Acenaphthylene	ND	230	ug/kg dry	1	06/17/14	B4F0915	8270	
120-12-7	Anthracene	ND	230	ug/kg dry	1	06/17/14	B4F0915	8270	
103-33-3	Azobenzene	ND	460	ug/kg dry	1	06/17/14	B4F0915	8270	
56-55-3	Benz[a]anthracene	ND	230	ug/kg dry	1	06/17/14	B4F0915	8270	
50-32-8	Benzo[a]pyrene	ND	460	ug/kg dry	1	06/17/14	B4F0915	8270	
205-99-2	Benzo[b]fluoranthene	ND	460	ug/kg dry	1	06/17/14	B4F0915	8270	
191-24-2	Benzo[g,h,i]perylene	ND	460	ug/kg dry	1	06/17/14	B4F0915	8270	
207-08-9	Benzo[k]fluoranthene	ND	460	ug/kg dry	1	06/17/14	B4F0915	8270	
100-51-6	Benzyl Alcohol	ND	5800	ug/kg dry	1	06/17/14	B4F0915	8270	A05
111-91-1	Bis(2-chloroethoxy)methane	ND	460	ug/kg dry	1	06/17/14	B4F0915	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	230	ug/kg dry	1	06/17/14	B4F0915	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	230	ug/kg dry	1	06/17/14	B4F0915	8270	A05
117-81-7	Bis(2-ethylhexyl)phthalate	ND	580	ug/kg dry	1	06/17/14	B4F0915	8270	
85-68-7	Butyl benzyl phthalate	ND	580	ug/kg dry	1	06/17/14	B4F0915	8270	
86-74-8	Carbazole	ND	580	ug/kg dry	1	06/17/14	B4F0915	8270	
218-01-9	Chrysene	ND	230	ug/kg dry	1	06/17/14	B4F0915	8270	
53-70-3	Dibenz[a,h]anthracene	ND	460	ug/kg dry	1	06/17/14	B4F0915	8270	
132-64-9	Dibenzofuran	ND	580	ug/kg dry	1	06/17/14	B4F0915	8270	

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Organics-Semivolatiles									**See note Y20**
84-66-2	Diethylphthalate	ND	580	ug/kg dry	1	06/17/14	B4F0915	8270	
131-11-3	Dimethyl phthalate	ND	580	ug/kg dry	1	06/17/14	B4F0915	8270	
84-74-2	Di-n-butyl phthalate	ND	580	ug/kg dry	1	06/17/14	B4F0915	8270	
117-84-0	Di-n-octyl phthalate	ND	580	ug/kg dry	1	06/17/14	B4F0915	8270	
206-44-0	Fluoranthene	ND	230	ug/kg dry	1	06/17/14	B4F0915	8270	
86-73-7	Fluorene	ND	230	ug/kg dry	1	06/17/14	B4F0915	8270	
118-74-1	Hexachlorobenzene	ND	460	ug/kg dry	1	06/17/14	B4F0915	8270	
87-68-3	Hexachlorobutadiene	ND	230	ug/kg dry	1	06/17/14	B4F0915	8270	
77-47-4	Hexachlorocyclopentadiene	ND	2300	ug/kg dry	1	06/17/14	B4F0915	8270	
67-72-1	Hexachloroethane	ND	230	ug/kg dry	1	06/17/14	B4F0915	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	460	ug/kg dry	1	06/17/14	B4F0915	8270	
78-59-1	Isophorone	ND	230	ug/kg dry	1	06/17/14	B4F0915	8270	
91-20-3	Naphthalene	ND	230	ug/kg dry	1	06/17/14	B4F0915	8270	
98-95-3	Nitrobenzene	ND	460	ug/kg dry	1	06/17/14	B4F0915	8270	
67-75-9	N-Nitrosodimethylamine	ND	580	ug/kg dry	1	06/17/14	B4F0915	8270	A05
621-64-7	N-Nitrosodi-n-propylamine	ND	460	ug/kg dry	1	06/17/14	B4F0915	8270	
[illegible]5	N-Nitrosodiphenylamine	ND	460	ug/kg dry	1	06/17/14	B4F0915	8270	
87-86-5	Pentachlorophenol	ND	3900	ug/kg dry	1	06/17/14	B4F0915	8270	
85-01-8	Phenanthrene	ND	230	ug/kg dry	1	06/17/14	B4F0915	8270	
108-95-2	Phenol	ND	760	ug/kg dry	1	06/17/14	B4F0915	8270	
129-00-0	Pyrene	ND	230	ug/kg dry	1	06/17/14	B4F0915	8270	
Surrogate: 2,4,6-Tribromophenol			*72.9 %*	*20.3-115*		*06/17/14*	B4F0915	*8270*	
Surrogate: 2-Fluorobiphenyl			*64.4 %*	*32.9-115*		*06/17/14*	B4F0915	*8270*	
Surrogate: 2-Fluorophenol			*41.1 %*	*23.7-115*		*06/17/14*	B4F0915	*8270*	
Surrogate: Nitrobenzene-d5			*49.6 %*	*31.8-115*		*06/17/14*	B4F0915	*8270*	
Surrogate: Phenol-d6			*48.4 %*	*29.3-115*		*06/17/14*	B4F0915	*8270*	
Surrogate: p-Terphenyl-d14			*76.6 %*	*38.5-115*		*06/17/14*	B4F0915	*8270*	

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Organics-Pesticides									
789-02-6	2,4'-DDT	ND	23	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-54-8	4,4'-DDD	ND	23	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-55-9	4,4'-DDE	ND	23	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
50-29-3	4,4'-DDT	ND	23	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-84-6	a-BHC	ND	12	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
5103-71-9	a-Chlordane	ND	23	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
309-00-2	Aldrin	ND	23	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-85-7	b-BHC	ND	23	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-86-8	d-BHC	ND	23	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
60-57-1	Dieldrin	ND	23	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
959-98-8	Endosulfan I	ND	23	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
33213-65-9	Endosulfan II	ND	23	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
1031-07-8	Endosulfan sulfate	ND	23	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-20-8	Endrin	ND	23	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
7421-93-4	Endrin aldehyde	ND	23	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
53494-70-5	Endrin ketone	ND	23	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
58-89-9	g-BHC (Lindane)	ND	23	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
5103-74-2	g-Chlordane	ND	23	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
76-44-8	Heptachlor	ND	23	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
1024-57-3	Heptachlor epoxide	ND	23	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
87-82-1	Hexabromobenzene	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-43-5	Methoxychlor	ND	58	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
2385-85-5	Mirex	ND	58	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
59080-40-9	PBB (BP-6)	ND	290	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
8001-35-2	Toxaphene	ND	200	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*66.4 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*67.2 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	

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ENVIRONMENTAL LABORATORY

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

Client ID: C-SB-08

Lab ID: 1406007-09

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-PCBs as Aroclors									
12674-11-2	Aroclor 1016	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11104-28-2	Aroclor 1221	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11141-16-5	Aroclor 1232	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
53469-21-9	Aroclor 1242	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
12672-29-6	Aroclor 1248	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11097-69-1	Aroclor 1254	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11096-82-5	Aroclor 1260	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
37324-23-5	Aroclor 1262	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11100-14-4	Aroclor 1268	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl		*74.4 %*		*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene		*71.9 %*		*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Inorganics-General Chemistry									
TS	**% Total Solids**	**86.5**	0.1	%	1	06/03/14	B4F0319	2540 B	
57-12-5	Total Cyanide	ND	0.12	mg/kg dry	1	06/12/14	B4F1005	ASTM D 7511-09	
Inorganics-Metals									
7440-36-0	Antimony	ND	0.3	mg/kg dry	10	06/18/14	B4F0904	6020/200.8	
7440-38-2	**Arsenic**	**9.9**	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-39-3	**Barium**	**50**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-41-7	**Beryllium**	**0.5**	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-43-9	Cadmium	ND	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-47-3	**Chromium**	**16**	2.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-48-4	**Cobalt**	**10**	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-50-8	**Copper**	**15**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-89-6	**Iron**	**23000**	5.0	mg/kg dry	10	06/23/14	B4F0902	6010/200.7	
7439-92-1	**Lead**	**9.9**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-96-5	**Manganese**	**470**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-97-6	Mercury	ND	0.06	mg/kg dry	1	06/19/14	B4F1721	7471/245.5	
7439-98-7	**Molybdenum**	**2.0**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-02-0	**Nickel**	**25**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7782-49-2	Selenium	ND	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-22-4	Silver	ND	0.1	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-28-0	Thallium	ND	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-62-2	**Vanadium**	**25**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-66-6	**Zinc**	**42**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	

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Lansing, MI 48909
TEL: (517) 335-9800
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Client ID: C-SB-09

Lab ID: 1406007-10

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
71-55-6	1,1,1-Trichloroethane	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
79-00-5	1,1,2-Trichloroethane	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
75-34-3	1,1-Dichloroethane	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
75-35-4	1,1-Dichloroethylene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
96-18-4	1,2,3-Trichloropropane	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
106-93-4	1,2-Dibromoethane	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
95-50-1	1,2-Dichlorobenzene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
107-06-2	1,2-Dichloroethane	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
78-87-5	1,2-Dichloropropane	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
541-73-1	1,3-Dichlorobenzene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
106-46-7	1,4-Dichlorobenzene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
78-93-3	2-Butanone (MEK)	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
591-78-6	2-Hexanone	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
91-57-6	2-Methylnaphthalene	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	X
67-64-1	2-Propanone (acetone)	ND	1500	ug/kg dry	50	06/06/14	B4F1719	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
107-13-1	Acrylonitrile	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
71-43-2	Benzene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
108-86-1	Bromobenzene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
74-97-5	Bromochloromethane	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
75-27-4	Bromodichloromethane	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
75-25-2	Bromoform	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
74-83-9	Bromomethane	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
75-15-0	Carbon disulfide	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
56-23-5	Carbon tetrachloride	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
108-90-7	Chlorobenzene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
75-00-3	Chloroethane	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
67-66-3	Chloroform	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
74-87-3	Chloromethane	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
110-82-7	Cyclohexane	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
124-48-1	Dibromochloromethane	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	

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Lansing, MI 48909
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Client ID: C-SB-09

Lab ID: 1406007-10

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
75-71-8	Dichlorodifluoromethane	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	A05
60-29-7	Diethyl ether	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	A05
108-20-3	Diisopropyl Ether	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
100-41-4	Ethylbenzene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
637-92-3	Ethyltertiarybutylether	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
67-72-1	Hexachloroethane	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
98-82-8	Isopropylbenzene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
1330-20-7	m & p - Xylene	ND	150	ug/kg dry	50	06/06/14	B4F1719	8260	
74-88-4	Methyl iodide	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	A05
75-09-2	Methylene chloride	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
1634-04-4	Methyltertiarybutylether	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
91-20-3	Naphthalene	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	X
104-51-8	n-Butylbenzene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
103-65-1	n-Propylbenzene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
95-47-6	o-Xylene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
99-87-6	p-Isopropyl toluene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
135-98-8	sec-Butylbenzene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
100-42-5	Styrene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
98-06-6	tert-Butylbenzene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
75-65-0	tertiary Butyl Alcohol	ND	3700	ug/kg dry	50	06/06/14	B4F1719	8260	
994-05-8	tertiaryAmylmethylether	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
127-18-4	Tetrachloroethylene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
109-99-9	Tetrahydrofuran	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
108-88-3	Toluene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	370	ug/kg dry	50	06/06/14	B4F1719	8260	
79-01-6	Trichloroethylene	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
75-69-4	Trichlorofluoromethane	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
75-01-4	Vinyl chloride	ND	75	ug/kg dry	50	06/06/14	B4F1719	8260	
Surrogate: Bromofluorobenzene			*112 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Dibromofluoromethane			*112 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Toluene-d8			*114 %*	*50-150*		*06/06/14*	B4F1719	*8260*	

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Lansing, MI 48909
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Client ID: C-SB-09

Lab ID: 1406007-10

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
120-82-1	1,2,4-Trichlorobenzene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
95-95-4	2,4,5-Trichlorophenol	ND	820	ug/kg dry	1	06/17/14	B4F0915	8270	
88-06-2	2,4,6-Trichlorophenol	ND	820	ug/kg dry	1	06/17/14	B4F0915	8270	
120-83-2	2,4-Dichlorophenol	ND	820	ug/kg dry	1	06/17/14	B4F0915	8270	
105-67-9	2,4-Dimethylphenol	ND	820	ug/kg dry	1	06/17/14	B4F0915	8270	
51-28-5	2,4-Dinitrophenol	ND	4200	ug/kg dry	1	06/17/14	B4F0915	8270	
121-14-2	2,4-Dinitrotoluene	ND	620	ug/kg dry	1	06/17/14	B4F0915	8270	
606-20-2	2,6-Dinitrotoluene	ND	620	ug/kg dry	1	06/17/14	B4F0915	8270	
91-58-7	2-Chloronaphthalene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
95-57-8	2-Chlorophenol	ND	820	ug/kg dry	1	06/17/14	B4F0915	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	4200	ug/kg dry	1	06/17/14	B4F0915	8270	
91-57-6	2-Methylnaphthalene	ND	620	ug/kg dry	1	06/17/14	B4F0915	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	820	ug/kg dry	1	06/17/14	B4F0915	8270	
88-74-4	2-Nitroaniline	ND	1200	ug/kg dry	1	06/17/14	B4F0915	8270	
88-75-5	2-Nitrophenol	ND	820	ug/kg dry	1	06/17/14	B4F0915	8270	
108394,106445	3 & 4-Methylphenol	ND	1600	ug/kg dry	1	06/17/14	B4F0915	8270	
99-09-2	3-Nitroaniline	ND	1200	ug/kg dry	1	06/17/14	B4F0915	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
59-50-7	4-Chloro-3-methyl phenol	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
7005-72-3	4-Chlorodiphenylether	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
100-01-6	4-Nitroaniline	ND	1200	ug/kg dry	1	06/17/14	B4F0915	8270	
100-02-7	4-Nitrophenol	ND	4200	ug/kg dry	1	06/17/14	B4F0915	8270	
83-32-9	Acenaphthene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
208-96-8	Acenaphthylene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
120-12-7	Anthracene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
103-33-3	Azobenzene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
56-55-3	Benz[a]anthracene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
50-32-8	Benzo[a]pyrene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
205-99-2	Benzo[b]fluoranthene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
191-24-2	Benzo[g,h,i]perylene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
207-08-9	Benzo[k]fluoranthene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
100-51-6	Benzyl Alcohol	ND	6200	ug/kg dry	1	06/17/14	B4F0915	8270	A05
111-91-1	Bis(2-chloroethoxy)methane	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	A05
117-81-7	Bis(2-ethylhexyl)phthalate	ND	620	ug/kg dry	1	06/17/14	B4F0915	8270	
85-68-7	Butyl benzyl phthalate	ND	620	ug/kg dry	1	06/17/14	B4F0915	8270	
86-74-8	Carbazole	ND	620	ug/kg dry	1	06/17/14	B4F0915	8270	
218-01-9	Chrysene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
53-70-3	Dibenz[a,h]anthracene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
132-64-9	Dibenzofuran	ND	620	ug/kg dry	1	06/17/14	B4F0915	8270	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
84-66-2	Diethylphthalate	ND	620	ug/kg dry	1	06/17/14	B4F0915	8270	
131-11-3	Dimethyl phthalate	ND	620	ug/kg dry	1	06/17/14	B4F0915	8270	
84-74-2	Di-n-butyl phthalate	ND	620	ug/kg dry	1	06/17/14	B4F0915	8270	
117-84-0	Di-n-octyl phthalate	ND	620	ug/kg dry	1	06/17/14	B4F0915	8270	
206-44-0	Fluoranthene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
86-73-7	Fluorene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
118-74-1	Hexachlorobenzene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
87-68-3	Hexachlorobutadiene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
77-47-4	Hexachlorocyclopentadiene	ND	2500	ug/kg dry	1	06/17/14	B4F0915	8270	
67-72-1	Hexachloroethane	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
78-59-1	Isophorone	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
91-20-3	Naphthalene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
98-95-3	Nitrobenzene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
67-75-9	N-Nitrosodimethylamine	ND	620	ug/kg dry	1	06/17/14	B4F0915	8270	A05
621-64-7	N-Nitrosodi-n-propylamine	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
86-30-6	N-Nitrosodiphenylamine	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
87-86-5	Pentachlorophenol	ND	4200	ug/kg dry	1	06/17/14	B4F0915	8270	
85-01-8	Phenanthrene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
108-95-2	Phenol	ND	820	ug/kg dry	1	06/17/14	B4F0915	8270	
129-00-0	Pyrene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
Surrogate: 2,4,6-Tribromophenol			*82.1 %*	*20.3-115*		*06/17/14*	B4F0915	*8270*	
Surrogate: 2-Fluorobiphenyl			*73.3 %*	*32.9-115*		*06/17/14*	B4F0915	*8270*	
Surrogate: 2-Fluorophenol			*43.4 %*	*23.7-115*		*06/17/14*	B4F0915	*8270*	
Surrogate: Nitrobenzene-d5			*53.2 %*	*31.8-115*		*06/17/14*	B4F0915	*8270*	
Surrogate: Phenol-d6			*50.8 %*	*29.3-115*		*06/17/14*	B4F0915	*8270*	
Surrogate: p-Terphenyl-d14			*87.6 %*	*38.5-115*		*06/17/14*	B4F0915	*8270*	

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ENVIRONMENTAL LABORATORY

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TEL: (517) 335-9800
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Client ID: C-SB-09

Lab ID: 1406007-10

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Pesticides									
789-02-6	2,4'-DDT	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-54-8	4,4'-DDD	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-55-9	4,4'-DDE	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
50-29-3	4,4'-DDT	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-84-6	a-BHC	ND	12	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
5103-71-9	a-Chlordane	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
309-00-2	Aldrin	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-85-7	b-BHC	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-86-8	d-BHC	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
60-57-1	Dieldrin	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
959-98-8	Endosulfan I	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
33213-65-9	Endosulfan II	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
1031-07-8	Endosulfan sulfate	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-20-8	Endrin	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
7421-93-4	Endrin aldehyde	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
53494-70-5	Endrin ketone	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
58-89-9	g-BHC (Lindane)	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
5103-74-2	g-Chlordane	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
76-44-8	Heptachlor	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
1024-57-3	Heptachlor epoxide	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
87-82-1	Hexabromobenzene	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-43-5	Methoxychlor	ND	62	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
2385-85-5	Mirex	ND	62	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
59080-40-9	PBB (BP-6)	ND	310	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
8001-35-2	Toxaphene	ND	210	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*55.8 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*56.6 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-PCBs as Aroclors									
12674-11-2	Aroclor 1016	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11104-28-2	Aroclor 1221	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11141-16-5	Aroclor 1232	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
53469-21-9	Aroclor 1242	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
12672-29-6	Aroclor 1248	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11097-69-1	Aroclor 1254	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11096-82-5	Aroclor 1260	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
37324-23-5	Aroclor 1262	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11100-14-4	Aroclor 1268	ND	120	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl		*63.2 %*		*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene		*59.5 %*		*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Inorganics-General Chemistry									
TS	**% Total Solids**	**80.3**	0.1	%	1	06/03/14	B4F0319	2540 B	
57-12-5	Total Cyanide	ND	0.12	mg/kg dry	1	06/12/14	B4F1005	ASTM D 7511-09	
Inorganics-Metals									
7440-36-0	Antimony	ND	0.3	mg/kg dry	10	06/18/14	B4F0904	6020/200.8	
7440-38-2	**Arsenic**	**7.0**	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-39-3	**Barium**	**55**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-41-7	**Beryllium**	**0.5**	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-43-9	**Cadmium**	**0.2**	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-47-3	**Chromium**	**18**	2.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-48-4	**Cobalt**	**11**	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-50-8	**Copper**	**18**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-89-6	**Iron**	**23000**	5.0	mg/kg dry	10	06/23/14	B4F0902	6010/200.7	
7439-92-1	**Lead**	**9.0**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-96-5	**Manganese**	**390**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-97-6	Mercury	ND	0.06	mg/kg dry	1	06/19/14	B4F1721	7471/245.5	
7439-98-7	**Molybdenum**	**1.3**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-02-0	**Nickel**	**27**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7782-49-2	Selenium	ND	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-22-4	Silver	ND	0.1	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-28-0	Thallium	ND	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-62-2	**Vanadium**	**25**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-66-6	**Zinc**	**47**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	

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Client ID: C-SB-10

Lab ID: 1406007-11

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
71-55-6	1,1,1-Trichloroethane	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
79-00-5	1,1,2-Trichloroethane	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
75-34-3	1,1-Dichloroethane	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
75-35-4	1,1-Dichloroethylene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
96-18-4	1,2,3-Trichloropropane	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
106-93-4	1,2-Dibromoethane	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
95-50-1	1,2-Dichlorobenzene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
107-06-2	1,2-Dichloroethane	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
78-87-5	1,2-Dichloropropane	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
541-73-1	1,3-Dichlorobenzene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
106-46-7	1,4-Dichlorobenzene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
78-93-3	2-Butanone (MEK)	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
591-78-6	2-Hexanone	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
91-57-6	2-Methylnaphthalene	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	X
67-64-1	2-Propanone (acetone)	ND	1500	ug/kg dry	50	06/06/14	B4F1719	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
107-13-1	Acrylonitrile	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
71-43-2	Benzene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
108-86-1	Bromobenzene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
74-97-5	Bromochloromethane	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
75-27-4	Bromodichloromethane	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
75-25-2	Bromoform	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
74-83-9	Bromomethane	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
75-15-0	Carbon disulfide	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
56-23-5	Carbon tetrachloride	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
108-90-7	Chlorobenzene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
75-00-3	Chloroethane	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
67-66-3	Chloroform	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
74-87-3	Chloromethane	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
110-82-7	Cyclohexane	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
124-48-1	Dibromochloromethane	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
75-71-8	Dichlorodifluoromethane	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	A05
60-29-7	Diethyl ether	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	A05
108-20-3	Diisopropyl Ether	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
100-41-4	Ethylbenzene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
637-92-3	Ethyltertiarybutylether	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
67-72-1	Hexachloroethane	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
98-82-8	Isopropylbenzene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
1330-20-7	m & p - Xylene	ND	150	ug/kg dry	50	06/06/14	B4F1719	8260	
74-88-4	Methyl iodide	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	A05
75-09-2	Methylene chloride	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
1634-04-4	Methyltertiarybutylether	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
91-20-3	Naphthalene	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	X
104-51-8	n-Butylbenzene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
103-65-1	n-Propylbenzene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
95-47-6	o-Xylene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
99-87-6	p-Isopropyl toluene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
135-98-8	sec-Butylbenzene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
100-42-5	Styrene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
98-06-6	tert-Butylbenzene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
75-65-0	tertiary Butyl Alcohol	ND	3900	ug/kg dry	50	06/06/14	B4F1719	8260	
994-05-8	tertiaryAmylmethylether	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
127-18-4	Tetrachloroethylene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
109-99-9	Tetrahydrofuran	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
108-88-3	Toluene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
79-01-6	Trichloroethylene	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
75-69-4	Trichlorofluoromethane	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
75-01-4	Vinyl chloride	ND	77	ug/kg dry	50	06/06/14	B4F1719	8260	
Surrogate: Bromofluorobenzene			*111 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Dibromofluoromethane			*113 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Toluene-d8			*113 %*	*50-150*		*06/06/14*	B4F1719	*8260*	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
120-82-1	1,2,4-Trichlorobenzene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
95-95-4	2,4,5-Trichlorophenol	ND	830	ug/kg dry	1	06/17/14	B4F0915	8270	
88-06-2	2,4,6-Trichlorophenol	ND	830	ug/kg dry	1	06/17/14	B4F0915	8270	
120-83-2	2,4-Dichlorophenol	ND	830	ug/kg dry	1	06/17/14	B4F0915	8270	
105-67-9	2,4-Dimethylphenol	ND	830	ug/kg dry	1	06/17/14	B4F0915	8270	
51-28-5	2,4-Dinitrophenol	ND	4300	ug/kg dry	1	06/17/14	B4F0915	8270	
121-14-2	2,4-Dinitrotoluene	ND	630	ug/kg dry	1	06/17/14	B4F0915	8270	
606-20-2	2,6-Dinitrotoluene	ND	630	ug/kg dry	1	06/17/14	B4F0915	8270	
91-58-7	2-Chloronaphthalene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
95-57-8	2-Chlorophenol	ND	830	ug/kg dry	1	06/17/14	B4F0915	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	4300	ug/kg dry	1	06/17/14	B4F0915	8270	
91-57-6	2-Methylnaphthalene	ND	630	ug/kg dry	1	06/17/14	B4F0915	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	830	ug/kg dry	1	06/17/14	B4F0915	8270	
88-74-4	2-Nitroaniline	ND	1300	ug/kg dry	1	06/17/14	B4F0915	8270	
88-75-5	2-Nitrophenol	ND	830	ug/kg dry	1	06/17/14	B4F0915	8270	
108394,106445	3 & 4-Methylphenol	ND	1700	ug/kg dry	1	06/17/14	B4F0915	8270	
99-09-2	3-Nitroaniline	ND	1300	ug/kg dry	1	06/17/14	B4F0915	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
59-50-7	4-Chloro-3-methyl phenol	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
7005-72-3	4-Chlorodiphenylether	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
100-01-6	4-Nitroaniline	ND	1300	ug/kg dry	1	06/17/14	B4F0915	8270	
100-02-7	4-Nitrophenol	ND	4300	ug/kg dry	1	06/17/14	B4F0915	8270	
83-32-9	Acenaphthene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
208-96-8	Acenaphthylene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
120-12-7	Anthracene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
103-33-3	Azobenzene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
56-55-3	Benz[a]anthracene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
50-32-8	Benzo[a]pyrene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
205-99-2	Benzo[b]fluoranthene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
191-24-2	Benzo[g,h,i]perylene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
207-08-9	Benzo[k]fluoranthene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
100-51-6	Benzyl Alcohol	ND	6300	ug/kg dry	1	06/17/14	B4F0915	8270	A05
111-91-1	Bis(2-chloroethoxy)methane	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	A05
117-81-7	Bis(2-ethylhexyl)phthalate	ND	630	ug/kg dry	1	06/17/14	B4F0915	8270	
85-68-7	Butyl benzyl phthalate	ND	630	ug/kg dry	1	06/17/14	B4F0915	8270	
86-74-8	Carbazole	ND	630	ug/kg dry	1	06/17/14	B4F0915	8270	
218-01-9	Chrysene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
53-70-3	Dibenz[a,h]anthracene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
132-64-9	Dibenzofuran	ND	630	ug/kg dry	1	06/17/14	B4F0915	8270	

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Client ID: C-SB-10

Lab ID: 1406007-11

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
84-66-2	Diethylphthalate	ND	630	ug/kg dry	1	06/17/14	B4F0915	8270	
131-11-3	Dimethyl phthalate	ND	630	ug/kg dry	1	06/17/14	B4F0915	8270	
84-74-2	Di-n-butyl phthalate	ND	630	ug/kg dry	1	06/17/14	B4F0915	8270	
117-84-0	Di-n-octyl phthalate	ND	630	ug/kg dry	1	06/17/14	B4F0915	8270	
206-44-0	Fluoranthene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
86-73-7	Fluorene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
118-74-1	Hexachlorobenzene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
87-68-3	Hexachlorobutadiene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
77-47-4	Hexachlorocyclopentadiene	ND	2500	ug/kg dry	1	06/17/14	B4F0915	8270	
67-72-1	Hexachloroethane	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
78-59-1	Isophorone	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
91-20-3	Naphthalene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
98-95-3	Nitrobenzene	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
67-75-9	N-Nitrosodimethylamine	ND	630	ug/kg dry	1	06/17/14	B4F0915	8270	A05
621-64-7	N-Nitrosodi-n-propylamine	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
6	N-Nitrosodiphenylamine	ND	500	ug/kg dry	1	06/17/14	B4F0915	8270	
87-86-5	Pentachlorophenol	ND	4300	ug/kg dry	1	06/17/14	B4F0915	8270	
85-01-8	Phenanthrene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
108-95-2	Phenol	ND	830	ug/kg dry	1	06/17/14	B4F0915	8270	
129-00-0	Pyrene	ND	250	ug/kg dry	1	06/17/14	B4F0915	8270	
Surrogate: 2,4,6-Tribromophenol			*70.9 %*	*20.3-115*		*06/17/14*	B4F0915	*8270*	
Surrogate: 2-Fluorobiphenyl			*62.1 %*	*32.9-115*		*06/17/14*	B4F0915	*8270*	
Surrogate: 2-Fluorophenol			*36.7 %*	*23.7-115*		*06/17/14*	B4F0915	*8270*	
Surrogate: Nitrobenzene-d5			*44.8 %*	*31.8-115*		*06/17/14*	B4F0915	*8270*	
Surrogate: Phenol-d6			*41.3 %*	*29.3-115*		*06/17/14*	B4F0915	*8270*	
Surrogate: p-Terphenyl-d14			*81.9 %*	*38.5-115*		*06/17/14*	B4F0915	*8270*	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Pesticides									
789-02-6	2,4'-DDT	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-54-8	4,4'-DDD	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-55-9	4,4'-DDE	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
50-29-3	4,4'-DDT	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-84-6	a-BHC	ND	13	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
5103-71-9	a-Chlordane	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
309-00-2	Aldrin	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-85-7	b-BHC	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
319-86-8	d-BHC	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
60-57-1	Dieldrin	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
959-98-8	Endosulfan I	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
33213-65-9	Endosulfan II	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
1031-07-8	Endosulfan sulfate	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-20-8	Endrin	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
7421-93-4	Endrin aldehyde	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
53494-70-5	Endrin ketone	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
58-89-9	g-BHC (Lindane)	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
5103-74-2	g-Chlordane	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
76-44-8	Heptachlor	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
1024-57-3	Heptachlor epoxide	ND	25	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
87-82-1	Hexabromobenzene	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
72-43-5	Methoxychlor	ND	63	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
2385-85-5	Mirex	ND	63	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
59080-40-9	PBB (BP-6)	ND	310	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
8001-35-2	Toxaphene	ND	210	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*71.7 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*66.8 %*	*30-150*		*06/15/14*	B4F0618	*8081/8082*	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-PCBs as Aroclors									
12674-11-2	Aroclor 1016	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11104-28-2	Aroclor 1221	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11141-16-5	Aroclor 1232	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
53469-21-9	Aroclor 1242	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
12672-29-6	Aroclor 1248	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11097-69-1	Aroclor 1254	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11096-82-5	Aroclor 1260	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
37324-23-5	Aroclor 1262	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
11100-14-4	Aroclor 1268	ND	130	ug/kg dry	1	06/15/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*80.2 %*		*30-150*	*06/15/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*71.5 %*		*30-150*	*06/15/14*	B4F0618	*8081/8082*	
Inorganics-General Chemistry									
TS	**% Total Solids**	**79.8**	0.1	%	1	06/03/14	B4F0319	2540 B	
57-12-5	Total Cyanide	ND	0.13	mg/kg dry	1	06/12/14	B4F1005	ASTM D 7511-09	
Inorganics-Metals									
[illegible]6-0	**Antimony**	**0.4**	0.3	mg/kg dry	10	06/18/14	B4F0904	6020/200.8	
7440-38-2	**Arsenic**	**10**	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-39-3	**Barium**	**100**	1.0	mg/kg dry	10	06/19/14	B4F0902	6020/200.8	
7440-41-7	**Beryllium**	**0.7**	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-43-9	**Cadmium**	**0.3**	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-47-3	**Chromium**	**22**	2.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-48-4	**Cobalt**	**15**	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-50-8	**Copper**	**25**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-89-6	**Iron**	**32000**	5.0	mg/kg dry	10	06/23/14	B4F0902	6010/200.7	
7439-92-1	**Lead**	**13**	1.0	mg/kg dry	10	06/19/14	B4F0902	6020/200.8	
7439-96-5	**Manganese**	**970**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-97-6	Mercury	ND	0.06	mg/kg dry	1	06/19/14	B4F1721	7471/245.5	
7439-98-7	**Molybdenum**	**1.4**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-02-0	**Nickel**	**37**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7782-49-2	Selenium	ND	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-22-4	Silver	ND	0.1	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-28-0	Thallium	ND	0.5	mg/kg dry	10	06/19/14	B4F0902	6020/200.8	
7440-62-2	**Vanadium**	**31**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-66-6	**Zinc**	**58**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	

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Client ID: C-SB-11

Lab ID: 1406007-12

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									**See note Y26**
630-20-6	1,1,1,2-Tetrachloroethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
71-55-6	1,1,1-Trichloroethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
79-00-5	1,1,2-Trichloroethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-34-3	1,1-Dichloroethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-35-4	1,1-Dichloroethylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
96-18-4	1,2,3-Trichloropropane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
106-93-4	1,2-Dibromoethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
95-50-1	1,2-Dichlorobenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
107-06-2	1,2-Dichloroethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
78-87-5	1,2-Dichloropropane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
541-73-1	1,3-Dichlorobenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
106-46-7	1,4-Dichlorobenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
78-93-3	2-Butanone (MEK)	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
591-78-6	2-Hexanone	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
91-57-6	2-Methylnaphthalene	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	X
67-64-1	2-Propanone (acetone)	ND	1500	ug/kg dry	50	06/06/14	B4F1719	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
107-13-1	Acrylonitrile	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
71-43-2	Benzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
108-86-1	Bromobenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
74-97-5	Bromochloromethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-27-4	Bromodichloromethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-25-2	Bromoform	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
74-83-9	Bromomethane	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
75-15-0	Carbon disulfide	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
56-23-5	Carbon tetrachloride	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
108-90-7	Chlorobenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-00-3	Chloroethane	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
67-66-3	Chloroform	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
74-87-3	Chloromethane	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
110-82-7	Cyclohexane	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
124-48-1	Dibromochloromethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	

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Organics-Volatiles									**See note Y26**
74-95-3	Dibromomethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-71-8	Dichlorodifluoromethane	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	A05
60-29-7	Diethyl ether	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	A05
108-20-3	Diisopropyl Ether	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
100-41-4	Ethylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
637-92-3	Ethyltertiarybutylether	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
67-72-1	Hexachloroethane	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
98-82-8	Isopropylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
1330-20-7	m & p - Xylene	ND	150	ug/kg dry	50	06/06/14	B4F1719	8260	
74-88-4	Methyl iodide	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	A05
75-09-2	Methylene chloride	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
1634-04-4	Methyltertiarybutylether	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
91-20-3	Naphthalene	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	X
104-51-8	n-Butylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
103-65-1	n-Propylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
95-47-6	o-Xylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
5	p-Isopropyl toluene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
135-98-8	sec-Butylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
100-42-5	Styrene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
98-06-6	tert-Butylbenzene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-65-0	tertiary Butyl Alcohol	ND	3800	ug/kg dry	50	06/06/14	B4F1719	8260	
994-05-8	tertiaryAmylmethylether	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
127-18-4	Tetrachloroethylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
109-99-9	Tetrahydrofuran	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
108-88-3	Toluene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	380	ug/kg dry	50	06/06/14	B4F1719	8260	
79-01-6	Trichloroethylene	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-69-4	Trichlorofluoromethane	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
75-01-4	Vinyl chloride	ND	76	ug/kg dry	50	06/06/14	B4F1719	8260	
Surrogate: Bromofluorobenzene			*112 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Dibromofluoromethane			*113 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Toluene-d8			*113 %*	*50-150*		*06/06/14*	B4F1719	*8260*	

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TEL: (517) 335-9800
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Client ID: C-SB-11

Lab ID: 1406007-12

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
120-82-1	1,2,4-Trichlorobenzene	ND	510	ug/kg dry	1	06/12/14	B4F0915	8270	
95-95-4	2,4,5-Trichlorophenol	ND	840	ug/kg dry	1	06/12/14	B4F0915	8270	
88-06-2	2,4,6-Trichlorophenol	ND	840	ug/kg dry	1	06/12/14	B4F0915	8270	
120-83-2	2,4-Dichlorophenol	ND	840	ug/kg dry	1	06/12/14	B4F0915	8270	
105-67-9	2,4-Dimethylphenol	ND	840	ug/kg dry	1	06/12/14	B4F0915	8270	
51-28-5	2,4-Dinitrophenol	ND	4300	ug/kg dry	1	06/12/14	B4F0915	8270	
121-14-2	2,4-Dinitrotoluene	ND	640	ug/kg dry	1	06/12/14	B4F0915	8270	
606-20-2	2,6-Dinitrotoluene	ND	640	ug/kg dry	1	06/12/14	B4F0915	8270	
91-58-7	2-Chloronaphthalene	ND	510	ug/kg dry	1	06/12/14	B4F0915	8270	
95-57-8	2-Chlorophenol	ND	840	ug/kg dry	1	06/12/14	B4F0915	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	4300	ug/kg dry	1	06/12/14	B4F0915	8270	
91-57-6	2-Methylnaphthalene	ND	640	ug/kg dry	1	06/12/14	B4F0915	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	840	ug/kg dry	1	06/12/14	B4F0915	8270	
88-74-4	2-Nitroaniline	ND	1300	ug/kg dry	1	06/12/14	B4F0915	8270	
88-75-5	2-Nitrophenol	ND	840	ug/kg dry	1	06/12/14	B4F0915	8270	
108394,106445	3 & 4-Methylphenol	ND	1700	ug/kg dry	1	06/12/14	B4F0915	8270	
99-09-2	3-Nitroaniline	ND	1300	ug/kg dry	1	06/12/14	B4F0915	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	510	ug/kg dry	1	06/12/14	B4F0915	8270	
59-50-7	4-Chloro-3-methyl-phenol	ND	510	ug/kg dry	1	06/12/14	B4F0915	8270	
7005-72-3	4-Chlorodiphenylether	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
100-01-6	4-Nitroaniline	ND	1300	ug/kg dry	1	06/12/14	B4F0915	8270	
100-02-7	4-Nitrophenol	ND	4300	ug/kg dry	1	06/12/14	B4F0915	8270	
83-32-9	Acenaphthene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
208-96-8	Acenaphthylene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
120-12-7	Anthracene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
103-33-3	Azobenzene	ND	510	ug/kg dry	1	06/12/14	B4F0915	8270	
56-55-3	Benz[a]anthracene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
50-32-8	Benzo[a]pyrene	ND	510	ug/kg dry	1	06/12/14	B4F0915	8270	
205-99-2	Benzo[b]fluoranthene	ND	510	ug/kg dry	1	06/12/14	B4F0915	8270	
191-24-2	Benzo[g,h,i]perylene	ND	510	ug/kg dry	1	06/12/14	B4F0915	8270	
207-08-9	Benzo[k]fluoranthene	ND	510	ug/kg dry	1	06/12/14	B4F0915	8270	
100-51-6	Benzyl Alcohol	ND	6400	ug/kg dry	1	06/12/14	B4F0915	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	510	ug/kg dry	1	06/12/14	B4F0915	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	A05
117-81-7	Bis(2-ethylhexyl)phthalate	ND	640	ug/kg dry	1	06/12/14	B4F0915	8270	
85-68-7	Butyl benzyl phthalate	ND	640	ug/kg dry	1	06/12/14	B4F0915	8270	
86-74-8	Carbazole	ND	640	ug/kg dry	1	06/12/14	B4F0915	8270	
218-01-9	Chrysene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
53-70-3	Dibenz[a,h]anthracene	ND	510	ug/kg dry	1	06/12/14	B4F0915	8270	
132-64-9	Dibenzofuran	ND	640	ug/kg dry	1	06/12/14	B4F0915	8270	

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Lab ID: 1406007-12

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
84-66-2	Diethylphthalate	ND	640	ug/kg dry	1	06/12/14	B4F0915	8270	
131-11-3	Dimethyl phthalate	ND	640	ug/kg dry	1	06/12/14	B4F0915	8270	
84-74-2	Di-n-butyl phthalate	ND	640	ug/kg dry	1	06/12/14	B4F0915	8270	
117-84-0	Di-n-octyl phthalate	ND	640	ug/kg dry	1	06/12/14	B4F0915	8270	
206-44-0	Fluoranthene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
86-73-7	Fluorene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
118-74-1	Hexachlorobenzene	ND	510	ug/kg dry	1	06/12/14	B4F0915	8270	
87-68-3	Hexachlorobutadiene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
77-47-4	Hexachlorocyclopentadiene	ND	2600	ug/kg dry	1	06/12/14	B4F0915	8270	
67-72-1	Hexachloroethane	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	510	ug/kg dry	1	06/12/14	B4F0915	8270	
78-59-1	Isophorone	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
91-20-3	Naphthalene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
98-95-3	Nitrobenzene	ND	510	ug/kg dry	1	06/12/14	B4F0915	8270	
67-75-9	N-Nitrosodimethylamine	ND	640	ug/kg dry	1	06/12/14	B4F0915	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	510	ug/kg dry	1	06/12/14	B4F0915	8270	
5	N-Nitrosodiphenylamine	ND	510	ug/kg dry	1	06/12/14	B4F0915	8270	
87-86-5	Pentachlorophenol	ND	4300	ug/kg dry	1	06/12/14	B4F0915	8270	
85-01-8	Phenanthrene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
108-95-2	Phenol	ND	840	ug/kg dry	1	06/12/14	B4F0915	8270	
129-00-0	Pyrene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
Surrogate: 2,4,6-Tribromophenol			*82.6 %*	*20.3-115*		*06/12/14*	B4F0915	*8270*	
Surrogate: 2-Fluorobiphenyl			*74.9 %*	*32.9-115*		*06/12/14*	B4F0915	*8270*	
Surrogate: 2-Fluorophenol			*48.4 %*	*23.7-115*		*06/12/14*	B4F0915	*8270*	
Surrogate: Nitrobenzene-d5			*57.6 %*	*31.8-115*		*06/12/14*	B4F0915	*8270*	
Surrogate: Phenol-d6			*54.8 %*	*29.3-115*		*06/12/14*	B4F0915	*8270*	
Surrogate: p-Terphenyl-d14			*76.3 %*	*38.5-115*		*06/12/14*	B4F0915	*8270*	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Pesticides									
789-02-6	2,4' DDT	ND	26	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
72-54-8	4,4'-DDD	ND	26	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
72-55-9	4,4'-DDE	ND	26	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
50-29-3	4,4'-DDT	ND	26	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
319-84-6	a-BHC	ND	13	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
5103-71-9	a-Chlordane	ND	26	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
309-00-2	Aldrin	ND	26	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
319-85-7	b-BHC	ND	26	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
319-86-8	d-BHC	ND	26	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
60-57-1	Dieldrin	ND	26	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
959-98-8	Endosulfan I	ND	26	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
33213-65-9	Endosulfan II	ND	26	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
1031-07-8	Endosulfan sulfate	ND	26	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
72-20-8	Endrin	ND	26	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
7421-93-4	Endrin aldehyde	ND	26	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
53494-70-5	Endrin ketone	ND	26	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
58-89-9	g-BHC (Lindane)	ND	26	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
5103-74-2	g-Chlordane	ND	26	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
76-44-8	Heptachlor	ND	26	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
1024-57-3	Heptachlor epoxide	ND	26	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
87-82-1	Hexabromobenzene	ND	130	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
72-43-5	Methoxychlor	ND	64	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
2385-85-5	Mirex	ND	64	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
59080-40-9	PBB (BP-6)	ND	320	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
8001-35-2	Toxaphene	ND	220	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*75.6 %*	*30-150*		*06/16/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*72.6 %*	*30-150*		*06/16/14*	B4F0618	*8081/8082*	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-PCBs as Aroclors									
12674-11-2	Aroclor 1016	ND	130	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
11104-28-2	Aroclor 1221	ND	130	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
11141-16-5	Aroclor 1232	ND	130	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
53469-21-9	Aroclor 1242	ND	130	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
12672-29-6	Aroclor 1248	ND	130	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
11097-69-1	Aroclor 1254	ND	130	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
11096-82-5	Aroclor 1260	ND	130	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
37324-23-5	Aroclor 1262	ND	130	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
11100-14-4	Aroclor 1268	ND	130	ug/kg dry	1	06/16/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*84.2 %*		*30-150*	*06/16/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*77.4 %*		*30-150*	*06/16/14*	B4F0618	*8081/8082*	
Inorganics-General Chemistry									
TS	**% Total Solids**	**78.3**	0.1	%	1	06/03/14	B4F0319	2540 B	
57-12-5	Total Cyanide	ND	0.13	mg/kg dry	1	06/12/14	B4F1005	ASTM D 7511-09	
Inorganics-Metals									
7440-36-0	Antimony	ND	0.3	mg/kg dry	10	06/18/14	B4F0904	6020/200.8	
7440-38-2	**Arsenic**	**6.4**	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-39-3	**Barium**	**140**	1.0	mg/kg dry	10	06/19/14	B4F0902	6020/200.8	
7440-41-7	**Beryllium**	**0.9**	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-43-9	**Cadmium**	**0.2**	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-47-3	**Chromium**	**23**	2.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-48-4	**Cobalt**	**13**	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-50-8	**Copper**	**22**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-89-6	**Iron**	**30000**	5.0	mg/kg dry	10	06/23/14	B4F0902	6010/200.7	
7439-92-1	**Lead**	**13**	1.0	mg/kg dry	10	06/19/14	B4F0902	6020/200.8	
7439-96-5	**Manganese**	**330**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-97-6	Mercury	ND	0.06	mg/kg dry	1	06/27/14	B4F2518	7471/245.5	
7439-98-7	**Molybdenum**	**2.2**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-02-0	**Nickel**	**32**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7782-49-2	**Selenium**	**0.2**	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-22-4	Silver	ND	0.1	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-28-0	Thallium	ND	0.5	mg/kg dry	10	06/19/14	B4F0902	6020/200.8	
7440-62-2	**Vanadium**	**33**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-66-6	**Zinc**	**62**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	

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Client ID: C-SB-12

Lab ID: 1406007-13

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
71-55-6	1,1,1-Trichloroethane	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
79-00-5	1,1,2-Trichloroethane	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
75-34-3	1,1-Dichloroethane	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
75-35-4	1,1-Dichloroethylene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
96-18-4	1,2,3-Trichloropropane	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
106-93-4	1,2-Dibromoethane	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
95-50-1	1,2-Dichlorobenzene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
107-06-2	1,2-Dichloroethane	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
78-87-5	1,2-Dichloropropane	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
541-73-1	1,3-Dichlorobenzene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
106-46-7	1,4-Dichlorobenzene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
78-93-3	2-Butanone (MEK)	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
591-78-6	2-Hexanone	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
91-57-6	2-Methylnaphthalene	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	X
67-64-1	2-Propanone (acetone)	ND	1600	ug/kg dry	50	06/06/14	B4F1719	8260	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
107-13-1	Acrylonitrile	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
71-43-2	Benzene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
108-86-1	Bromobenzene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
74-97-5	Bromochloromethane	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
75-27-4	Bromodichloromethane	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
75-25-2	Bromoform	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
74-83-9	Bromomethane	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
75-15-0	Carbon disulfide	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
56-23-5	Carbon tetrachloride	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
108-90-7	Chlorobenzene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
75-00-3	Chloroethane	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
67-66-3	Chloroform	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
74-87-3	Chloromethane	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
110-82-7	Cyclohexane	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
124-48-1	Dibromochloromethane	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	

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Lab ID: 1406007-13

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
75-71-8	Dichlorodifluoromethane	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	A05
60-29-7	Diethyl ether	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	A05
108-20-3	Diisopropyl Ether	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
100-41-4	Ethylbenzene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
637-92-3	Ethyltertiarybutylether	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
67-72-1	Hexachloroethane	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
98-82-8	Isopropylbenzene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
1330-20-7	m & p - Xylene	ND	160	ug/kg dry	50	06/06/14	B4F1719	8260	
74-88-4	Methyl iodide	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	A05
75-09-2	Methylene chloride	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
1634-04-4	Methyltertiarybutylether	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
91-20-3	Naphthalene	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	X
104-51-8	n-Butylbenzene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
103-65-1	n-Propylbenzene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
95-47-6	o-Xylene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
[illegible]5	p-Isopropyl toluene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
135-98-8	sec-Butylbenzene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
100-42-5	Styrene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
98-06-6	tert-Butylbenzene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
75-65-0	tertiary-Butyl Alcohol	ND	3900	ug/kg dry	50	06/06/14	B4F1719	8260	
994-05-8	tertiaryAmylmethylether	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
127-18-4	Tetrachloroethylene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
109-99-9	Tetrahydrofuran	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
108-88-3	Toluene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	390	ug/kg dry	50	06/06/14	B4F1719	8260	
79-01-6	Trichloroethylene	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
75-69-4	Trichlorofluoromethane	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
75-01-4	Vinyl chloride	ND	78	ug/kg dry	50	06/06/14	B4F1719	8260	
Surrogate: Bromofluorobenzene			*122 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Dibromofluoromethane			*123 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Toluene-d8			*122 %*	*50-150*		*06/06/14*	B4F1719	*8260*	

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Lab ID: 1406007-13

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
120-82-1	1,2,4-Trichlorobenzene	ND	520	ug/kg dry	1	06/12/14	B4F0915	8270	
95-95-4	2,4,5-Trichlorophenol	ND	860	ug/kg dry	1	06/12/14	B4F0915	8270	
88-06-2	2,4,6-Trichlorophenol	ND	860	ug/kg dry	1	06/12/14	B4F0915	8270	
120-83-2	2,4-Dichlorophenol	ND	860	ug/kg dry	1	06/12/14	B4F0915	8270	
105-67-9	2,4-Dimethylphenol	ND	860	ug/kg dry	1	06/12/14	B4F0915	8270	
51-28-5	2,4-Dinitrophenol	ND	4400	ug/kg dry	1	06/12/14	B4F0915	8270	
121-14-2	2,4-Dinitrotoluene	ND	650	ug/kg dry	1	06/12/14	B4F0915	8270	
606-20-2	2,6-Dinitrotoluene	ND	650	ug/kg dry	1	06/12/14	B4F0915	8270	
91-58-7	2-Chloronaphthalene	ND	520	ug/kg dry	1	06/12/14	B4F0915	8270	
95-57-8	2-Chlorophenol	ND	860	ug/kg dry	1	06/12/14	B4F0915	8270	
534-52-1	2-Methyl-4,6-dinitrophenol	ND	4400	ug/kg dry	1	06/12/14	B4F0915	8270	
91-57-6	2-Methylnaphthalene	ND	650	ug/kg dry	1	06/12/14	B4F0915	8270	
95-48-7	2-Methylphenol (o-Cresol)	ND	860	ug/kg dry	1	06/12/14	B4F0915	8270	
88-74-4	2-Nitroaniline	ND	1300	ug/kg dry	1	06/12/14	B4F0915	8270	
88-75-5	2-Nitrophenol	ND	860	ug/kg dry	1	06/12/14	B4F0915	8270	
108394,106445	3 & 4-Methylphenol	ND	1700	ug/kg dry	1	06/12/14	B4F0915	8270	
99-09-2	3-Nitroaniline	ND	1300	ug/kg dry	1	06/12/14	B4F0915	8270	
101-55-3	4-Bromophenyl phenyl ether	ND	520	ug/kg dry	1	06/12/14	B4F0915	8270	
59-50-7	4-Chloro-3-methyl phenol	ND	520	ug/kg dry	1	06/12/14	B4F0915	8270	
7005-72-3	4-Chlorodiphenylether	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
100-01-6	4-Nitroaniline	ND	1300	ug/kg dry	1	06/12/14	B4F0915	8270	
100-02-7	4-Nitrophenol	ND	4400	ug/kg dry	1	06/12/14	B4F0915	8270	
83-32-9	Acenaphthene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
208-96-8	Acenaphthylene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
120-12-7	Anthracene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
103-33-3	Azobenzene	ND	520	ug/kg dry	1	06/12/14	B4F0915	8270	
56-55-3	Benz[a]anthracene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
50-32-8	Benzo[a]pyrene	ND	520	ug/kg dry	1	06/12/14	B4F0915	8270	
205-99-2	Benzo[b]fluoranthene	ND	520	ug/kg dry	1	06/12/14	B4F0915	8270	
191-24-2	Benzo[g,h,i]perylene	ND	520	ug/kg dry	1	06/12/14	B4F0915	8270	
207-08-9	Benzo[k]fluoranthene	ND	520	ug/kg dry	1	06/12/14	B4F0915	8270	
100-51-6	Benzyl Alcohol	ND	6500	ug/kg dry	1	06/12/14	B4F0915	8270	
111-91-1	Bis(2-chloroethoxy)methane	ND	520	ug/kg dry	1	06/12/14	B4F0915	8270	
111-44-4	Bis(2-chloroethyl)ether	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
108-60-1	Bis(2-chloroisopropyl)ether	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	A05
117-81-7	Bis(2-ethylhexyl)phthalate	ND	650	ug/kg dry	1	06/12/14	B4F0915	8270	
85-68-7	Butyl benzyl phthalate	ND	650	ug/kg dry	1	06/12/14	B4F0915	8270	
86-74-8	Carbazole	ND	650	ug/kg dry	1	06/12/14	B4F0915	8270	
218-01-9	Chrysene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
53-70-3	Dibenz[a,h]anthracene	ND	520	ug/kg dry	1	06/12/14	B4F0915	8270	
132-64-9	Dibenzofuran	ND	650	ug/kg dry	1	06/12/14	B4F0915	8270	

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Organics-Semivolatiles									**See note Y20**
84-66-2	Diethylphthalate	ND	650	ug/kg dry	1	06/12/14	B4F0915	8270	
131-11-3	Dimethyl phthalate	ND	650	ug/kg dry	1	06/12/14	B4F0915	8270	
84-74-2	Di-n-butyl phthalate	ND	650	ug/kg dry	1	06/12/14	B4F0915	8270	
117-84-0	Di-n-octyl phthalate	ND	650	ug/kg dry	1	06/12/14	B4F0915	8270	
206-44-0	Fluoranthene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
86-73-7	Fluorene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
118-74-1	Hexachlorobenzene	ND	520	ug/kg dry	1	06/12/14	B4F0915	8270	
87-68-3	Hexachlorobutadiene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
77-47-4	Hexachlorocyclopentadiene	ND	2600	ug/kg dry	1	06/12/14	B4F0915	8270	
67-72-1	Hexachloroethane	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
193-39-5	Indeno(1,2,3-c,d)pyrene	ND	520	ug/kg dry	1	06/12/14	B4F0915	8270	
78-59-1	Isophorone	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
91-20-3	Naphthalene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
98-95-3	Nitrobenzene	ND	520	ug/kg dry	1	06/12/14	B4F0915	8270	
67-75-9	N-Nitrosodimethylamine	ND	650	ug/kg dry	1	06/12/14	B4F0915	8270	
621-64-7	N-Nitrosodi-n-propylamine	ND	520	ug/kg dry	1	06/12/14	B4F0915	8270	
[illegible]5	N-Nitrosodiphenylamine	ND	520	ug/kg dry	1	06/12/14	B4F0915	8270	
87-86-5	Pentachlorophenol	ND	4400	ug/kg dry	1	06/12/14	B4F0915	8270	
85-01-8	Phenanthrene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
108-95-2	Phenol	ND	860	ug/kg dry	1	06/12/14	B4F0915	8270	
129-00-0	Pyrene	ND	260	ug/kg dry	1	06/12/14	B4F0915	8270	
Surrogate: 2,4,6-Tribromophenol			*80.9 %*	*20.3-115*		*06/12/14*	B4F0915	*8270*	
Surrogate: 2-Fluorobiphenyl			*71.6 %*	*32.9-115*		*06/12/14*	B4F0915	*8270*	
Surrogate: 2-Fluorophenol			*44.5 %*	*23.7-115*		*06/12/14*	B4F0915	*8270*	
Surrogate: Nitrobenzene-d5			*54.7 %*	*31.8-115*		*06/12/14*	B4F0915	*8270*	
Surrogate: Phenol-d6			*53.3 %*	*29.3-115*		*06/12/14*	B4F0915	*8270*	
Surrogate: p-Terphenyl-d14			*70.2 %*	*38.5-115*		*06/12/14*	B4F0915	*8270*	

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Organics-Pesticides									
789-02-6	2,4'-DDT	ND	26	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
72-54-8	4,4'-DDD	ND	26	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
72-55-9	4,4'-DDE	ND	26	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
50-29-3	4,4'-DDT	ND	26	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
319-84-6	a-BHC	ND	13	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
5103-71-9	a-Chlordane	ND	26	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
309-00-2	Aldrin	ND	26	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
319-85-7	b-BHC	ND	26	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
319-86-8	d-BHC	ND	26	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
60-57-1	Dieldrin	ND	26	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
959-98-8	Endosulfan I	ND	26	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
33213-65-9	Endosulfan II	ND	26	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
1031-07-8	Endosulfan sulfate	ND	26	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
72-20-8	Endrin	ND	26	ug/kg dry	1	06/21/14	B4F1020	8081/8082	
7421-93-4	Endrin aldehyde	ND	26	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
53494-70-5	Endrin ketone	ND	26	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
58-89-9	g-BHC (Lindane)	ND	26	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
5103-74-2	g-Chlordane	ND	26	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
76-44-8	Heptachlor	ND	26	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
1024-57-3	Heptachlor epoxide	ND	26	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
87-82-1	Hexabromobenzene	ND	130	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
72-43-5	Methoxychlor	ND	65	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
2385-85-5	Mirex	ND	65	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
59080-40-9	PBB (BP-6)	ND	320	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
8001-35-2	Toxaphene	ND	220	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
Surrogate: Decachlorobiphenyl			*80.5 %*	*30-150*		*06/15/14*	B4F1020	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*76.7 %*	*30-150*		*06/15/14*	B4F1020	*8081/8082*	

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Organics-PCBs as Aroclors									
12674-11-2	Aroclor 1016	ND	130	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
11104-28-2	Aroclor 1221	ND	130	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
11141-16-5	Aroclor 1232	ND	130	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
53469-21-9	Aroclor 1242	ND	130	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
12672-29-6	Aroclor 1248	ND	130	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
11097-69-1	Aroclor 1254	ND	130	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
11096-82-5	Aroclor 1260	ND	130	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
37324-23-5	Aroclor 1262	ND	130	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
11100-14-4	Aroclor 1268	ND	130	ug/kg dry	1	06/15/14	B4F1020	8081/8082	
Surrogate: Decachlorobiphenyl			*80.5 %*	*30-150*		*06/15/14*	B4F1020	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*76.7 %*	*30-150*		*06/15/14*	B4F1020	*8081/8082*	
Inorganics-General Chemistry									
TS	**% Total Solids**	**77.1**	0.1	%	1	06/03/14	B4F0319	2540 B	
57-12-5	Total Cyanide	ND	0.13	mg/kg dry	1	06/12/14	B4F1005	ASTM D 7511-09	
I anics-Metals									
7440-36-0	Antimony	ND	0.3	mg/kg dry	10	06/18/14	B4F0904	6020/200.8	
7440-38-2	**Arsenic**	**7.7**	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-39-3	**Barium**	**95**	1.0	mg/kg dry	10	06/19/14	B4F0902	6020/200.8	
7440-41-7	**Beryllium**	**0.8**	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-43-9	Cadmium	ND	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-47-3	**Chromium**	**27**	2.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-48-4	**Cobalt**	**14**	0.5	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-50-8	**Copper**	**22**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-89-6	**Iron**	**34000**	5.0	mg/kg dry	10	06/23/14	B4F0902	6010/200.7	
7439-92-1	**Lead**	**14**	1.0	mg/kg dry	10	06/19/14	B4F0902	6020/200.8	
7439-96-5	**Manganese**	**480**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7439-97-6	Mercury	ND	0.06	mg/kg dry	1	06/27/14	B4F2518	7471/245.5	
7439-98-7	**Molybdenum**	**1.4**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-02-0	**Nickel**	**37**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7782-49-2	**Selenium**	**0.3**	0.2	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-22-4	Silver	ND	0.1	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-28-0	Thallium	ND	0.5	mg/kg dry	10	06/19/14	B4F0902	6020/200.8	
7440-62-2	**Vanadium**	**34**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	
7440-66-6	**Zinc**	**61**	1.0	mg/kg dry	10	06/18/14	B4F0902	6020/200.8	

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

Client ID: C-SB-03 MS

Lab ID: 1406007-14

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	**1,1,1,2-Tetrachloroethane**	**2900**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
71-55-6	**1,1,1-Trichloroethane**	**2900**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
79-34-5	**1,1,2,2-Tetrachloroethane**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
79-00-5	**1,1,2-Trichloroethane**	**2900**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-34-3	**1,1-Dichloroethane**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-35-4	**1,1-Dichloroethylene**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
87-61-6	**1,2,3-Trichlorobenzene**	**2900**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
96-18-4	**1,2,3-Trichloropropane**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
526-73-8	**1,2,3-Trimethylbenzene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
120-82-1	**1,2,4-Trichlorobenzene**	**2900**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
95-63-6	**1,2,4-Trimethylbenzene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
96-12-8	**1,2-Dibromo-3-chloropropane**	**3000**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
106-93-4	**1,2-Dibromoethane**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
95-50-1	**1,2-Dichlorobenzene**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
107-06-2	**1,2-Dichloroethane**	**2800**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
78-87-5	**1,2-Dichloropropane**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
108-67-8	**1,3,5-Trimethylbenzene**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
541-73-1	**1,3-Dichlorobenzene**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
106-46-7	**1,4-Dichlorobenzene**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
78-93-3	**2-Butanone (MEK)**	**4600**	330	ug/kg dry	50	06/06/14	B4F1719	8260	A04, A11
591-78-6	**2-Hexanone**	**4000**	330	ug/kg dry	50	06/06/14	B4F1719	8260	A11
91-57-6	**2-Methylnaphthalene**	**2500**	330	ug/kg dry	50	06/06/14	B4F1719	8260	X
67-64-1	**2-Propanone (acetone)**	**5500**	1300	ug/kg dry	50	06/06/14	B4F1719	8260	A04, A11
108-10-1	**4-Methyl-2-pentanone (MIBK)**	**3100**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
107-13-1	**Acrylonitrile**	**3000**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
71-43-2	**Benzene**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
108-86-1	**Bromobenzene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
74-97-5	**Bromochloromethane**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-27-4	**Bromodichloromethane**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-25-2	**Bromoform**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
74-83-9	**Bromomethane**	**3100**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
75-15-0	**Carbon disulfide**	**2900**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
56-23-5	**Carbon tetrachloride**	**2800**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
108-90-7	**Chlorobenzene**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-00-3	**Chloroethane**	**2700**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
67-66-3	**Chloroform**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
74-87-3	**Chloromethane**	**3100**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
156-59-2	**cis-1,2-Dichloroethylene**	**3200**	66	ug/kg dry	50	06/06/14	B4F1719	8260	

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Client ID: C-SB-03 MS

Lab ID: 1406007-14

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
10061-01-5	**cis-1,3-Dichloropropylene**	**2900**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
110-82-7	**Cyclohexane**	**3000**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
124-48-1	**Dibromochloromethane**	**2800**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
74-95-3	**Dibromomethane**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-71-8	**Dichlorodifluoromethane**	**2800**	330	ug/kg dry	50	06/06/14	B4F1719	8260	A05
60-29-7	**Diethyl ether**	**3800**	330	ug/kg dry	50	06/06/14	B4F1719	8260	A05
108-20-3	**Diisopropyl Ether**	**3200**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
100-41-4	**Ethylbenzene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
637-92-3	**Ethyltertiarybutylether**	**3100**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
67-72-1	**Hexachloroethane**	**3000**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
98-82-8	**Isopropylbenzene**	**3200**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
1330-20-7	**m & p - Xylene**	**5900**	130	ug/kg dry	50	06/06/14	B4F1719	8260	
74-88-4	**Methyl iodide**	**2700**	66	ug/kg dry	50	06/06/14	B4F1719	8260	A05
75-09-2	**Methylene chloride**	**3200**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
1634-04-4	**Methyltertiarybutylether**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
[illegible]3	**Naphthalene**	**3000**	330	ug/kg dry	50	06/06/14	B4F1719	8260	X
104-51-8	**n-Butylbenzene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
103-65-1	**n-Propylbenzene**	**3200**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
95-47-6	**o-Xylene**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
99-87-6	**p-Isopropyl toluene**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
135-98-8	**sec-Butylbenzene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
100-42-5	**Styrene**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
98-06-6	**tert-Butylbenzene**	**3200**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-65-0	**tertiary Butyl Alcohol**	**22000**	3300	ug/kg dry	50	06/06/14	B4F1719	8260	A04
994-05-8	**tertiaryAmylmethylether**	**2800**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
127-18-4	**Tetrachloroethylene**	**2800**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
109-99-9	**Tetrahydrofuran**	**3200**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
108-88-3	**Toluene**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
156-60-5	**trans-1,2-Dichloroethylene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-02-6	**trans-1,3-Dichloropropylene**	**2900**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
110-57-6	**trans-1,4-Dichloro-2-butene**	**3100**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
79-01-6	**Trichloroethylene**	**2900**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-69-4	**Trichlorofluoromethane**	**2700**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-01-4	**Vinyl chloride**	**3200**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
Surrogate: Bromofluorobenzene			*128 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Dibromofluoromethane			*124 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
[illegible]e: Toluene-d8			*127 %*	*50-150*		*06/06/14*	B4F1719	*8260*	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
120-82-1	**1,2,4-Trichlorobenzene**	**3100**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
95-95-4	**2,4,5-Trichlorophenol**	**8200**	770	ug/kg dry	1	06/16/14	B4F0915	8270	A06
88-06-2	**2,4,6-Trichlorophenol**	**7400**	770	ug/kg dry	1	06/16/14	B4F0915	8270	
120-83-2	**2,4-Dichlorophenol**	**6900**	770	ug/kg dry	1	06/16/14	B4F0915	8270	
105-67-9	**2,4-Dimethylphenol**	**5400**	770	ug/kg dry	1	06/16/14	B4F0915	8270	
51-28-5	**2,4-Dinitrophenol**	**4100**	4000	ug/kg dry	1	06/16/14	B4F0915	8270	
121-14-2	**2,4-Dinitrotoluene**	**3500**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
606-20-2	**2,6-Dinitrotoluene**	**3500**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
91-58-7	**2-Chloronaphthalene**	**3100**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
95-57-8	**2-Chlorophenol**	**5100**	770	ug/kg dry	1	06/16/14	B4F0915	8270	
534-52-1	**2-Methyl-4,6-dinitrophenol**	**4200**	4000	ug/kg dry	1	06/16/14	B4F0915	8270	
91-57-6	**2-Methylnaphthalene**	**3200**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
95-48-7	**2-Methylphenol (o-Cresol)**	**4800**	770	ug/kg dry	1	06/16/14	B4F0915	8270	
88-74-4	**2-Nitroaniline**	**3400**	1200	ug/kg dry	1	06/16/14	B4F0915	8270	
88-75-5	**2-Nitrophenol**	**6100**	770	ug/kg dry	1	06/16/14	B4F0915	8270	
108394,106445	**3 & 4-Methylphenol**	**5100**	1500	ug/kg dry	1	06/16/14	B4F0915	8270	
99-09-2	**3-Nitroaniline**	**2800**	1200	ug/kg dry	1	06/16/14	B4F0915	8270	
101-55-3	**4-Bromophenyl phenyl ether**	**3700**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
59-50-7	**4-Chloro-3-methyl-phenol**	**6300**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
7005-72-3	**4-Chlorodiphenylether**	**3500**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
100-01-6	**4-Nitroaniline**	**2400**	1200	ug/kg dry	1	06/16/14	B4F0915	8270	
100-02-7	**4-Nitrophenol**	**6600**	4000	ug/kg dry	1	06/16/14	B4F0915	8270	
83-32-9	**Acenaphthene**	**3300**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
208-96-8	**Acenaphthylene**	**3300**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
120-12-7	**Anthracene**	**3500**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
103-33-3	**Azobenzene**	**2700**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
56-55-3	**Benz[a]anthracene**	**3700**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
50-32-8	**Benzo[a]pyrene**	**4000**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
205-99-2	**Benzo[b]fluoranthene**	**4300**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
191-24-2	**Benzo[g,h,i]perylene**	**2700**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
207-08-9	**Benzo[k]fluoranthene**	**4200**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
100-51-6	**Benzyl Alcohol**	**3900**	5900	ug/kg dry	1	06/16/14	B4F0915	8270	A05, T
111-91-1	**Bis(2-chloroethoxy)methane**	**2500**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
111-44-4	**Bis(2-chloroethyl)ether**	**2300**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
108-60-1	**Bis(2-chloroisopropyl)ether**	**1800**	230	ug/kg dry	1	06/16/14	B4F0915	8270	A05
117-81-7	**Bis(2-ethylhexyl)phthalate**	**3300**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
85-68-7	**Butyl benzyl phthalate**	**3200**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
86-74-8	**Carbazole**	**3100**	590	ug/kg dry	1	06/16/14	B4F0915	8270	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
218-01-9	**Chrysene**	**3900**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
53-70-3	**Dibenz[a,h]anthracene**	**3000**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
132-64-9	**Dibenzofuran**	**3300**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
84-66-2	**Diethylphthalate**	**3300**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
131-11-3	**Dimethyl phthalate**	**3500**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
84-74-2	**Di-n-butyl phthalate**	**3400**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
117-84-0	**Di-n-octyl phthalate**	**3600**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
206-44-0	**Fluoranthene**	**4000**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
86-73-7	**Fluorene**	**3300**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
118-74-1	**Hexachlorobenzene**	**3700**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
87-68-3	**Hexachlorobutadiene**	**3200**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
77-47-4	**Hexachlorocyclopentadiene**	**2900**	2300	ug/kg dry	1	06/16/14	B4F0915	8270	
67-72-1	**Hexachloroethane**	**2200**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
193-39-5	**Indeno(1,2,3-c,d)pyrene**	**3000**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
78-59-1	**Isophorone**	**2300**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
[illegible]3	**Naphthalene**	**2800**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
98-95-3	**Nitrobenzene**	**2700**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
67-75-9	**N-Nitrosodimethylamine**	**1700**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
621-64-7	**N-Nitrosodi-n-propylamine**	**2400**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
86-30-6	**N-Nitrosodiphenylamine**	**3500**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
87-86-5	**Pentachlorophenol**	**4000**	4000	ug/kg dry	1	06/16/14	B4F0915	8270	
85-01-8	**Phenanthrene**	**3600**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
108-95-2	**Phenol**	**4600**	770	ug/kg dry	1	06/16/14	B4F0915	8270	
129-00-0	**Pyrene**	**3400**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
Surrogate: 2,4,6-Tribromophenol			*76.2 %*	*20.3-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: 2-Fluorobiphenyl			*71.0 %*	*32.9-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: 2-Fluorophenol			*43.9 %*	*23.7-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: Nitrobenzene-d5			*54.1 %*	*31.8-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: Phenol-d6			*48.5 %*	*29.3-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: p-Terphenyl-d14			*71.2 %*	*38.5-115*		*06/16/14*	B4F0915	*8270*	

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Organics-Pesticides									
789-02-6	**2,4'-DDT**	94	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
72-54-8	**4,4'-DDD**	82	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
72-55-9	**4,4'-DDE**	100	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
50-29-3	**4,4'-DDT**	120	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
319-84-6	**a-BHC**	84	12	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
5103-71-9	**a-Chlordane**	78	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
309-00-2	**Aldrin**	76	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
319-85-7	**b-BHC**	110	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
319-86-8	**d-BHC**	100	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
60-57-1	**Dieldrin**	60	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
959-98-8	**Endosulfan I**	68	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
33213-65-9	**Endosulfan II**	75	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
1031-07-8	**Endosulfan sulfate**	83	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
72-20-8	**Endrin**	210	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	A04
7421-93-4	**Endrin aldehyde**	56	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
53494-70-5	**Endrin ketone**	83	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
58-89-9	**g-BHC (Lindane)**	79	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
5103-74-2	**g-Chlordane**	91	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
76-44-8	**Heptachlor**	89	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
1024-57-3	**Heptachlor epoxide**	91	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
87-82-1	**Hexabromobenzene**	55	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	A03, T
72-43-5	**Methoxychlor**	150	59	ug/kg dry	1	06/14/14	B4F0618	8081/8082	A04
2385-85-5	**Mirex**	76	59	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
59080-40-9	**PBB (BP-6)**	74	290	ug/kg dry	1	06/14/14	B4F0618	8081/8082	T
8001-35-2	Toxaphene	ND	200	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*62.6 %*	*30-150*		*06/14/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*63.2 %*	*30-150*		*06/14/14*	B4F0618	*8081/8082*	

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Client ID: C-SB-03 MS

Lab ID: 1406007-14

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-PCBs as Aroclors									**See note 100**
12674-11-2	Aroclor 1016	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
11104-28-2	Aroclor 1221	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
11141-16-5	Aroclor 1232	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
53469-21-9	Aroclor 1242	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
12672-29-6	Aroclor 1248	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
11097-69-1	Aroclor 1254	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
11096-82-5	Aroclor 1260	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
37324-23-5	Aroclor 1262	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
11100-14-4	Aroclor 1268	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*71.1 %*		*30-150*	*06/14/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*67.8 %*		*30-150*	*06/14/14*	B4F0618	*8081/8082*	
Inorganics-General Chemistry									
TS	**% Total Solids**	**85.3**	0.1	%	1	06/03/14	B4F0319	2540 B	
57-12-5	**Total Cyanide**	**2.2**	0.12	mg/kg dry	1	06/12/14	B4F1005	ASTM D 7511-09	
I[illegible]anics-Metals									
[illegible]6-0	**Antimony**	39	0.6	mg/kg dry	20	06/18/14	B4F0904	6020/200.8	A03
7440-38-2	**Arsenic**	**110**	5.0	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-39-3	**Barium**	**130**	10	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-41-7	**Beryllium**	**100**	2.0	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-43-9	**Cadmium**	**10**	2.0	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-47-3	**Chromium**	**110**	20	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-48-4	**Cobalt**	**110**	5.0	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-50-8	**Copper**	**110**	10	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7439-89-6	**Iron**	**7500**	5.0	mg/kg dry	10	06/19/14	B4F0901	6010/200.7	A09, X3
7439-92-1	**Lead**	**110**	10	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7439-96-5	**Manganese**	**240**	10	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7439-97-6	**Mercury**	**0.5**	0.06	mg/kg dry	1	06/27/14	B4F2518	7471/245.5	
7439-98-7	**Molybdenum**	**110**	10	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-02-0	**Nickel**	**110**	10	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7782-49-2	**Selenium**	**99**	2.0	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-22-4	**Silver**	**11**	1.0	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-28-0	**Thallium**	**99**	5.0	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-62-2	**Vanadium**	**110**	10	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-66-6	**Zinc**	**120**	10	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	

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Client ID: C-SB-03 MSD

Lab ID: 1406007-15

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	**1,1,1,2-Tetrachloroethane**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
71-55-6	**1,1,1-Trichloroethane**	**2900**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
79-34-5	**1,1,2,2-Tetrachloroethane**	**3300**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
79-00-5	**1,1,2-Trichloroethane**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-34-3	**1,1-Dichloroethane**	**3200**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-35-4	**1,1-Dichloroethylene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
87-61-6	**1,2,3-Trichlorobenzene**	**3000**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
96-18-4	**1,2,3-Trichloropropane**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
526-73-8	**1,2,3-Trimethylbenzene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
120-82-1	**1,2,4-Trichlorobenzene**	**2900**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
95-63-6	**1,2,4-Trimethylbenzene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
96-12-8	**1,2-Dibromo-3-chloropropane**	**2900**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
106-93-4	**1,2-Dibromoethane**	**3200**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
95-50-1	**1,2-Dichlorobenzene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
107-06-2	**1,2-Dichloroethane**	**2900**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
78-87-5	**1,2-Dichloropropane**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
108-67-8	**1,3,5-Trimethylbenzene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
541-73-1	**1,3-Dichlorobenzene**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
106-46-7	**1,4-Dichlorobenzene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
78-93-3	**2-Butanone (MEK)**	**4900**	330	ug/kg dry	50	06/06/14	B4F1719	8260	A04, A11
591-78-6	**2-Hexanone**	**4300**	330	ug/kg dry	50	06/06/14	B4F1719	8260	A11
91-57-6	**2-Methylnaphthalene**	**2800**	330	ug/kg dry	50	06/06/14	B4F1719	8260	X
67-64-1	**2-Propanone (acetone)**	**5900**	1300	ug/kg dry	50	06/06/14	B4F1719	8260	A04, A11
108-10-1	**4-Methyl-2-pentanone (MIBK)**	**3300**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
107-13-1	**Acrylonitrile**	**3100**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
71-43-2	**Benzene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
108-86-1	**Bromobenzene**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
74-97-5	**Bromochloromethane**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-27-4	**Bromodichloromethane**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-25-2	**Bromoform**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
74-83-9	**Bromomethane**	**3300**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
75-15-0	**Carbon disulfide**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
56-23-5	**Carbon tetrachloride**	**2800**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
108-90-7	**Chlorobenzene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-00-3	**Chloroethane**	**2900**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
67-66-3	**Chloroform**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
74-87-3	**Chloromethane**	**3200**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
156-59-2	**cis-1,2-Dichloroethylene**	**3300**	66	ug/kg dry	50	06/06/14	B4F1719	8260	

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Client ID: C-SB-03 MSD

Lab ID: 1406007-15

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
10061-01-5	**cis-1,3-Dichloropropylene**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
110-82-7	**Cyclohexane**	**3000**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
124-48-1	**Dibromochloromethane**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
74-95-3	**Dibromomethane**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-71-8	**Dichlorodifluoromethane**	**2700**	330	ug/kg dry	50	06/06/14	B4F1719	8260	A05
60-29-7	**Diethyl ether**	**3800**	330	ug/kg dry	50	06/06/14	B4F1719	8260	A05
108-20-3	**Diisopropyl Ether**	**3300**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
100-41-4	**Ethylbenzene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
637-92-3	**Ethyltertiarybutylether**	**3100**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
67-72-1	**Hexachloroethane**	**3100**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
98-82-8	**Isopropylbenzene**	**3300**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
1330-20-7	**m & p - Xylene**	**6000**	130	ug/kg dry	50	06/06/14	B4F1719	8260	
74-88-4	**Methyl iodide**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	A05
75-09-2	**Methylene chloride**	**3300**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
1634-04-4	**Methyltertiarybutylether**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
[illegible]3	**Naphthalene**	**3100**	330	ug/kg dry	50	06/06/14	B4F1719	8260	X
104-51-8	**n-Butylbenzene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
103-65-1	**n-Propylbenzene**	**3200**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
95-47-6	**o-Xylene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
99-87-6	**p-Isopropyl toluene**	**3000**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
135-98-8	**sec-Butylbenzene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
100-42-5	**Styrene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
98-06-6	**tert-Butylbenzene**	**3300**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-65-0	**tertiary Butyl Alcohol**	**23000**	3300	ug/kg dry	50	06/06/14	B4F1719	8260	A04
994-05-8	**tertiaryAmylmethylether**	**2900**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
127-18-4	**Tetrachloroethylene**	**2900**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
109-99-9	**Tetrahydrofuran**	**3300**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
108-88-3	**Toluene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
156-60-5	**trans-1,2-Dichloroethylene**	**3100**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
10061-02-6	**trans-1,3-Dichloropropylene**	**2900**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
110-57-6	**trans-1,4-Dichloro-2-butene**	**3100**	330	ug/kg dry	50	06/06/14	B4F1719	8260	
79-01-6	**Trichloroethylene**	**2900**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-69-4	**Trichlorofluoromethane**	**2700**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
75-01-4	**Vinyl chloride**	**3200**	66	ug/kg dry	50	06/06/14	B4F1719	8260	
Surrogate: Bromofluorobenzene			*122 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
Surrogate: Dibromofluoromethane			*118 %*	*50-150*		*06/06/14*	B4F1719	*8260*	
S[illegible]e: Toluene-d8			*120 %*	*50-150*		*06/06/14*	B4F1719	*8260*	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
120-82-1	**1,2,4-Trichlorobenzene**	**3100**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
95-95-4	**2,4,5-Trichlorophenol**	**8100**	770	ug/kg dry	1	06/16/14	B4F0915	8270	A06
88-06-2	**2,4,6-Trichlorophenol**	**7400**	770	ug/kg dry	1	06/16/14	B4F0915	8270	
120-83-2	**2,4-Dichlorophenol**	**6900**	770	ug/kg dry	1	06/16/14	B4F0915	8270	
105-67-9	**2,4-Dimethylphenol**	**5600**	770	ug/kg dry	1	06/16/14	B4F0915	8270	
51-28-5	**2,4-Dinitrophenol**	**3600**	4000	ug/kg dry	1	06/16/14	B4F0915	8270	T
121-14-2	**2,4-Dinitrotoluene**	**3400**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
606-20-2	**2,6-Dinitrotoluene**	**3500**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
91-58-7	**2-Chloronaphthalene**	**3100**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
95-57-8	**2-Chlorophenol**	**5400**	770	ug/kg dry	1	06/16/14	B4F0915	8270	
534-52-1	**2-Methyl-4,6-dinitrophenol**	**3700**	4000	ug/kg dry	1	06/16/14	B4F0915	8270	T
91-57-6	**2-Methylnaphthalene**	**3200**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
95-48-7	**2-Methylphenol (o-Cresol)**	**5300**	770	ug/kg dry	1	06/16/14	B4F0915	8270	
88-74-4	**2-Nitroaniline**	**3200**	1200	ug/kg dry	1	06/16/14	B4F0915	8270	
88-75-5	**2-Nitrophenol**	**6400**	770	ug/kg dry	1	06/16/14	B4F0915	8270	
108394,106445	**3 & 4-Methylphenol**	**5600**	1500	ug/kg dry	1	06/16/14	B4F0915	8270	
99-09-2	**3-Nitroaniline**	**2800**	1200	ug/kg dry	1	06/16/14	B4F0915	8270	
101-55-3	**4-Bromophenyl phenyl ether**	**3600**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
59-50-7	**4-Chloro-3-methyl-phenol**	**6200**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
7005-72-3	**4-Chlorodiphenylether**	**3400**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
100-01-6	**4-Nitroaniline**	**2400**	1200	ug/kg dry	1	06/16/14	B4F0915	8270	
100-02-7	**4-Nitrophenol**	**7200**	4000	ug/kg dry	1	06/16/14	B4F0915	8270	
83-32-9	**Acenaphthene**	**3300**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
208-96-8	**Acenaphthylene**	**3300**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
120-12-7	**Anthracene**	**3500**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
103-33-3	**Azobenzene**	**2600**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
56-55-3	**Benz[a]anthracene**	**3800**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
50-32-8	**Benzo[a]pyrene**	**4100**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
205-99-2	**Benzo[b]fluoranthene**	**4500**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
191-24-2	**Benzo[g,h,i]perylene**	**2800**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
207-08-9	**Benzo[k]fluoranthene**	**4200**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
100-51-6	**Benzyl Alcohol**	**4400**	5900	ug/kg dry	1	06/16/14	B4F0915	8270	A05, T
111-91-1	**Bis(2-chloroethoxy)methane**	**2500**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
111-44-4	**Bis(2-chloroethyl)ether**	**2500**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
108-60-1	**Bis(2-chloroisopropyl)ether**	**1900**	230	ug/kg dry	1	06/16/14	B4F0915	8270	A05
117-81-7	**Bis(2-ethylhexyl)phthalate**	**3500**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
85-68-7	**Butyl benzyl phthalate**	**3300**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
86-74-8	**Carbazole**	**3400**	590	ug/kg dry	1	06/16/14	B4F0915	8270	

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Client ID: C-SB-03 MSD

Lab ID: 1406007-15

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Semivolatiles									**See note Y20**
218-01-9	**Chrysene**	**4000**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
53-70-3	**Dibenz[a,h]anthracene**	**3100**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
132-64-9	**Dibenzofuran**	**3200**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
84-66-2	**Diethylphthalate**	**3400**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
131-11-3	**Dimethyl phthalate**	**3500**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
84-74-2	**Di-n-butyl phthalate**	**3500**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
117-84-0	**Di-n-octyl phthalate**	**3700**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
206-44-0	**Fluoranthene**	**4200**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
86-73-7	**Fluorene**	**3300**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
118-74-1	**Hexachlorobenzene**	**3700**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
87-68-3	**Hexachlorobutadiene**	**3200**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
77-47-4	**Hexachlorocyclopentadiene**	**2700**	2300	ug/kg dry	1	06/16/14	B4F0915	8270	
67-72-1	**Hexachloroethane**	**2300**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
193-39-5	**Indeno(1,2,3-c,d)pyrene**	**3100**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
[illegible]-1	**Isophorone**	**2300**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
[illegible]3	**Naphthalene**	**2900**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
98-95-3	**Nitrobenzene**	**2800**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
67-75-9	**N-Nitrosodimethylamine**	**1800**	590	ug/kg dry	1	06/16/14	B4F0915	8270	
621-64-7	**N-Nitrosodi-n-propylamine**	**2500**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
86-30-6	**N-Nitrosodiphenylamine**	**3500**	470	ug/kg dry	1	06/16/14	B4F0915	8270	
87-86-5	**Pentachlorophenol**	**3500**	4000	ug/kg dry	1	06/16/14	B4F0915	8270	T
85-01-8	**Phenanthrene**	**3500**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
108-95-2	**Phenol**	**4800**	770	ug/kg dry	1	06/16/14	B4F0915	8270	
129-00-0	**Pyrene**	**3400**	230	ug/kg dry	1	06/16/14	B4F0915	8270	
Surrogate: 2,4,6-Tribromophenol			*72.8 %*	*20.3-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: 2-Fluorobiphenyl			*71.6 %*	*32.9-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: 2-Fluorophenol			*50.5 %*	*23.7-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: Nitrobenzene-d5			*55.1 %*	*31.8-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: Phenol-d6			*50.5 %*	*29.3-115*		*06/16/14*	B4F0915	*8270*	
Surrogate: p-Terphenyl-d14			*73.2 %*	*38.5-115*		*06/16/14*	B4F0915	*8270*	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Pesticides									
789-02-6	**2,4'-DDT**	**91**	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
72-54-8	**4,4'-DDD**	**80**	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
72-55-9	**4,4'-DDE**	**97**	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
50-29-3	**4,4'-DDT**	**110**	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
319-84-6	**a-BHC**	**78**	12	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
5103-71-9	**a-Chlordane**	**79**	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
309-00-2	**Aldrin**	**73**	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
319-85-7	**b-BHC**	**110**	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
319-86-8	**d-BHC**	**94**	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
60-57-1	**Dieldrin**	**60**	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
959-98-8	**Endosulfan I**	**64**	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
33213-65-9	**Endosulfan II**	**70**	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
1031-07-8	**Endosulfan sulfate**	**79**	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
72-20-8	**Endrin**	**200**	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	A04
7421-93-4	**Endrin aldehyde**	**51**	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
53494-70-5	**Endrin ketone**	**79**	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
58-89-9	**g-BHC (Lindane)**	**73**	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
5103-74-2	**g-Chlordane**	**86**	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
76-44-8	**Heptachlor**	**81**	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
1024-57-3	**Heptachlor epoxide**	**86**	23	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
87-82-1	**Hexabromobenzene**	**55**	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	A03, T
72-43-5	**Methoxychlor**	**140**	59	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
2385-85-5	**Mirex**	**74**	59	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
59080-40-9	**PBB (BP-6)**	**78**	290	ug/kg dry	1	06/14/14	B4F0618	8081/8082	T
8001-35-2	Toxaphene	ND	200	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl			*64.5 %*	*30-150*		*06/14/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene			*60.7 %*	*30-150*		*06/14/14*	B4F0618	*8081/8082*	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-PCBs as Aroclors									**See note 10θ**
12674-11-2	Aroclor 1016	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
11104-28-2	Aroclor 1221	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
11141-16-5	Aroclor 1232	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
53469-21-9	Aroclor 1242	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
12672-29-6	Aroclor 1248	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
11097-69-1	Aroclor 1254	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
11096-82-5	Aroclor 1260	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
37324-23-5	Aroclor 1262	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
11100-14-4	Aroclor 1268	ND	120	ug/kg dry	1	06/14/14	B4F0618	8081/8082	
Surrogate: Decachlorobiphenyl		*73.8 %*		*30-150*		*06/14/14*	B4F0618	*8081/8082*	
Surrogate: Tetrachloro-m-xylene		*65.3 %*		*30-150*		*06/14/14*	B4F0618	*8081/8082*	
Inorganics-General Chemistry									
TS	**% Total Solids**	**85.3**	0.1	%	1	06/03/14	B4F0319	2540 B	
57-12-5	**Total Cyanide**	**2.3**	0.12	mg/kg dry	1	06/12/14	B4F1005	ASTM D 7511-09	
Inorganics-Metals									
[illegible]36-0	**Antimony**	**39**	0.6	mg/kg dry	20	06/18/14	B4F0904	6020/200.8	A03
7440-38-2	**Arsenic**	**110**	5.0	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-39-3	**Barium**	**130**	10	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-41-7	**Beryllium**	**100**	2.0	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-43-9	**Cadmium**	**11**	2.0	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-47-3	**Chromium**	**110**	20	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-48-4	**Cobalt**	**110**	5.0	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-50-8	**Copper**	**110**	10	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7439-89-6	**Iron**	**7600**	5.0	mg/kg dry	10	06/19/14	B4F0901	6010/200.7	A09, X3
7439-92-1	**Lead**	**110**	10	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7439-96-5	**Manganese**	**230**	10	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7439-97-6	**Mercury**	**0.5**	0.06	mg/kg dry	1	06/27/14	B4F2518	7471/245.5	
7439-98-7	**Molybdenum**	**110**	10	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-02-0	**Nickel**	**110**	10	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7782-49-2	**Selenium**	**100**	2.0	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-22-4	**Silver**	**11**	1.0	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-28-0	**Thallium**	**100**	5.0	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-62-2	**Vanadium**	**110**	10	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	
7440-66-6	**Zinc**	**130**	10	mg/kg dry	100	06/18/14	B4F0901	6020/200.8	

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Client ID: TRIP BLANK

Lab ID: 1406007-16

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
71-55-6	1,1,1-Trichloroethane	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
79-00-5	1,1,2-Trichloroethane	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
75-34-3	1,1-Dichloroethane	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
75-35-4	1,1-Dichloroethylene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
87-61-6	1,2,3-Trichlorobenzene	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	
96-18-4	1,2,3-Trichloropropane	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
526-73-8	1,2,3-Trimethylbenzene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
120-82-1	1,2,4-Trichlorobenzene	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	
95-63-6	1,2,4-Trimethylbenzene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	
106-93-4	1,2-Dibromoethane	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
95-50-1	1,2-Dichlorobenzene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
107-06-2	1,2-Dichloroethane	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
78-87-5	1,2-Dichloropropane	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
108-67-8	1,3,5-Trimethylbenzene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
541-73-1	1,3-Dichlorobenzene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
106-46-7	1,4-Dichlorobenzene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
78-93-3	2-Butanone (MEK)	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	
591-78-6	2-Hexanone	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	
91-57-6	2-Methylnaphthalene	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	X
67-64-1	2-Propanone (acetone)	ND	1000	ug/kg dry	50	06/06/14	B4F0615	8260	A05
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	
107-13-1	Acrylonitrile	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	
71-43-2	Benzene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
108-86-1	Bromobenzene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
74-97-5	Bromochloromethane	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
75-27-4	Bromodichloromethane	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
75-25-2	Bromoform	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
74-83-9	Bromomethane	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	
75-15-0	Carbon disulfide	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
56-23-5	Carbon tetrachloride	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
108-90-7	Chlorobenzene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
75-00-3	Chloroethane	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	
67-66-3	Chloroform	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
74-87-3	Chloromethane	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	
156-59-2	cis-1,2-Dichloroethylene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
10061-01-5	cis-1,3-Dichloropropylene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
110-82-7	Cyclohexane	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	
124-48-1	Dibromochloromethane	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	

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CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Organics-Volatiles									
74-95-3	Dibromomethane	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
75-71-8	Dichlorodifluoromethane	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	A05
60-29-7	Diethyl ether	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	
108-20-3	Diisopropyl Ether	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	
100-41-4	Ethylbenzene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
637-92-3	Ethyltertiarybutylether	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	
67-72-1	Hexachloroethane	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	
98-82-8	Isopropylbenzene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
1330-20-7	m & p - Xylene	ND	100	ug/kg dry	50	06/06/14	B4F0615	8260	
74-88-4	Methyl iodide	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
75-09-2	Methylene chloride	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	
1634-04-4	Methyltertiarybutylether	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
91-20-3	Naphthalene	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	X
104-51-8	n-Butylbenzene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
103-65-1	n-Propylbenzene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
95-47-6	o-Xylene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
6	p-Isopropyl toluene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
135-98-8	sec-Butylbenzene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
100-42-5	Styrene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
98-06-6	tert-Butylbenzene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
75-65-0	tertiary Butyl Alcohol	ND	2500	ug/kg dry	50	06/06/14	B4F0615	8260	
994-05-8	tertiaryAmylmethylether	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	
127-18-4	Tetrachloroethylene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
109-99-9	Tetrahydrofuran	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	
108-88-3	Toluene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
156-60-5	trans-1,2-Dichloroethylene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
10061-02-6	trans-1,3-Dichloropropylene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
110-57-6	trans-1,4-Dichloro-2-butene	ND	250	ug/kg dry	50	06/06/14	B4F0615	8260	
79-01-6	Trichloroethylene	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
75-69-4	Trichlorofluoromethane	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
75-01-4	Vinyl chloride	ND	50	ug/kg dry	50	06/06/14	B4F0615	8260	
Surrogate: Bromofluorobenzene			*99.9 %*		*50-150*	*06/06/14*	B4F0615	*8260*	
Surrogate: Dibromofluoromethane			*99.6 %*		*50-150*	*06/06/14*	B4F0615	*8260*	
Surrogate: Toluene-d8			*101 %*		*50-150*	*06/06/14*	B4F0615	*8260*	

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ENVIRONMENTAL LABORATORY

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

Client ID: TRIP BLANK

Lab ID: 1406007-16

CAS #	Analyte	Result	RL	Units	Dilution	Analyzed Date	QC Batch	Method	Qualifier
Inorganics-General Chemistry									
TS	**% Total Solids**	**100**	0.1	%	1	06/03/14	B1F0319	2540 B	

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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 B4F0615 - Method: 5035				**Prepared: 06/06/2014**							
Blank (B4F0615-BLK1)											
1,1,1,2-Tetrachloroethane	ND	50	ug/kg wet							06/06/2014	
1,1,1-Trichloroethane	ND	50	ug/kg wet							06/06/2014	
1,1,2,2-Tetrachloroethane	ND	50	ug/kg wet							06/06/2014	
1,1,2-Trichloroethane	ND	50	ug/kg wet							06/06/2014	
1,1-Dichloroethane	ND	50	ug/kg wet							06/06/2014	
1,1-Dichloroethylene	ND	50	ug/kg wet							06/06/2014	
1,2,3-Trichlorobenzene	ND	250	ug/kg wet							06/06/2014	
1,2,3-Trichloropropane	ND	50	ug/kg wet							06/06/2014	
1,2,3-Trimethylbenzene	ND	50	ug/kg wet							06/06/2014	
1,2,4-Trichlorobenzene	ND	250	ug/kg wet							06/06/2014	
1,2,4-Trimethylbenzene	ND	50	ug/kg wet							06/06/2014	
1,2-Dibromo-3-chloropropane	ND	250	ug/kg wet							06/06/2014	
1,2-Dibromoethane	ND	50	ug/kg wet							06/06/2014	
1,2-Dichlorobenzene	ND	50	ug/kg wet							06/06/2014	
1,2-Dichloroethane	ND	50	ug/kg wet							06/06/2014	
1,2-Dichloropropane	ND	50	ug/kg wet							06/06/2014	
1,3,5-Trimethylbenzene	ND	50	ug/kg wet							06/06/2014	
[illegible]lorobenzene	ND	50	ug/kg wet							06/06/2014	
[illegible]lorobenzene	ND	50	ug/kg wet							06/06/2014	
2-Butanone (MEK)	ND	250	ug/kg wet							06/06/2014	
2-Hexanone	ND	250	ug/kg wet							06/06/2014	
2-Methylnaphthalene	ND	250	ug/kg wet							06/06/2014	X
2-Propanone (acetone)	ND	1000	ug/kg wet							06/06/2014	A05
4-Methyl-2-pentanone (MIBK)	ND	250	ug/kg wet							06/06/2014	
Acrylonitrile	ND	250	ug/kg wet							06/06/2014	
Benzene	ND	50	ug/kg wet							06/06/2014	
Bromobenzene	ND	50	ug/kg wet							06/06/2014	
Bromochloromethane	ND	50	ug/kg wet							06/06/2014	
Bromodichloromethane	ND	50	ug/kg wet							06/06/2014	
Bromoform	ND	50	ug/kg wet							06/06/2014	
Bromomethane	ND	250	ug/kg wet							06/06/2014	
Carbon disulfide	ND	50	ug/kg wet							06/06/2014	
Carbon tetrachloride	ND	50	ug/kg wet							06/06/2014	
Chlorobenzene	ND	50	ug/kg wet							06/06/2014	
Chloroethane	ND	250	ug/kg wet							06/06/2014	
Chloroform	ND	50	ug/kg wet							06/06/2014	
Chloromethane	ND	250	ug/kg wet							06/06/2014	
cis-1,2-Dichloroethylene	ND	50	ug/kg wet							06/06/2014	
cis-1,3-Dichloropropylene	ND	50	ug/kg wet							06/06/2014	
Cyclohexane	ND	250	ug/kg wet							06/06/2014	
Dibromochloromethane	ND	50	ug/kg wet							06/06/2014	
Dibromomethane	ND	50	ug/kg wet							06/06/2014	
Dichlorodifluoromethane	ND	250	ug/kg wet							06/06/2014	A05
Diethyl ether	ND	250	ug/kg wet							06/06/2014	
Diisopropyl Ether	ND	250	ug/kg wet							06/06/2014	
[illegible]zene	ND	50	ug/kg wet							06/06/2014	
E[illegible]diarybutylether	ND	250	ug/kg wet							06/06/2014	
Hexachloroethane	ND	250	ug/kg wet							06/06/2014	

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

Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F0615 - Method: 5035				**Prepared: 06/06/2014**							
Blank (B4F0615-BLK1)											
Isopropylbenzene	ND	50	ug/kg wet							06/06/2014	
m & p- Xylene	ND	100	ug/kg wet							06/06/2014	
Methyl iodide	ND	50	ug/kg wet							06/06/2014	
Methylene chloride	ND	250	ug/kg wet							06/06/2014	
Methyltertiarybutylether	ND	50	ug/kg wet							06/06/2014	
Naphthalene	ND	250	ug/kg wet							06/06/2014	X
n-Butylbenzene	ND	50	ug/kg wet							06/06/2014	
n-Propylbenzene	ND	50	ug/kg wet							06/06/2014	
o-Xylene	ND	50	ug/kg wet							06/06/2014	
p-Isopropyl toluene	ND	50	ug/kg wet							06/06/2014	
sec-Butylbenzene	ND	50	ug/kg wet							06/06/2014	
Styrene	ND	50	ug/kg wet							06/06/2014	
tert-Butylbenzene	ND	50	ug/kg wet							06/06/2014	
tertiary Butyl Alcohol	ND	2500	ug/kg wet							06/06/2014	
tertiaryAmylmethylether	ND	250	ug/kg wet							06/06/2014	
Tetrachloroethylene	ND	50	ug/kg wet							06/06/2014	
Tetrahydrofuran	ND	250	ug/kg wet							06/06/2014	
Toluene	ND	50	ug/kg wet							06/06/2014	
trans-1,2-Dichloroethylene	ND	50	ug/kg wet							06/06/2014	
trans-1,3-Dichloropropylene	ND	50	ug/kg wet							06/06/2014	
trans-1,4-Dichloro-2-butene	ND	250	ug/kg wet							06/06/2014	
Trichloroethylene	ND	50	ug/kg wet							06/06/2014	
Trichlorofluoromethane	ND	50	ug/kg wet							06/06/2014	
Vinyl chloride	ND	50	ug/kg wet							06/06/2014	
Surrogate: Bromofluorobenzene	*54.1*		ug/L	*50.00*		*108*	*50-150*			06/06/2014	
Surrogate: Dibromofluoromethane	*56.6*		ug/L	*50.00*		*113*	*50-150*			06/06/2014	
Surrogate: Toluene-d8	*55.1*		ug/L	*50.00*		*110*	*50-150*			06/06/2014	
LCS (B4F0615-BS1)											
1,1,1,2-Tetrachloroethane	2130	50	ug/kg wet	2500		85.1	70-130			06/06/2014	
1,1,1-Trichloroethane	1980	50	ug/kg wet	2500		79.4	70-130			06/06/2014	
1,1,2,2-Tetrachloroethane	2280	50	ug/kg wet	2500		91.3	70-130			06/06/2014	
1,1,2-Trichloroethane	2190	50	ug/kg wet	2500		87.4	70-130			06/06/2014	
1,1-Dichloroethane	2300	50	ug/kg wet	2500		92.2	70-130			06/06/2014	
1,1-Dichloroethylene	2050	50	ug/kg wet	2500		82.1	70-130			06/06/2014	
1,2,3-Trichlorobenzene	2150	250	ug/kg wet	2500		85.9	70-130			06/06/2014	
1,2,3-Trichloropropane	2200	50	ug/kg wet	2500		87.9	70-130			06/06/2014	
1,2,3-Trimethylbenzene	2140	50	ug/kg wet	2500		85.6	70-130			06/06/2014	
1,2,4-Trichlorobenzene	2170	250	ug/kg wet	2500		86.8	70-130			06/06/2014	
1,2,4-Trimethylbenzene	2160	50	ug/kg wet	2500		86.6	70-130			06/06/2014	
1,2-Dibromo-3-chloropropane	2080	250	ug/kg wet	2500		83.1	70-130			06/06/2014	
1,2-Dibromoethane	2240	50	ug/kg wet	2500		89.6	70-130			06/06/2014	
1,2-Dichlorobenzene	2180	50	ug/kg wet	2500		87.3	70-130			06/06/2014	
1,2-Dichloroethane	2040	50	ug/kg wet	2500		81.5	70-130			06/06/2014	
1,2-Dichloropropane	2180	50	ug/kg wet	2500		87.2	70-130			06/06/2014	
1,3,5-Trimethylbenzene	2140	50	ug/kg wet	2500		85.6	70-130			06/06/2014	
1,3-Dichlorobenzene	2130	50	ug/kg wet	2500		85.2	70-130			06/06/2014	
1,4-Dichlorobenzene	2120	50	ug/kg wet	2500		84.9	70-130			06/06/2014	

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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 B4F0615 - Method: 5035				**Prepared: 06/06/2014**							
LCS (B4F0615-BS1)											
2-Butanone (MEK)	2970	250	ug/kg wet	2500		119	70-130			06/06/2014	A11
2-Hexanone	2560	250	ug/kg wet	2500		102	70-130			06/06/2014	A11
2-Methylnaphthalene	2080	250	ug/kg wet	2500		83.4	70-130			06/06/2014	X
2-Propanone (acetone)	3150	1000	ug/kg wet	2500		126	70-130			06/06/2014	A05, A11
4-Methyl-2-pentanone (MIBK)	2220	250	ug/kg wet	2500		88.7	70-130			06/06/2014	
Acrylonitrile	2290	250	ug/kg wet	2500		91.6	70-130			06/06/2014	
Benzene	2150	50	ug/kg wet	2500		85.9	70-130			06/06/2014	
Bromobenzene	2160	50	ug/kg wet	2500		86.5	70-130			06/06/2014	
Bromochloromethane	2140	50	ug/kg wet	2500		85.7	70-130			06/06/2014	
Bromodichloromethane	2140	50	ug/kg wet	2500		85.7	70-130			06/06/2014	
Bromoform	2120	50	ug/kg wet	2500		84.8	70-130			06/06/2014	
Bromomethane	2310	250	ug/kg wet	2500		92.6	70-130			06/06/2014	
Carbon disulfide	2060	50	ug/kg wet	2500		82.3	70-130			06/06/2014	
Carbon tetrachloride	1870	50	ug/kg wet	2500		74.8	70-130			06/06/2014	
Chlorobenzene	2190	50	ug/kg wet	2500		87.4	70-130			06/06/2014	
Chloroethane	2070	250	ug/kg wet	2500		82.9	70-130			06/06/2014	
Chloroform	2260	50	ug/kg wet	2500		90.4	70-130			06/06/2014	
C ethane	2230	250	ug/kg wet	2500		89.2	70-130			06/06/2014	
c. ichloroethylene	2350	50	ug/kg wet	2500		93.9	70-130			06/06/2014	
cis-1,3-Dichloropropylene	2060	50	ug/kg wet	2500		82.5	70-130			06/06/2014	
Cyclohexane	1880	250	ug/kg wet	2500		75.3	70-130			06/06/2014	
Dibromochloromethane	2090	50	ug/kg wet	2500		83.6	70-130			06/06/2014	
Dibromomethane	2160	50	ug/kg wet	2500		86.3	70-130			06/06/2014	
Dichlorodifluoromethane	1520	250	ug/kg wet	2500		60.9	70-130			06/06/2014	A05, A08
Diethyl ether	2580	250	ug/kg wet	2500		103	70-130			06/06/2014	
Diisopropyl Ether	2400	250	ug/kg wet	2500		96.1	70-130			06/06/2014	
Ethylbenzene	2160	50	ug/kg wet	2500		86.5	70-130			06/06/2014	
Ethyltertiarybutylether	2300	250	ug/kg wet	2500		91.9	70-130			06/06/2014	
Hexachloroethane	2080	250	ug/kg wet	2500		83.3	70-130			06/06/2014	
Isopropylbenzene	2230	50	ug/kg wet	2500		89.1	70-130			06/06/2014	
m & p - Xylene	4250	100	ug/kg wet	5000		85.0	70-130			06/06/2014	
Methyl iodide	2100	50	ug/kg wet	2500		83.9	70-130			06/06/2014	
Methylene chloride	2360	250	ug/kg wet	2500		94.5	70-130			06/06/2014	
Methyltertiarybutylether	2250	50	ug/kg wet	2500		89.9	70-130			06/06/2014	
Naphthalene	2250	250	ug/kg wet	2500		89.9	70-130			06/06/2014	X
n-Butylbenzene	2140	50	ug/kg wet	2500		85.7	70-130			06/06/2014	
n-Propylbenzene	2220	50	ug/kg wet	2500		88.6	70-130			06/06/2014	
o-Xylene	2160	50	ug/kg wet	2500		86.4	70-130			06/06/2014	
p-Isopropyl toluene	2070	50	ug/kg wet	2500		82.9	70-130			06/06/2014	
sec-Butylbenzene	2120	50	ug/kg wet	2500		84.6	70-130			06/06/2014	
Styrene	2200	50	ug/kg wet	2500		88.0	70-130			06/06/2014	
tert-Butylbenzene	1980	50	ug/kg wet	2500		79.3	70-130			06/06/2014	
tertiary Butyl Alcohol	9470	2500	ug/kg wet	12500		75.7	70-130			06/06/2014	
tertiaryAmylmethylether	2050	250	ug/kg wet	2500		81.9	70-130			06/06/2014	
Tetrachloroethylene	1960	50	ug/kg wet	2500		78.6	70-130			06/06/2014	
T rofuran	2450	250	ug/kg wet	2500		97.8	70-130			06/06/2014	
Tc	2140	50	ug/kg wet	2500		85.7	70-130			06/06/2014	
trans-1,2-Dichloroethylene	2240	50	ug/kg wet	2500		89.5	70-130			06/06/2014	

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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 B4F0615 - Method: 5035				**Prepared: 06/06/2014**							
LCS (B4F0615-BS1)											
trans-1,3-Dichloropropylene	2050	50	ug/kg wet	2500		82.0	70-130			06/06/2014	
trans-1,4-Dichloro-2-butene	2180	250	ug/kg wet	2500		87.4	70-130			06/06/2014	
Trichloroethylene	2050	50	ug/kg wet	2500		81.8	70-130			06/06/2014	
Trichlorofluoromethane	1820	50	ug/kg wet	2500		72.7	70-130			06/06/2014	
Vinyl chloride	2170	50	ug/kg wet	2500		86.8	70-130			06/06/2014	
Surrogate: Bromofluorobenzene	*51.8*		ug/L	*50.00*		*104*	*50-150*			06/06/2014	
Surrogate: Dibromofluoromethane	*50.5*		ug/L	*50.00*		*101*	*50-150*			06/06/2014	
Surrogate: Toluene-d8	*51.4*		ug/L	*50.00*		*103*	*50-150*			06/06/2014	
Matrix Spike (B4F0615-MS1)	**Source: 1406020-04**										
1,1,1,2-Tetrachloroethane	3230	71	ug/kg dry	3541	ND	91.2	70-130			06/10/2014	
1,1,1-Trichloroethane	3160	71	ug/kg dry	3541	ND	89.2	70-130			06/10/2014	
1,1,2,2-Tetrachloroethane	3380	71	ug/kg dry	3541	ND	95.5	70-130			06/10/2014	
1,1,2-Trichloroethane	3380	71	ug/kg dry	3541	ND	95.5	70-130			06/10/2014	
1,1-Dichloroethane	3470	71	ug/kg dry	3541	ND	98.0	70-130			06/10/2014	
1,1-Dichloroethylene	3480	71	ug/kg dry	3541	ND	98.3	70-130			06/10/2014	
1,2,3-Trichlorobenzene	3220	350	ug/kg dry	3541	ND	90.9	70-130			06/10/2014	
1,2,3-Trichloropropane	3330	71	ug/kg dry	3541	ND	94.1	70-130			06/10/2014	
1,2,3-Trimethylbenzene	3260	71	ug/kg dry	3541	ND	92.1	70-130			06/10/2014	
1,2,4-Trichlorobenzene	3300	350	ug/kg dry	3541	ND	93.2	70-130			06/10/2014	
1,2,4-Trimethylbenzene	3240	71	ug/kg dry	3541	ND	91.6	70-130			06/10/2014	
1,2-Dibromo-3-chloropropane	3230	350	ug/kg dry	3541	ND	91.3	70-130			06/10/2014	
1,2-Dibromoethane	3350	71	ug/kg dry	3541	ND	94.6	70-130			06/10/2014	
1,2-Dichlorobenzene	3270	71	ug/kg dry	3541	ND	92.3	70-130			06/10/2014	
1,2-Dichloroethane	3100	71	ug/kg dry	3541	ND	87.4	70-130			06/10/2014	
1,2-Dichloropropane	3390	71	ug/kg dry	3541	ND	95.8	70-130			06/10/2014	
1,3,5-Trimethylbenzene	3270	71	ug/kg dry	3541	ND	92.3	70-130			06/10/2014	
1,3-Dichlorobenzene	3210	71	ug/kg dry	3541	ND	90.7	70-130			06/10/2014	
1,4-Dichlorobenzene	3260	71	ug/kg dry	3541	ND	91.9	70-130			06/10/2014	
2-Butanone (MEK)	3540	350	ug/kg dry	3541	ND	100	70-130			06/10/2014	A11
2-Hexanone	3550	350	ug/kg dry	3541	ND	100	70-130			06/10/2014	A11
2-Methylnaphthalene	2960	350	ug/kg dry	3541	ND	83.5	70-130			06/10/2014	X
2-Propanone (acetone)	3180	1400	ug/kg dry	3541	ND	89.8	70-130			06/10/2014	A05, A11
4-Methyl-2-pentanone (MIBK)	3440	350	ug/kg dry	3541	ND	97.1	70-130			06/10/2014	
Acrylonitrile	3490	350	ug/kg dry	3541	ND	98.7	70-130			06/10/2014	
Benzene	3300	71	ug/kg dry	3541	ND	93.2	70-130			06/10/2014	
Bromobenzene	3200	71	ug/kg dry	3541	ND	90.5	70-130			06/10/2014	
Bromochloromethane	3250	71	ug/kg dry	3541	ND	91.8	70-130			06/10/2014	
Bromodichloromethane	3220	71	ug/kg dry	3541	ND	91.0	70-130			06/10/2014	
Bromoform	3340	71	ug/kg dry	3541	ND	94.4	70-130			06/10/2014	
Bromomethane	3440	350	ug/kg dry	3541	ND	97.2	70-130			06/10/2014	
Carbon disulfide	3320	71	ug/kg dry	3541	ND	93.8	70-130			06/10/2014	
Carbon tetrachloride	3120	71	ug/kg dry	3541	ND	88.0	70-130			06/10/2014	
Chlorobenzene	3310	71	ug/kg dry	3541	ND	93.6	70-130			06/10/2014	
Chloroethane	3180	350	ug/kg dry	3541	ND	89.9	70-130			06/10/2014	
Chloroform	3370	71	ug/kg dry	3541	ND	95.2	70-130			06/10/2014	
Chloromethane	3280	350	ug/kg dry	3541	ND	92.7	70-130			06/10/2014	
cis-1,2-Dichloroethylene	3490	71	ug/kg dry	3541	ND	98.7	70-130			06/10/2014	

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FAX: (517) 335-9600

Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F0615 - Method: 5035				**Prepared: 06/06/2014**							
Matrix Spike (B4F0615-MS1)	**Source: 1406020-04**										
cis-1,3-Dichloropropylene	3270	71	ug/kg dry	3541	ND	92.3	70-130			06/10/2014	
Cyclohexane	3470	350	ug/kg dry	3541	ND	98.1	70-130			06/10/2014	
Dibromochloromethane	3260	71	ug/kg dry	3541	ND	92.0	70-130			06/10/2014	
Dibromomethane	3250	71	ug/kg dry	3541	ND	91.9	70-130			06/10/2014	
Dichlorodifluoromethane	2710	350	ug/kg dry	3541	ND	76.6	70-130			06/10/2014	A05
Diethyl ether	4160	350	ug/kg dry	3541	ND	117	70-130			06/10/2014	
Diisopropyl Ether	3520	350	ug/kg dry	3541	ND	99.3	70-130			06/10/2014	
Ethylbenzene	3300	71	ug/kg dry	3541	ND	93.3	70-130			06/10/2014	
Ethyltertiarybutylether	3370	350	ug/kg dry	3541	ND	95.3	70-130			06/10/2014	
Hexachloroethane	3290	350	ug/kg dry	3541	ND	93.0	70-130			06/10/2014	
Isopropylbenzene	3310	71	ug/kg dry	3541	ND	93.6	70-130			06/10/2014	
m & p - Xylene	6550	140	ug/kg dry	7082	ND	92.5	70-130			06/10/2014	
Methyl iodide	3010	71	ug/kg dry	3541	ND	85.1	70-130			06/10/2014	
Methylene chloride	3490	350	ug/kg dry	3541	ND	98.7	70-130			06/10/2014	
Methyltertiarybutylether	3270	71	ug/kg dry	3541	ND	92.4	70-130			06/10/2014	
Naphthalene	3200	350	ug/kg dry	3541	ND	90.4	70-130			06/10/2014	X
n-Butylbenzene	3450	71	ug/kg dry	3541	ND	97.5	70-130			06/10/2014	
[illegible]benzene	3300	71	ug/kg dry	3541	ND	93.1	70-130			06/10/2014	
o	3320	71	ug/kg dry	3541	ND	93.8	70-130			06/10/2014	
p-Isopropyl toluene	3230	71	ug/kg dry	3541	ND	91.1	70-130			06/10/2014	
sec-Butylbenzene	3280	71	ug/kg dry	3541	ND	92.6	70-130			06/10/2014	
Styrene	3350	71	ug/kg dry	3541	ND	94.6	70-130			06/10/2014	
tert-Butylbenzene	3390	71	ug/kg dry	3541	ND	95.7	70-130			06/10/2014	
tertiary Butyl Alcohol	26400	3500	ug/kg dry	17710	ND	149	70-130			06/10/2014	A04
tertiaryAmylmethylether	3190	350	ug/kg dry	3541	ND	90.1	70-130			06/10/2014	
Tetrachloroethylene	3160	71	ug/kg dry	3541	ND	89.3	70-130			06/10/2014	
Tetrahydrofuran	3600	350	ug/kg dry	3541	ND	102	70-130			06/10/2014	
Toluene	3660	71	ug/kg dry	3541	339	93.8	70-130			06/10/2014	
trans-1,2-Dichloroethylene	3400	71	ug/kg dry	3541	ND	96.1	70-130			06/10/2014	
trans-1,3-Dichloropropylene	3200	71	ug/kg dry	3541	ND	90.4	70-130			06/10/2014	
trans-1,4-Dichloro-2-butene	3550	350	ug/kg dry	3541	ND	100	70-130			06/10/2014	
Trichloroethylene	3190	71	ug/kg dry	3541	ND	90.2	70-130			06/10/2014	
Trichlorofluoromethane	3060	71	ug/kg dry	3541	ND	86.3	70-130			06/10/2014	
Vinyl chloride	3360	71	ug/kg dry	3541	ND	94.8	70-130			06/10/2014	
Surrogate: Bromofluorobenzene	*71.5*		ug/kg dry	*62.29*		*115*	*50-150*			06/10/2014	
Surrogate: Dibromofluoromethane	*70.4*		ug/kg dry	*62.29*		*113*	*50-150*			06/10/2014	
Surrogate: Toluene-d8	*73.9*		ug/kg dry	*62.29*		*119*	*50-150*			06/10/2014	
Matrix Spike Dup (B4F0615-MSD1)	**Source: 1406020-04**										
1,1,1,2-Tetrachloroethane	3080	71	ug/kg dry	3541	ND	87.1	70-130	4.67	30	06/10/2014	
1,1,1-Trichloroethane	3060	71	ug/kg dry	3541	ND	86.5	70-130	3.08	30	06/10/2014	
1,1,2,2-Tetrachloroethane	3280	71	ug/kg dry	3541	ND	92.5	70-130	3.18	30	06/10/2014	
1,1,2-Trichloroethane	3230	71	ug/kg dry	3541	ND	91.1	70-130	4.66	30	06/10/2014	
1,1-Dichloroethane	3360	71	ug/kg dry	3541	ND	94.7	70-130	3.38	30	06/10/2014	
1,1-Dichloroethylene	3370	71	ug/kg dry	3541	ND	95.3	70-130	3.08	30	06/10/2014	
1 [illegible]chlorobenzene	3120	350	ug/kg dry	3541	ND	88.2	70-130	3.01	30	06/10/2014	
1 [illegible]chloropropane	3270	71	ug/kg dry	3541	ND	92.3	70-130	1.90	30	06/10/2014	
1,2,3-Trimethylbenzene	3260	71	ug/kg dry	3541	ND	92.1	70-130	0.0618	30	06/10/2014	

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

Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F0615 - Method: 5035				**Prepared: 06/06/2014**							
Matrix Spike Dup (B4F0615-MSD1)	**Source: 1406020-04**										
1,2,4-Trichlorobenzene	3160	350	ug/kg dry	3541	ND	89.1	70-130	4.44	30	06/10/2014	
1,2,4-Trimethylbenzene	3230	71	ug/kg dry	3541	ND	91.1	70-130	0.562	30	06/10/2014	
1,2-Dibromo-3-chloropropane	3120	350	ug/kg dry	3541	ND	88.2	70-130	3.54	30	06/10/2014	
1,2-Dibromoethane	3280	71	ug/kg dry	3541	ND	92.7	70-130	2.04	30	06/10/2014	
1,2-Dichlorobenzene	3230	71	ug/kg dry	3541	ND	91.3	70-130	1.10	30	06/10/2014	
1,2-Dichloroethane	3070	71	ug/kg dry	3541	ND	86.6	70-130	0.980	30	06/10/2014	
1,2-Dichloropropane	3350	71	ug/kg dry	3541	ND	94.5	70-130	1.34	30	06/10/2014	
1,3,5-Trimethylbenzene	3250	71	ug/kg dry	3541	ND	91.8	70-130	0.575	30	06/10/2014	
1,3-Dichlorobenzene	3210	71	ug/kg dry	3541	ND	90.5	70-130	0.201	30	06/10/2014	
1,4-Dichlorobenzene	3200	71	ug/kg dry	3541	ND	90.5	70-130	1.59	30	06/10/2014	
2-Butanone (MEK)	3430	350	ug/kg dry	3541	ND	96.7	70-130	3.43	30	06/10/2014	A11
2-Hexanone	3370	350	ug/kg dry	3541	ND	95.2	70-130	5.26	30	06/10/2014	A11
2-Methylnaphthalene	3250	350	ug/kg dry	3541	ND	91.8	70-130	9.51	30	06/10/2014	X
2-Propanone (acetone)	3220	1400	ug/kg dry	3541	ND	90.8	70-130	1.17	30	06/10/2014	A05, A11
4-Methyl-2-pentanone (MIBK)	3390	350	ug/kg dry	3541	ND	95.9	70-130	1.33	30	06/10/2014	
Acrylonitrile	3350	350	ug/kg dry	3541	ND	94.5	70-130	4.37	30	06/10/2014	
Benzene	3250	71	ug/kg dry	3541	ND	91.7	70-130	1.57	30	06/10/2014	
Bromobenzene	3140	71	ug/kg dry	3541	ND	88.7	70-130	1.92	30	06/10/2014	
Bromochloromethane	3190	71	ug/kg dry	3541	ND	90.1	70-130	1.83	30	06/10/2014	
Bromodichloromethane	3150	71	ug/kg dry	3541	ND	88.9	70-130	2.38	30	06/10/2014	
Bromoform	3170	71	ug/kg dry	3541	ND	89.4	70-130	5.47	30	06/10/2014	
Bromomethane	3330	350	ug/kg dry	3541	ND	94.1	70-130	3.24	30	06/10/2014	
Carbon disulfide	3200	71	ug/kg dry	3541	ND	90.5	70-130	3.63	30	06/10/2014	
Carbon tetrachloride	3040	71	ug/kg dry	3541	ND	85.7	70-130	2.63	30	06/10/2014	
Chlorobenzene	3230	71	ug/kg dry	3541	ND	91.3	70-130	2.41	30	06/10/2014	
Chloroethane	3310	350	ug/kg dry	3541	ND	93.6	70-130	4.04	30	06/10/2014	
Chloroform	3300	71	ug/kg dry	3541	ND	93.1	70-130	2.24	30	06/10/2014	
Chloromethane	3140	350	ug/kg dry	3541	ND	88.8	70-130	4.28	30	06/10/2014	
cis-1,2-Dichloroethylene	3400	71	ug/kg dry	3541	ND	96.0	70-130	2.71	30	06/10/2014	
cis-1,3-Dichloropropylene	3200	71	ug/kg dry	3541	ND	90.2	70-130	2.23	30	06/10/2014	
Cyclohexane	3300	350	ug/kg dry	3541	ND	93.3	70-130	5.03	30	06/10/2014	
Dibromochloromethane	3120	71	ug/kg dry	3541	ND	88.1	70-130	4.34	30	06/10/2014	
Dibromomethane	3280	71	ug/kg dry	3541	ND	92.6	70-130	0.731	30	06/10/2014	
Dichlorodifluoromethane	2680	350	ug/kg dry	3541	ND	75.6	70-130	1.22	30	06/10/2014	A05
Diethyl ether	3880	350	ug/kg dry	3541	ND	110	70-130	6.89	30	06/10/2014	
Diisopropyl Ether	3450	350	ug/kg dry	3541	ND	97.4	70-130	2.01	30	06/10/2014	
Ethylbenzene	3220	71	ug/kg dry	3541	ND	91.0	70-130	2.52	30	06/10/2014	
Ethyltertiarybutylether	3270	350	ug/kg dry	3541	ND	92.2	70-130	3.28	30	06/10/2014	
Hexachloroethane	3210	350	ug/kg dry	3541	ND	90.8	70-130	2.47	30	06/10/2014	
Isopropylbenzene	3260	71	ug/kg dry	3541	ND	92.1	70-130	1.53	30	06/10/2014	
m & p - Xylene	6330	140	ug/kg dry	7082	ND	89.4	70-130	3.46	30	06/10/2014	
Methyl iodide	3100	71	ug/kg dry	3541	ND	87.5	70-130	2.80	30	06/10/2014	
Methylene chloride	3460	350	ug/kg dry	3541	ND	97.8	70-130	0.887	30	06/10/2014	
Methyltertiarybutylether	3210	71	ug/kg dry	3541	ND	90.8	70-130	1.72	30	06/10/2014	
Naphthalene	3250	350	ug/kg dry	3541	ND	91.8	70-130	1.54	30	06/10/2014	X
n-Butylbenzene	3410	71	ug/kg dry	3541	ND	96.4	70-130	1.16	30	06/10/2014	
n-Propylbenzene	3280	71	ug/kg dry	3541	ND	92.6	70-130	0.547	30	06/10/2014	
o-Xylene	3210	71	ug/kg dry	3541	ND	90.8	70-130	3.26	30	06/10/2014	

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

Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F0615 - Method: 5035				**Prepared: 06/06/2014**							
Matrix Spike Dup (B4F0615-MSD1)	**Source: 1406020-04**										
p-Isopropyl toluene	3210	71	ug/kg dry	3541	ND	90.7	70-130	0.467	30	06/10/2014	
sec-Butylbenzene	3250	71	ug/kg dry	3541	ND	91.7	70-130	1.01	30	06/10/2014	
Styrene	3250	71	ug/kg dry	3541	ND	91.8	70-130	2.94	30	06/10/2014	
tert-Butylbenzene	3350	71	ug/kg dry	3541	ND	94.7	70-130	1.11	30	06/10/2014	
tertiary Butyl Alcohol	25200	3500	ug/kg dry	17710	ND	142	70-130	4.81	30	06/10/2014	A04
tertiaryAmylmethylether	3150	350	ug/kg dry	3541	ND	89.0	70-130	1.21	30	06/10/2014	
Tetrachloroethylene	3100	71	ug/kg dry	3541	ND	87.6	70-130	1.95	30	06/10/2014	
Tetrahydrofuran	3480	350	ug/kg dry	3541	ND	98.3	70-130	3.48	30	06/10/2014	
Toluene	3520	71	ug/kg dry	3541	339	89.9	70-130	3.83	30	06/10/2014	
trans-1,2-Dichloroethylene	3330	71	ug/kg dry	3541	ND	94.2	70-130	1.99	30	06/10/2014	
trans-1,3-Dichloropropylene	3200	71	ug/kg dry	3541	ND	90.2	70-130	0.189	30	06/10/2014	
trans-1,4-Dichloro-2-butene	3400	350	ug/kg dry	3541	ND	96.1	70-130	4.24	30	06/10/2014	
Trichloroethylene	3120	71	ug/kg dry	3541	ND	88.2	70-130	2.21	30	06/10/2014	
Trichlorofluoromethane	3060	71	ug/kg dry	3541	ND	86.5	70-130	0.266	30	06/10/2014	
Vinyl chloride	3280	71	ug/kg dry	3541	ND	92.6	70-130	2.33	30	06/10/2014	
Surrogate: Bromofluorobenzene	*68.1*		ug/kg dry	*62.29*		*109*	*50-150*			06/10/2014	
Surrogate: Dibromofluoromethane	*68.0*		ug/kg dry	*62.29*		*109*	*50-150*			06/10/2014	
Surrogate: Toluene-d8	*69.1*		ug/kg dry	*62.29*		*111*	*50-150*			06/10/2014	
Batch B4F1719 - Method: 5035				**Prepared: 06/06/2014**							
Blank (B4F1719-BLK1)											
1,1,1,2-Tetrachloroethane	ND	50	ug/kg wet							06/06/2014	
1,1,1-Trichloroethane	ND	50	ug/kg wet							06/06/2014	
1,1,2,2-Tetrachloroethane	ND	50	ug/kg wet							06/06/2014	
1,1,2-Trichloroethane	ND	50	ug/kg wet							06/06/2014	
1,1-Dichloroethane	ND	50	ug/kg wet							06/06/2014	
1,1-Dichloroethylene	ND	50	ug/kg wet							06/06/2014	
1,2,3-Trichlorobenzene	ND	250	ug/kg wet							06/06/2014	
1,2,3-Trichloropropane	ND	50	ug/kg wet							06/06/2014	
1,2,3-Trimethylbenzene	ND	50	ug/kg wet							06/06/2014	
1,2,4-Trichlorobenzene	ND	250	ug/kg wet							06/06/2014	
1,2,4-Trimethylbenzene	ND	50	ug/kg wet							06/06/2014	
1,2-Dibromo-3-chloropropane	ND	250	ug/kg wet							06/06/2014	
1,2-Dibromoethane	ND	50	ug/kg wet							06/06/2014	
1,2-Dichlorobenzene	ND	50	ug/kg wet							06/06/2014	
1,2-Dichloroethane	ND	50	ug/kg wet							06/06/2014	
1,2-Dichloropropane	ND	50	ug/kg wet							06/06/2014	
1,3,5-Trimethylbenzene	ND	50	ug/kg wet							06/06/2014	
1,3-Dichlorobenzene	ND	50	ug/kg wet							06/06/2014	
1,4-Dichlorobenzene	ND	50	ug/kg wet							06/06/2014	
2-Butanone (MEK)	ND	250	ug/kg wet							06/06/2014	
2-Hexanone	ND	250	ug/kg wet							06/06/2014	
2-Methylnaphthalene	ND	250	ug/kg wet							06/06/2014	X
4-Methyl-2-pentanone (MIBK)	ND	250	ug/kg wet							06/06/2014	

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

Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F1719 - Method: 5035				**Prepared: 06/06/2014**							
Blank (B4F1719-BLK1)											
Acrylonitrile	ND	250	ug/kg wet							06/06/2014	
Benzene	ND	50	ug/kg wet							06/06/2014	
Bromobenzene	ND	50	ug/kg wet							06/06/2014	
Bromochloromethane	ND	50	ug/kg wet							06/06/2014	
Bromodichloromethane	ND	50	ug/kg wet							06/06/2014	
Bromoform	ND	50	ug/kg wet							06/06/2014	
Bromomethane	ND	250	ug/kg wet							06/06/2014	
Carbon disulfide	ND	50	ug/kg wet							06/06/2014	
Carbon tetrachloride	ND	50	ug/kg wet							06/06/2014	
Chlorobenzene	ND	50	ug/kg wet							06/06/2014	
Chloroethane	ND	250	ug/kg wet							06/06/2014	
Chloroform	ND	50	ug/kg wet							06/06/2014	
Chloromethane	ND	250	ug/kg wet							06/06/2014	
cis-1,2-Dichloroethylene	ND	50	ug/kg wet							06/06/2014	
cis-1,3-Dichloropropylene	ND	50	ug/kg wet							06/06/2014	
Cyclohexane	ND	250	ug/kg wet							06/06/2014	
Dibromochloromethane	ND	50	ug/kg wet							06/06/2014	
Dibromomethane	ND	50	ug/kg wet							06/06/2014	
Dichlorodifluoromethane	ND	250	ug/kg wet							06/06/2014	
Diethyl ether	ND	250	ug/kg wet							06/06/2014	A05
Diisopropyl Ether	ND	250	ug/kg wet							06/06/2014	
Ethylbenzene	ND	50	ug/kg wet							06/06/2014	
Ethyltertiarybutylether	ND	250	ug/kg wet							06/06/2014	
Hexachloroethane	ND	250	ug/kg wet							06/06/2014	
Isopropylbenzene	ND	50	ug/kg wet							06/06/2014	
m & p - Xylene	ND	100	ug/kg wet							06/06/2014	
Methyl iodide	ND	50	ug/kg wet							06/06/2014	A05
Methylene chloride	ND	250	ug/kg wet							06/06/2014	
Methyltertiarybutylether	ND	50	ug/kg wet							06/06/2014	
Naphthalene	ND	250	ug/kg wet							06/06/2014	X
n-Butylbenzene	ND	50	ug/kg wet							06/06/2014	
n-Propylbenzene	ND	50	ug/kg wet							06/06/2014	
o-Xylene	ND	50	ug/kg wet							06/06/2014	
p-Isopropyl toluene	ND	50	ug/kg wet							06/06/2014	
sec-Butylbenzene	ND	50	ug/kg wet							06/06/2014	
Styrene	ND	50	ug/kg wet							06/06/2014	
tert-Butylbenzene	ND	50	ug/kg wet							06/06/2014	
tertiary Butyl Alcohol	ND	2500	ug/kg wet							06/06/2014	
tertiaryAmylmethylether	ND	250	ug/kg wet							06/06/2014	
Tetrachloroethylene	ND	50	ug/kg wet							06/06/2014	
Tetrahydrofuran	ND	250	ug/kg wet							06/06/2014	
Toluene	ND	50	ug/kg wet							06/06/2014	
trans-1,2-Dichloroethylene	ND	50	ug/kg wet							06/06/2014	
trans-1,3-Dichloropropylene	ND	50	ug/kg wet							06/06/2014	
trans-1,4-Dichloro-2-butene	ND	250	ug/kg wet							06/06/2014	
Trichloroethylene	ND	50	ug/kg wet							06/06/2014	
Trichlorofluoromethane	ND	50	ug/kg wet							06/06/2014	
Vinyl chloride	ND	50	ug/kg wet							06/06/2014	

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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 B4F1719 - Method: 5035				**Prepared: 06/06/2014**							
Blank (B4F1719-BLK1)											
Surrogate: Bromofluorobenzene	*50.5*		ug/L	*50.00*		*101*	*50-150*			06/06/2014	
Surrogate: Dibromofluoromethane	*53.3*		ug/L	*50.00*		*107*	*50-150*			06/06/2014	
Surrogate: Toluene-d8	*51.7*		ug/L	*50.00*		*103*	*50-150*			06/06/2014	
LCS (B4F1719-BS1)											
1,1,1,2-Tetrachloroethane	2180	50	ug/kg wet	2500		87.3	70-130			06/06/2014	
1,1,1-Trichloroethane	2060	50	ug/kg wet	2500		82.3	70-130			06/06/2014	
1,1,2,2-Tetrachloroethane	2410	50	ug/kg wet	2500		96.5	70-130			06/06/2014	
1,1,2-Trichloroethane	2240	50	ug/kg wet	2500		89.5	70-130			06/06/2014	
1,1-Dichloroethane	2330	50	ug/kg wet	2500		93.2	70-130			06/06/2014	
1,1-Dichloroethylene	2040	50	ug/kg wet	2500		81.4	70-130			06/06/2014	
1,2,3-Trichlorobenzene	2210	250	ug/kg wet	2500		88.4	70-130			06/06/2014	
1,2,3-Trichloropropane	2210	50	ug/kg wet	2500		88.4	70-130			06/06/2014	
1,2,3-Trimethylbenzene	2230	50	ug/kg wet	2500		89.3	70-130			06/06/2014	
1,2,4-Trichlorobenzene	2210	250	ug/kg wet	2500		88.2	70-130			06/06/2014	
1,2,4-Trimethylbenzene	2210	50	ug/kg wet	2500		88.2	70-130			06/06/2014	
1,2-Dibromo-3-chloropropane	2200	250	ug/kg wet	2500		88.1	70-130			06/06/2014	
1 romoethane	2290	50	ug/kg wet	2500		91.8	70-130			06/06/2014	
lorobenzene	2240	50	ug/kg wet	2500		89.8	70-130			06/06/2014	
1,2-Dichloroethane	2130	50	ug/kg wet	2500		85.1	70-130			06/06/2014	
1,2-Dichloropropane	2260	50	ug/kg wet	2500		90.5	70-130			06/06/2014	
1,3,5-Trimethylbenzene	2180	50	ug/kg wet	2500		87.3	70-130			06/06/2014	
1,3-Dichlorobenzene	2190	50	ug/kg wet	2500		87.4	70-130			06/06/2014	
1,4-Dichlorobenzene	2200	50	ug/kg wet	2500		87.9	70-130			06/06/2014	
2-Butanone (MEK)	3540	250	ug/kg wet	2500		142	70-130			06/06/2014	A09, A11
2-Hexanone	3020	250	ug/kg wet	2500		121	70-130			06/06/2014	A11
2-Methylnaphthalene	2140	250	ug/kg wet	2500		85.5	70-130			06/06/2014	X
2-Propanone (acetone)	4250	1000	ug/kg wet	2500		170	70-130			06/06/2014	A09, A11
4-Methyl-2-pentanone (MIBK)	2370	250	ug/kg wet	2500		94.8	70-130			06/06/2014	
Acrylonitrile	2310	250	ug/kg wet	2500		92.4	70-130			06/06/2014	
Benzene	2240	50	ug/kg wet	2500		89.7	70-130			06/06/2014	
Bromobenzene	2180	50	ug/kg wet	2500		87.0	70-130			06/06/2014	
Bromochloromethane	2240	50	ug/kg wet	2500		89.8	70-130			06/06/2014	
Bromodichloromethane	2250	50	ug/kg wet	2500		90.2	70-130			06/06/2014	
Bromoform	2230	50	ug/kg wet	2500		89.2	70-130			06/06/2014	
Bromomethane	2460	250	ug/kg wet	2500		98.4	70-130			06/06/2014	
Carbon disulfide	2080	50	ug/kg wet	2500		83.2	70-130			06/06/2014	
Carbon tetrachloride	1940	50	ug/kg wet	2500		77.7	70-130			06/06/2014	
Chlorobenzene	2230	50	ug/kg wet	2500		89.1	70-130			06/06/2014	
Chloroethane	2180	250	ug/kg wet	2500		87.1	70-130			06/06/2014	
Chloroform	2300	50	ug/kg wet	2500		92.1	70-130			06/06/2014	
Chloromethane	2330	250	ug/kg wet	2500		93.1	70-130			06/06/2014	
cis-1,2-Dichloroethylene	2380	50	ug/kg wet	2500		95.3	70-130			06/06/2014	
cis-1,3-Dichloropropylene	2220	50	ug/kg wet	2500		88.7	70-130			06/06/2014	
Cyclohexane	1850	250	ug/kg wet	2500		73.9	70-130			06/06/2014	
D chloromethane	2180	50	ug/kg wet	2500		87.3	70-130			06/06/2014	
L methane	2220	50	ug/kg wet	2500		88.6	70-130			06/06/2014	
Dichlorodifluoromethane	1560	250	ug/kg wet	2500		62.6	70-130			06/06/2014	A05, A08

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

Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F1719 - Method: 5035				**Prepared: 06/06/2014**							
LCS (B4F1719-BS1)											
Diethyl ether	2320	250	ug/kg wet	2500		92.8	70-130			06/06/2014	A05
Diisopropyl Ether	2430	250	ug/kg wet	2500		97.2	70-130			06/06/2014	
Ethylbenzene	2250	50	ug/kg wet	2500		90.0	70-130			06/06/2014	
Ethyltertiarybutylether	2340	250	ug/kg wet	2500		93.6	70-130			06/06/2014	
Hexachloroethane	2200	250	ug/kg wet	2500		88.0	70-130			06/06/2014	
Isopropylbenzene	2280	50	ug/kg wet	2500		91.2	70-130			06/06/2014	
m & p - Xylene	4330	100	ug/kg wet	5000		86.6	70-130			06/06/2014	
Methyl iodide	1980	50	ug/kg wet	2500		79.4	70-130			06/06/2014	A05
Methylene chloride	2380	250	ug/kg wet	2500		95.2	70-130			06/06/2014	
Methyltertiarybutylether	2290	50	ug/kg wet	2500		91.8	70-130			06/06/2014	
Naphthalene	2310	250	ug/kg wet	2500		92.5	70-130			06/06/2014	X
n-Butylbenzene	2180	50	ug/kg wet	2500		87.3	70-130			06/06/2014	
n-Propylbenzene	2240	50	ug/kg wet	2500		89.7	70-130			06/06/2014	
o-Xylene	2200	50	ug/kg wet	2500		88.0	70-130			06/06/2014	
p-Isopropyl toluene	2150	50	ug/kg wet	2500		85.8	70-130			06/06/2014	
sec-Butylbenzene	2170	50	ug/kg wet	2500		86.6	70-130			06/06/2014	
Styrene	2270	50	ug/kg wet	2500		90.9	70-130			06/06/2014	
tert-Butylbenzene	2240	50	ug/kg wet	2500		89.8	70-130			06/06/2014	
tertiary Butyl Alcohol	12200	2500	ug/kg wet	12500		97.6	70-130			06/06/2014	
tertiaryAmylmethylether	2160	250	ug/kg wet	2500		86.6	70-130			06/06/2014	
Tetrachloroethylene	2030	50	ug/kg wet	2500		81.1	70-130			06/06/2014	
Tetrahydrofuran	2450	250	ug/kg wet	2500		98.1	70-130			06/06/2014	
Toluene	2210	50	ug/kg wet	2500		88.3	70-130			06/06/2014	
trans-1,2-Dichloroethylene	2270	50	ug/kg wet	2500		90.8	70-130			06/06/2014	
trans-1,3-Dichloropropylene	2180	50	ug/kg wet	2500		87.0	70-130			06/06/2014	
trans-1,4-Dichloro-2-butene	2280	250	ug/kg wet	2500		91.0	70-130			06/06/2014	
Trichloroethylene	2130	50	ug/kg wet	2500		85.4	70-130			06/06/2014	
Trichlorofluoromethane	1820	50	ug/kg wet	2500		73.0	70-130			06/06/2014	
Vinyl chloride	2180	50	ug/kg wet	2500		87.0	70-130			06/06/2014	
Surrogate: Bromofluorobenzene	*45.2*		ug/L	*50.00*		*90.4*	*50-150*			06/06/2014	
Surrogate: Dibromofluoromethane	*44.8*		ug/L	*50.00*		*89.6*	*50-150*			06/06/2014	
Surrogate: Toluene-d8	*44.6*		ug/L	*50.00*		*89.3*	*50-150*			06/06/2014	
Matrix Spike (B4F1719-MS1)	**Source: 1406007-04**										
1,1,1,2-Tetrachloroethane	2930	66	ug/kg dry	3282	ND	89.1	70-130			06/06/2014	
1,1,1-Trichloroethane	2860	66	ug/kg dry	3282	ND	87.1	70-130			06/06/2014	
1,1,2,2-Tetrachloroethane	3150	66	ug/kg dry	3282	ND	95.9	70-130			06/06/2014	
1,1,2-Trichloroethane	2940	66	ug/kg dry	3282	ND	89.6	70-130			06/06/2014	
1,1-Dichloroethane	3140	66	ug/kg dry	3282	ND	95.7	70-130			06/06/2014	
1,1-Dichloroethylene	3040	66	ug/kg dry	3282	ND	92.7	70-130			06/06/2014	
1,2,3-Trichlorobenzene	2910	330	ug/kg dry	3282	ND	88.7	70-130			06/06/2014	
1,2,3-Trichloropropane	3030	66	ug/kg dry	3282	ND	92.3	70-130			06/06/2014	
1,2,3-Trimethylbenzene	3060	66	ug/kg dry	3282	ND	93.1	70-130			06/06/2014	
1,2,4-Trichlorobenzene	2900	330	ug/kg dry	3282	ND	88.4	70-130			06/06/2014	
1,2,4-Trimethylbenzene	3070	66	ug/kg dry	3282	ND	93.7	70-130			06/06/2014	
1,2-Dibromo-3-chloropropane	2960	330	ug/kg dry	3282	ND	90.2	70-130			06/06/2014	
1,2-Dibromoethane	3050	66	ug/kg dry	3282	ND	92.9	70-130			06/06/2014	
1,2-Dichlorobenzene	3030	66	ug/kg dry	3282	ND	92.3	70-130			06/06/2014	

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

Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F1719 - Method: 5035				**Prepared: 06/06/2014**							
Matrix Spike (B4F1719-MS1)	**Source: 1406007-04**										
1,2-Dichloroethane	2840	66	ug/kg dry	3282	ND	86.6	70-130			06/06/2014	
1,2-Dichloropropane	3070	66	ug/kg dry	3282	ND	93.5	70-130			06/06/2014	
1,3,5-Trimethylbenzene	3050	66	ug/kg dry	3282	ND	92.9	70-130			06/06/2014	
1,3-Dichlorobenzene	2980	66	ug/kg dry	3282	ND	90.8	70-130			06/06/2014	
1,4-Dichlorobenzene	2990	66	ug/kg dry	3282	ND	91.0	70-130			06/06/2014	
2-Butanone (MEK)	4560	330	ug/kg dry	3282	ND	139	70-130			06/06/2014	A04, A11
2-Hexanone	3980	330	ug/kg dry	3282	ND	121	70-130			06/06/2014	A11
2-Methylnaphthalene	2530	330	ug/kg dry	3282	ND	77.0	70-130			06/06/2014	X
2-Propanone (acetone)	5480	1300	ug/kg dry	3282	ND	167	70-130			06/06/2014	A04, A11
4-Methyl-2-pentanone (MIBK)	3140	330	ug/kg dry	3282	ND	95.7	70-130			06/06/2014	
Acrylonitrile	2990	330	ug/kg dry	3282	ND	91.0	70-130			06/06/2014	
Benzene	3030	66	ug/kg dry	3282	ND	92.4	70-130			06/06/2014	
Bromobenzene	3060	66	ug/kg dry	3282	ND	93.2	70-130			06/06/2014	
Bromochloromethane	2970	66	ug/kg dry	3282	ND	90.5	70-130			06/06/2014	
Bromodichloromethane	2990	66	ug/kg dry	3282	ND	91.2	70-130			06/06/2014	
Bromoform	2950	66	ug/kg dry	3282	ND	90.0	70-130			06/06/2014	
Bromomethane	3140	330	ug/kg dry	3282	ND	95.7	70-130			06/06/2014	
C[illegible]isulfide	2940	66	ug/kg dry	3282	ND	89.5	70-130			06/06/2014	
C[illegible]etrachloride	2780	66	ug/kg dry	3282	ND	84.7	70-130			06/06/2014	
Chlorobenzene	2960	66	ug/kg dry	3282	ND	90.3	70-130			06/06/2014	
Chloroethane	2660	330	ug/kg dry	3282	ND	80.9	70-130			06/06/2014	
Chloroform	3030	66	ug/kg dry	3282	ND	92.4	70-130			06/06/2014	
Chloromethane	3120	330	ug/kg dry	3282	ND	95.1	70-130			06/06/2014	
cis-1,2-Dichloroethylene	3150	66	ug/kg dry	3282	ND	96.1	70-130			06/06/2014	
cis-1,3-Dichloropropylene	2880	66	ug/kg dry	3282	ND	87.7	70-130			06/06/2014	
Cyclohexane	3020	330	ug/kg dry	3282	ND	92.1	70-130			06/06/2014	
Dibromochloromethane	2840	66	ug/kg dry	3282	ND	86.6	70-130			06/06/2014	
Dibromomethane	3010	66	ug/kg dry	3282	ND	91.6	70-130			06/06/2014	
Dichlorodifluoromethane	2760	330	ug/kg dry	3282	ND	84.0	70-130			06/06/2014	A05
Diethyl ether	3800	330	ug/kg dry	3282	ND	116	70-130			06/06/2014	A05
Diisopropyl Ether	3230	330	ug/kg dry	3282	ND	98.4	70-130			06/06/2014	
Ethylbenzene	3070	66	ug/kg dry	3282	ND	93.6	70-130			06/06/2014	
Ethyltertiarybutylether	3050	330	ug/kg dry	3282	ND	93.0	70-130			06/06/2014	
Hexachloroethane	2990	330	ug/kg dry	3282	ND	91.2	70-130			06/06/2014	
Isopropylbenzene	3250	66	ug/kg dry	3282	ND	99.0	70-130			06/06/2014	
m & p - Xylene	5900	130	ug/kg dry	6565	ND	89.8	70-130			06/06/2014	
Methyl iodide	2750	66	ug/kg dry	3282	ND	83.7	70-130			06/06/2014	A05
Methylene chloride	3180	330	ug/kg dry	3282	ND	96.7	70-130			06/06/2014	
Methyltertiarybutylether	2970	66	ug/kg dry	3282	ND	90.5	70-130			06/06/2014	
Naphthalene	3000	330	ug/kg dry	3282	ND	91.4	70-130			06/06/2014	X
n-Butylbenzene	3110	66	ug/kg dry	3282	ND	94.9	70-130			06/06/2014	
n-Propylbenzene	3170	66	ug/kg dry	3282	ND	96.5	70-130			06/06/2014	
o-Xylene	2950	66	ug/kg dry	3282	ND	89.9	70-130			06/06/2014	
p-Isopropyl toluene	3020	66	ug/kg dry	3282	ND	92.1	70-130			06/06/2014	
sec-Butylbenzene	3100	66	ug/kg dry	3282	ND	94.5	70-130			06/06/2014	
S[illegible]	3040	66	ug/kg dry	3282	ND	92.5	70-130			06/06/2014	
t[illegible]ylbenzene	3200	66	ug/kg dry	3282	ND	97.6	70-130			06/06/2014	
tertiary-Butyl Alcohol	22100	3300	ug/kg dry	16410	ND	134	70-130			06/06/2014	A04

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

Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F1719 - Method: 5035				**Prepared: 06/06/2014**							
Matrix Spike (B4F1719-MS1)	**Source: 1406007-04**										
tertiaryAmylmethylether	2830	330	ug/kg dry	3282	ND	86.4	70-130			06/06/2014	
Tetrachloroethylene	2800	66	ug/kg dry	3282	ND	85.2	70-130			06/06/2014	
Tetrahydrofuran	3160	330	ug/kg dry	3282	ND	96.4	70-130			06/06/2014	
Toluene	2990	66	ug/kg dry	3282	ND	91.0	70-130			06/06/2014	
trans-1,2-Dichloroethylene	3080	66	ug/kg dry	3282	ND	93.7	70-130			06/06/2014	
trans-1,3-Dichloropropylene	2870	66	ug/kg dry	3282	ND	87.3	70-130			06/06/2014	
trans-1,4-Dichloro-2-butene	3090	330	ug/kg dry	3282	ND	94.1	70-130			06/06/2014	
Trichloroethylene	2860	66	ug/kg dry	3282	ND	87.2	70-130			06/06/2014	
Trichlorofluoromethane	2680	66	ug/kg dry	3282	ND	81.6	70-130			06/06/2014	
Vinyl chloride	3160	66	ug/kg dry	3282	ND	96.1	70-130			06/06/2014	
Surrogate: Bromofluorobenzene	*73.3*		ug/kg dry	*57.04*		*128*	*50-150*			06/06/2014	
Surrogate: Dibromofluoromethane	*70.8*		ug/kg dry	*57.04*		*124*	*50-150*			06/06/2014	
Surrogate: Toluene-d8	*72.7*		ug/kg dry	*57.04*		*127*	*50-150*			06/06/2014	
Matrix Spike Dup (B4F1719-MSD1)	**Source: 1406007-04**										
1,1,1,2-Tetrachloroethane	3000	66	ug/kg dry	3282	ND	91.2	70-130	2.35	30	06/06/2014	
1,1,1-Trichloroethane	2890	66	ug/kg dry	3282	ND	87.9	70-130	0.961	30	06/06/2014	
1,1,2,2-Tetrachloroethane	3290	66	ug/kg dry	3282	ND	100	70-130	4.35	30	06/06/2014	
1,1,2-Trichloroethane	3050	66	ug/kg dry	3282	ND	93.0	70-130	3.66	30	06/06/2014	
1,1-Dichloroethane	3230	66	ug/kg dry	3282	ND	98.4	70-130	2.80	30	06/06/2014	
1,1-Dichloroethylene	3060	66	ug/kg dry	3282	ND	93.3	70-130	0.231	30	06/06/2014	
1,2,3-Trichlorobenzene	2980	330	ug/kg dry	3282	ND	90.7	70-130	2.21	30	06/06/2014	
1,2,3-Trichloropropane	3070	66	ug/kg dry	3282	ND	93.5	70-130	1.32	30	06/06/2014	
1,2,3-Trimethylbenzene	3120	66	ug/kg dry	3282	ND	95.0	70-130	2.02	30	06/06/2014	
1,2,4-Trichlorobenzene	2950	330	ug/kg dry	3282	ND	89.9	70-130	1.58	30	06/06/2014	
1,2,4-Trimethylbenzene	3130	66	ug/kg dry	3282	ND	95.3	70-130	1.68	30	06/06/2014	
1,2-Dibromo-3-chloropropane	2930	330	ug/kg dry	3282	ND	89.2	70-130	1.09	30	06/06/2014	
1,2-Dibromoethane	3150	66	ug/kg dry	3282	ND	96.0	70-130	3.28	30	06/06/2014	
1,2-Dichlorobenzene	3060	66	ug/kg dry	3282	ND	93.3	70-130	1.05	30	06/06/2014	
1,2-Dichloroethane	2920	66	ug/kg dry	3282	ND	89.0	70-130	2.65	30	06/06/2014	
1,2-Dichloropropane	3100	66	ug/kg dry	3282	ND	94.5	70-130	0.879	30	06/06/2014	
1,3,5-Trimethylbenzene	3110	66	ug/kg dry	3282	ND	94.7	70-130	1.92	30	06/06/2014	
1,3-Dichlorobenzene	3030	66	ug/kg dry	3282	ND	92.4	70-130	1.74	30	06/06/2014	
1,4-Dichlorobenzene	3060	66	ug/kg dry	3282	ND	93.1	70-130	2.20	30	06/06/2014	
2-Butanone (MEK)	4890	330	ug/kg dry	3282	ND	149	70-130	6.95	30	06/06/2014	A04, A11
2-Hexanone	4260	330	ug/kg dry	3282	ND	130	70-130	6.84	30	06/06/2014	A11
2-Methylnaphthalene	2840	330	ug/kg dry	3282	ND	86.6	70-130	11.8	30	06/06/2014	X
2-Propanone (acetone)	5860	1300	ug/kg dry	3282	ND	179	70-130	6.69	30	06/06/2014	A04, A11
4-Methyl-2-pentanone (MIBK)	3300	330	ug/kg dry	3282	ND	101	70-130	4.91	30	06/06/2014	
Acrylonitrile	3140	330	ug/kg dry	3282	ND	95.6	70-130	4.92	30	06/06/2014	
Benzene	3060	66	ug/kg dry	3282	ND	93.2	70-130	0.329	30	06/06/2014	
Bromobenzene	3050	66	ug/kg dry	3282	ND	92.9	70-130	0.392	30	06/06/2014	
Bromochloromethane	3030	66	ug/kg dry	3282	ND	92.4	70-130	2.11	30	06/06/2014	
Bromodichloromethane	3050	66	ug/kg dry	3282	ND	93.0	70-130	1.98	30	06/06/2014	
Bromoform	3070	66	ug/kg dry	3282	ND	93.4	70-130	3.74	30	06/06/2014	
Bromomethane	3260	330	ug/kg dry	3282	ND	99.4	70-130	3.75	30	06/06/2014	
Carbon disulfide	3020	66	ug/kg dry	3282	ND	92.1	70-130	2.86	30	06/06/2014	
Carbon tetrachloride	2820	66	ug/kg dry	3282	ND	85.8	70-130	1.36	30	06/06/2014	

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

Organics-Volatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F1719 - Method: 5035				**Prepared: 06/06/2014**							
Matrix Spike Dup (B4F1719-MSD1)	**Source: 1406007-04**										
Chlorobenzene	3100	66	ug/kg dry	3282	ND	94.3	70-130	4.35	30	06/06/2014	
Chloroethane	2930	330	ug/kg dry	3282	ND	89.4	70-130	9.87	30	06/06/2014	
Chloroform	3110	66	ug/kg dry	3282	ND	94.7	70-130	2.45	30	06/06/2014	
Chloromethane	3190	330	ug/kg dry	3282	ND	97.2	70-130	2.13	30	06/06/2014	
cis-1,2-Dichloroethylene	3270	66	ug/kg dry	3282	ND	99.6	70-130	3.56	30	06/06/2014	
cis-1,3-Dichloropropylene	2970	66	ug/kg dry	3282	ND	90.4	70-130	2.95	30	06/06/2014	
Cyclohexane	3030	330	ug/kg dry	3282	ND	92.3	70-130	0.243	30	06/06/2014	
Dibromochloromethane	2980	66	ug/kg dry	3282	ND	90.8	70-130	4.68	30	06/06/2014	
Dibromomethane	3100	66	ug/kg dry	3282	ND	94.6	70-130	3.21	30	06/06/2014	
Dichlorodifluoromethane	2710	330	ug/kg dry	3282	ND	82.6	70-130	1.63	30	06/06/2014	A05
Diethyl ether	3810	330	ug/kg dry	3282	ND	116	70-130	0.169	30	06/06/2014	A05
Diisopropyl Ether	3310	330	ug/kg dry	3282	ND	101	70-130	2.47	30	06/06/2014	
Ethylbenzene	3130	66	ug/kg dry	3282	ND	95.3	70-130	1.80	30	06/06/2014	
Ethyltertiarybutylether	3140	330	ug/kg dry	3282	ND	95.5	70-130	2.72	30	06/06/2014	
Hexachloroethane	3090	330	ug/kg dry	3282	ND	94.3	70-130	3.29	30	06/06/2014	
Isopropylbenzene	3270	66	ug/kg dry	3282	ND	99.5	70-130	0.524	30	06/06/2014	
m & p - Xylene	6010	130	ug/kg dry	6565	ND	91.6	70-130	1.92	30	06/06/2014	
M[illegible]oddide	2990	66	ug/kg dry	3282	ND	90.9	70-130	8.31	30	06/06/2014	A05
i[illegible]e chloride	3330	330	ug/kg dry	3282	ND	101	70-130	4.74	30	06/06/2014	
Methyltertiarybutylether	3050	66	ug/kg dry	3282	ND	93.0	70-130	2.73	30	06/06/2014	
Naphthalene	3110	330	ug/kg dry	3282	ND	94.7	70-130	3.52	30	06/06/2014	X
n-Butylbenzene	3110	66	ug/kg dry	3282	ND	94.9	70-130	0.0351	30	06/06/2014	
n-Propylbenzene	3210	66	ug/kg dry	3282	ND	97.7	70-130	1.21	30	06/06/2014	
o-Xylene	3070	66	ug/kg dry	3282	ND	93.6	70-130	4.10	30	06/06/2014	
p-Isopropyl toluene	3040	66	ug/kg dry	3282	ND	92.6	70-130	0.624	30	06/06/2014	
sec-Butylbenzene	3140	66	ug/kg dry	3282	ND	95.6	70-130	1.08	30	06/06/2014	
Styrene	3150	66	ug/kg dry	3282	ND	95.9	70-130	3.53	30	06/06/2014	
tert-Butylbenzene	3250	66	ug/kg dry	3282	ND	99.1	70-130	1.55	30	06/06/2014	
tertiary Butyl Alcohol	22600	3300	ug/kg dry	16410	ND	138	70-130	2.35	30	06/06/2014	A04
tertiaryAmylmethylether	2900	330	ug/kg dry	3282	ND	88.4	70-130	2.34	30	06/06/2014	
Tetrachloroethylene	2860	66	ug/kg dry	3282	ND	87.2	70-130	2.26	30	06/06/2014	
Tetrahydrofuran	3310	330	ug/kg dry	3282	ND	101	70-130	4.37	30	06/06/2014	
Toluene	3100	66	ug/kg dry	3282	ND	94.4	70-130	3.72	30	06/06/2014	
trans-1,2-Dichloroethylene	3130	66	ug/kg dry	3282	ND	95.4	70-130	1.83	30	06/06/2014	
trans-1,3-Dichloropropylene	2930	66	ug/kg dry	3282	ND	89.2	70-130	2.19	30	06/06/2014	
trans-1,4-Dichloro-2-butene	3090	330	ug/kg dry	3282	ND	94.2	70-130	0.143	30	06/06/2014	
Trichloroethylene	2920	66	ug/kg dry	3282	ND	89.0	70-130	2.07	30	06/06/2014	
Trichlorofluoromethane	2740	66	ug/kg dry	3282	ND	83.6	70-130	2.41	30	06/06/2014	
Vinyl chloride	3190	66	ug/kg dry	3282	ND	97.2	70-130	1.08	30	06/06/2014	
Surrogate: Bromofluorobenzene	*69.3*		ug/kg dry	*57.04*		*122*	*50-150*			06/06/2014	
Surrogate: Dibromofluoromethane	*67.1*		ug/kg dry	*57.04*		*118*	*50-150*			06/06/2014	
Surrogate: Toluene-d8	*68.4*		ug/kg dry	*57.04*		*120*	*50-150*			06/06/2014	

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

Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F0915 - Method: 3545 Soil SVOC				**Prepared: 06/10/2014**							
Blank (B4F0915-BLK1)											
1,2,4-Trichlorobenzene	ND	200	ug/kg wet							06/16/2014	
2,4,5-Trichlorophenol	ND	330	ug/kg wet							06/16/2014	
2,4,6-Trichlorophenol	ND	330	ug/kg wet							06/16/2014	
2,4-Dichlorophenol	ND	330	ug/kg wet							06/16/2014	
2,4-Dimethylphenol	ND	330	ug/kg wet							06/16/2014	
2,4-Dinitrophenol	ND	1700	ug/kg wet							06/16/2014	
2,4-Dinitrotoluene	ND	250	ug/kg wet							06/16/2014	
2,6-Dinitrotoluene	ND	250	ug/kg wet							06/16/2014	
2-Chloronaphthalene	ND	200	ug/kg wet							06/16/2014	
2-Chlorophenol	ND	330	ug/kg wet							06/16/2014	
2-Methyl-4,6-dinitrophenol	ND	1700	ug/kg wet							06/16/2014	
2-Methylnaphthalene	ND	250	ug/kg wet							06/16/2014	
2-Methylphenol (o-Cresol)	ND	330	ug/kg wet							06/16/2014	
2-Nitroaniline	ND	500	ug/kg wet							06/16/2014	
2-Nitrophenol	ND	330	ug/kg wet							06/16/2014	
3 & 4 Methylphenol	ND	660	ug/kg wet							06/16/2014	
3-Nitroaniline	ND	500	ug/kg wet							06/16/2014	
4-Bromophenyl phenyl ether	ND	200	ug/kg wet							06/16/2014	
4-Chloro-3-methyl-phenol	ND	200	ug/kg wet							06/16/2014	
4-Chlorodiphenylether	ND	100	ug/kg wet							06/16/2014	
4-Nitroaniline	ND	500	ug/kg wet							06/16/2014	
4-Nitrophenol	ND	1700	ug/kg wet							06/16/2014	
Acenaphthene	ND	100	ug/kg wet							06/16/2014	
Acenaphthylene	ND	100	ug/kg wet							06/16/2014	
Anthracene	ND	100	ug/kg wet							06/16/2014	
Azobenzene	ND	200	ug/kg wet							06/16/2014	
Benz[a]anthracene	ND	100	ug/kg wet							06/16/2014	
Benzo[a]pyrene	ND	200	ug/kg wet							06/16/2014	
Benzo[b]fluoranthene	ND	200	ug/kg wet							06/16/2014	
Benzo[g,h,i]perylene	ND	200	ug/kg wet							06/16/2014	
Benzo[k]fluoranthene	ND	200	ug/kg wet							06/16/2014	
Benzyl Alcohol	ND	2500	ug/kg wet							06/16/2014	A05
Bis(2-chloroethoxy)methane	ND	200	ug/kg wet							06/16/2014	
Bis(2-chloroethyl)ether	ND	100	ug/kg wet							06/16/2014	
Bis(2-chloroisopropyl)ether	ND	100	ug/kg wet							06/16/2014	A05
Bis(2-ethylhexyl)phthalate	ND	250	ug/kg wet							06/16/2014	
Butyl benzyl phthalate	ND	250	ug/kg wet							06/16/2014	
Carbazole	ND	250	ug/kg wet							06/16/2014	
Chrysene	ND	100	ug/kg wet							06/16/2014	
Dibenz[a,h]anthracene	ND	200	ug/kg wet							06/16/2014	
Dibenzofuran	ND	250	ug/kg wet							06/16/2014	
Diethylphthalate	ND	250	ug/kg wet							06/16/2014	
Dimethyl phthalate	ND	250	ug/kg wet							06/16/2014	
Di-n-butyl phthalate	ND	250	ug/kg wet							06/16/2014	
Di-n-octyl phthalate	ND	250	ug/kg wet							06/16/2014	
Fluoranthene	ND	100	ug/kg wet							06/16/2014	
Fluorene	ND	100	ug/kg wet							06/16/2014	
Hexachlorobenzene	ND	200	ug/kg wet							06/16/2014	

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Lansing, MI 48909
TEL: (517) 335-9800
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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 B4F0915 - Method: 3545 Soil SVOC				**Prepared: 06/10/2014**							
Blank (B4F0915-BLK1)											
Hexachlorobutadiene	ND	100	ug/kg wet							06/16/2014	
Hexachlorocyclopentadiene	ND	1000	ug/kg wet							06/16/2014	
Hexachloroethane	ND	100	ug/kg wet							06/16/2014	
Indeno(1,2,3-c,d)pyrene	ND	200	ug/kg wet							06/16/2014	
Isophorone	ND	100	ug/kg wet							06/16/2014	
Naphthalene	ND	100	ug/kg wet							06/16/2014	
Nitrobenzene	ND	200	ug/kg wet							06/16/2014	
N-Nitrosodimethylamine	ND	250	ug/kg wet							06/16/2014	
N-Nitrosodi-n-propylamine	ND	200	ug/kg wet							06/16/2014	
N-Nitrosodiphenylamine	ND	200	ug/kg wet							06/16/2014	
Pentachlorophenol	ND	1700	ug/kg wet							06/16/2014	
Phenanthrene	ND	100	ug/kg wet							06/16/2014	
Phenol	ND	330	ug/kg wet							06/16/2014	
Pyrene	ND	100	ug/kg wet							06/16/2014	
Surrogate: 2,4,6-Tribromophenol	*3220*		ug/kg wet	*4000*		*80.5*	*20.3-115*			06/16/2014	
Surrogate: 2-Fluorobiphenyl	*1590*		ug/kg wet	*2000*		*79.4*	*32.9-115*			06/16/2014	
Surrogate: 2-Fluorophenol	*2040*		ug/kg wet	*4000*		*50.9*	*23.7-115*			06/16/2014	
Surrogate: Nitrobenzene-d5	*1180*		ug/kg wet	*2000*		*59.1*	*31.8-115*			06/16/2014	
Surrogate: Phenol-d6	*2350*		ug/kg wet	*4000*		*58.8*	*29.3-115*			06/16/2014	
Surrogate: p-Terphenyl-d14	*1720*		ug/kg wet	*2000*		*86.2*	*38.5-115*			06/16/2014	
LCS (B4F0915-BS1)											
1,2,4-Trichlorobenzene	1330	200	ug/kg wet	2000		66.5	36.1-90.5			06/16/2014	
2,4,5-Trichlorophenol	3370	330	ug/kg wet	4000		84.3	42.9-114.1			06/16/2014	A06
2,4,6-Trichlorophenol	3060	330	ug/kg wet	4000		76.5	40.1-106.5			06/16/2014	
2,4-Dichlorophenol	2910	330	ug/kg wet	4000		72.9	41.3-105.1			06/16/2014	
2,4-Dimethylphenol	2370	330	ug/kg wet	4000		59.3	29.1-103.6			06/16/2014	
2,4-Dinitrophenol	1830	1700	ug/kg wet	4000		45.7	10-123			06/16/2014	
2,4-Dinitrotoluene	1460	250	ug/kg wet	2000		72.8	49.3-111.6			06/16/2014	
2,6-Dinitrotoluene	1460	250	ug/kg wet	2000		73.1	49.7-108			06/16/2014	
2-Chloronaphthalene	1330	200	ug/kg wet	2000		66.4	41.4-98.7			06/16/2014	
2-Chlorophenol	2220	330	ug/kg wet	4000		55.6	38.8-92.2			06/16/2014	
2-Methyl-4,6-dinitrophenol	2640	1700	ug/kg wet	4000		66.0	37.5-107.3			06/16/2014	
2-Methylnaphthalene	1340	250	ug/kg wet	2000		66.9	38.6-94.3			06/16/2014	
2-Methylphenol (o-Cresol)	2110	330	ug/kg wet	4000		52.9	37.6-99.4			06/16/2014	
2-Nitroaniline	1400	500	ug/kg wet	2000		69.9	48.4-105.5			06/16/2014	
2-Nitrophenol	2670	330	ug/kg wet	4000		66.7	39.2-96.3			06/16/2014	
3 & 4-Methylphenol	2240	660	ug/kg wet	4000		56.1	38.5-100.7			06/16/2014	
3-Nitroaniline	1160	500	ug/kg wet	2000		57.9	16.5-118.9			06/16/2014	
4-Bromophenyl phenyl ether	1480	200	ug/kg wet	2000		73.9	46.6-111.4			06/16/2014	
4-Chloro-3-methyl-phenol	2630	200	ug/kg wet	4000		65.7	44.2-111.5			06/16/2014	
4-Chlorodiphenylether	1430	100	ug/kg wet	2000		71.4	45.5-105.3			06/16/2014	
4-Nitroaniline	905	500	ug/kg wet	2000		45.2	22.1-117.4			06/16/2014	
4-Nitrophenol	3110	1700	ug/kg wet	4000		77.8	25.4-124			06/16/2014	
Acenaphthene	1380	100	ug/kg wet	2000		69.1	43.6-101.5			06/16/2014	
Acenaphthylene	1430	100	ug/kg wet	2000		71.3	46.3-108.7			06/16/2014	
Anthracene	1480	100	ug/kg wet	2000		73.8	48.9-106.4			06/16/2014	
Azobenzene	1110	200	ug/kg wet	2000		55.4	45.5-109.9			06/16/2014	

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ENVIRONMENTAL LABORATORY

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TEL: (517) 335-9800
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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 B4F0915 - Method: 3545 Soil SVOC				**Prepared: 06/10/2014**							
LCS (B4F0915-BS1)											
Benz[a]anthracene	1530	100	ug/kg wet	2000		76.6	53.1-107.9			06/16/2014	
Benzo[a]pyrene	1630	200	ug/kg wet	2000		81.3	47.5-113.5			06/16/2014	
Benzo[b]fluoranthene	1780	200	ug/kg wet	2000		88.9	49.8-112.3			06/16/2014	
Benzo[g,h,i]perylene	1010	200	ug/kg wet	2000		50.5	25.7-120.5			06/16/2014	
Benzo[k]fluoranthene	1710	200	ug/kg wet	2000		85.6	49.6-112.4			06/16/2014	
Benzyl Alcohol	1970	2500	ug/kg wet	4000		49.3	19.5-106.2			06/16/2014	A05, P
Bis(2-chloroethoxy)methane	1080	200	ug/kg wet	2000		54.2	36.6-95.2			06/16/2014	
Bis(2-chloroethyl)ether	981	100	ug/kg wet	2000		49.0	32.5-89.4			06/16/2014	
Bis(2-chloroisopropyl)ether	779	100	ug/kg wet	2000		38.9	24.1-100.9			06/16/2014	A05
Bis(2-ethylhexyl)phthalate	1370	250	ug/kg wet	2000		68.6	48.4-121.6			06/16/2014	
Butyl benzyl phthalate	1300	250	ug/kg wet	2000		65.0	49.5-117.3			06/16/2014	
Carbazole	1240	250	ug/kg wet	2000		62.2	45.9-110.5			06/16/2014	
Chrysene	1600	100	ug/kg wet	2000		79.9	54-109.3			06/16/2014	
Dibenz[a,h]anthracene	1250	200	ug/kg wet	2000		62.3	32.7-127			06/16/2014	
Dibenzofuran	1370	250	ug/kg wet	2000		68.4	45.8-99.3			06/16/2014	
Diethylphthalate	1380	250	ug/kg wet	2000		68.8	49.6-110.7			06/16/2014	
Dimethyl phthalate	1470	250	ug/kg wet	2000		73.6	51-104.6			06/16/2014	
Di-n-butyl phthalate	1380	250	ug/kg wet	2000		69.1	53.5-114.4			06/16/2014	
Di-n-octyl phthalate	1530	250	ug/kg wet	2000		76.4	49.8-123.9			06/16/2014	
Fluoranthene	1630	100	ug/kg wet	2000		81.4	48.8-112.4			06/16/2014	
Fluorene	1380	100	ug/kg wet	2000		69.1	45.9-103.5			06/16/2014	
Hexachlorobenzene	1540	200	ug/kg wet	2000		76.8	46.4-109.9			06/16/2014	
Hexachlorobutadiene	1380	100	ug/kg wet	2000		69.0	30.2-96.2			06/16/2014	
Hexachlorocyclopentadiene	1320	1000	ug/kg wet	2000		65.8	16.5-91.7			06/16/2014	
Hexachloroethane	936	100	ug/kg wet	2000		46.8	30.4-82.9			06/16/2014	
Indeno(1,2,3-c,d)pyrene	1260	200	ug/kg wet	2000		63.2	36.6-126.1			06/16/2014	
Isophorone	998	100	ug/kg wet	2000		49.9	35.3-93.1			06/16/2014	
Naphthalene	1230	100	ug/kg wet	2000		61.3	36.2-91.2			06/16/2014	
Nitrobenzene	1150	200	ug/kg wet	2000		57.6	38.1-92.5			06/16/2014	
N-Nitrosodimethylamine	785	250	ug/kg wet	2000		39.3	15.1-103.7			06/16/2014	
N-Nitrosodi-n-propylamine	1030	200	ug/kg wet	2000		51.5	37.8-95.4			06/16/2014	
N-Nitrosodiphenylamine	1480	200	ug/kg wet	2000		74.1	24.3-135.2			06/16/2014	
Pentachlorophenol	2340	1700	ug/kg wet	4000		58.5	10-112.1			06/16/2014	
Phenanthrene	1430	100	ug/kg wet	2000		71.4	50.9-105.9			06/16/2014	
Phenol	2040	330	ug/kg wet	4000		51.1	32.4-98.4			06/16/2014	
Pyrene	1290	100	ug/kg wet	2000		64.4	46.2-113.7			06/16/2014	
Surrogate: 2,4,6-Tribromophenol	*3140*		ug/kg wet	*4000*		*78.4*	*20.3-115*			06/16/2014	
Surrogate: 2-Fluorobiphenyl	*1380*		ug/kg wet	*2000*		*69.2*	*32.9-115*			06/16/2014	
Surrogate: 2-Fluorophenol	*1850*		ug/kg wet	*4000*		*46.2*	*23.7-115*			06/16/2014	
Surrogate: Nitrobenzene-d5	*1090*		ug/kg wet	*2000*		*54.6*	*31.8-115*			06/16/2014	
Surrogate: Phenol-d6	*2010*		ug/kg wet	*4000*		*50.1*	*29.3-115*			06/16/2014	
Surrogate: p-Terphenyl-d14	*1350*		ug/kg wet	*2000*		*67.4*	*38.5-115*			06/16/2014	
LCS Dup (B4F0915-BSD1)											
1,2,4-Trichlorobenzene	1470	200	ug/kg wet	2000		73.4	36.1-90.5	9.82	28.4	06/16/2014	
2,4,5-Trichlorophenol	3940	330	ug/kg wet	4000		98.6	42.9-114.1	15.7	29.4	06/16/2014	
2,4,6-Trichlorophenol	3490	330	ug/kg wet	4000		87.3	40.1-106.5	13.2	28.6	06/16/2014	
2,4-Dichlorophenol	3230	330	ug/kg wet	4000		80.6	41.3-105.1	10.1	23.5	06/16/2014	

Lab Work Order # 1406007

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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

Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F0915 - Method: 3545 Soil SVOC				**Prepared: 06/10/2014**							
LCS Dup (B4F0915-BSD1)											
2,4-Dimethylphenol	2660	330	ug/kg wet	4000		66.6	29.1-103.6	11.5	30.1	06/16/2014	
2,4-Dinitrophenol	1880	1700	ug/kg wet	4000		47.0	10-123	2.81	65	06/16/2014	
2,4-Dinitrotoluene	1570	250	ug/kg wet	2000		78.4	49.3-111.6	7.38	29.9	06/16/2014	
2,6-Dinitrotoluene	1590	250	ug/kg wet	2000		79.6	49.7-108	8.55	27.3	06/16/2014	
2-Chloronaphthalene	1470	200	ug/kg wet	2000		73.6	41.4-98.7	10.3	27.9	06/16/2014	
2-Chlorophenol	2500	330	ug/kg wet	4000		62.5	38.8-92.2	11.7	25.8	06/16/2014	
2-Methyl-4,6-dinitrophenol	2880	1700	ug/kg wet	4000		72.0	37.5-107.3	8.65	25.3	06/16/2014	
2-Methylnaphthalene	1500	250	ug/kg wet	2000		75.0	38.6-94.3	11.5	28.1	06/16/2014	
2-Methylphenol (o-Cresol)	2340	330	ug/kg wet	4000		58.6	37.6-99.4	10.3	26.3	06/16/2014	
2-Nitroaniline	1490	500	ug/kg wet	2000		74.6	48.4-105.5	6.58	27.9	06/16/2014	
2-Nitrophenol	2990	330	ug/kg wet	4000		74.7	39.2-96.3	11.4	25.1	06/16/2014	
3 & 4-Methylphenol	2550	660	ug/kg wet	4000		63.9	38.5-100.7	12.9	28	06/16/2014	
3-Nitroaniline	1240	500	ug/kg wet	2000		61.9	16.5-118.9	6.65	88.7	06/16/2014	
4-Bromophenyl phenyl ether	1670	200	ug/kg wet	2000		83.6	46.6-111.4	12.4	26	06/16/2014	
4-Chloro-3-methyl-phenol	2930	200	ug/kg wet	4000		73.3	44.2-111.5	10.9	25.6	06/16/2014	
4-Chlorodiphenylether	1590	100	ug/kg wet	2000		79.6	45.5-105.3	10.9	29.2	06/16/2014	
4-Nitroaniline	849	500	ug/kg wet	2000		42.4	22.1-117.4	6.44	50	06/16/2014	
4 [illegible]henol	3170	1700	ug/kg wet	4000		79.2	25.4-124	1.72	31.8	06/16/2014	
A [illegible]hene	1530	100	ug/kg wet	2000		76.6	43.6-101.5	10.2	26.1	06/16/2014	
Acenaphthylene	1520	100	ug/kg wet	2000		76.2	46.3-108.7	6.60	27.3	06/16/2014	
Anthracene	1600	100	ug/kg wet	2000		80.1	48.9-106.4	8.21	24.2	06/16/2014	
Azobenzene	1250	200	ug/kg wet	2000		62.4	45.5-109.9	12.0	27.8	06/16/2014	
Benz[a]anthracene	1650	100	ug/kg wet	2000		82.5	53.1-107.9	7.44	24.5	06/16/2014	
Benzo[a]pyrene	1750	200	ug/kg wet	2000		87.3	47.5-113.5	7.16	25.9	06/16/2014	
Benzo[b]fluoranthene	1940	200	ug/kg wet	2000		96.8	49.8-112.3	8.50	26.1	06/16/2014	
Benzo[g,h,i]perylene	1110	200	ug/kg wet	2000		55.4	25.7-120.5	9.31	37.8	06/16/2014	
Benzo[k]fluoranthene	1850	200	ug/kg wet	2000		92.4	49.6-112.4	7.65	25.7	06/16/2014	
Benzyl Alcohol	2150	2500	ug/kg wet	4000		53.7	19.5-106.2	8.55	39.8	06/16/2014	A05, T
Bis(2-chloroethoxy)methane	1200	200	ug/kg wet	2000		59.8	36.6-95.2	9.80	29.9	06/16/2014	
Bis(2-chloroethyl)ether	1140	100	ug/kg wet	2000		56.9	32.5-89.4	14.9	30.4	06/16/2014	
Bis(2-chloroisopropyl)ether	861	100	ug/kg wet	2000		43.1	24.1-100.9	10.1	27.6	06/16/2014	A05
Bis(2-ethylhexyl)phthalate	1470	250	ug/kg wet	2000		73.5	48.4-121.6	6.81	26.1	06/16/2014	
Butyl benzyl phthalate	1410	250	ug/kg wet	2000		70.6	49.5-117.3	8.25	26.6	06/16/2014	
Carbazole	1330	250	ug/kg wet	2000		66.4	45.9-110.5	6.55	27.5	06/16/2014	
Chrysene	1740	100	ug/kg wet	2000		86.9	54-109.3	8.37	24.4	06/16/2014	
Dibenz[a,h]anthracene	1300	200	ug/kg wet	2000		64.8	32.7-127	4.03	40.3	06/16/2014	
Dibenzofuran	1490	250	ug/kg wet	2000		74.7	45.8-99.3	8.83	25.7	06/16/2014	
Diethylphthalate	1490	250	ug/kg wet	2000		74.4	49.6-110.7	7.78	28.4	06/16/2014	
Dimethyl phthalate	1610	250	ug/kg wet	2000		80.4	51-104.6	8.75	26.5	06/16/2014	
Di-n-butyl phthalate	1490	250	ug/kg wet	2000		74.4	53.5-114.4	7.45	25.4	06/16/2014	
Di-n-octyl phthalate	1590	250	ug/kg wet	2000		79.4	49.8-123.9	3.89	26.6	06/16/2014	
Fluoranthene	1690	100	ug/kg wet	2000		84.5	48.8-112.4	3.50	27.9	06/16/2014	
Fluorene	1500	100	ug/kg wet	2000		74.8	45.9-103.5	7.95	25.2	06/16/2014	
Hexachlorobenzene	1710	200	ug/kg wet	2000		85.4	46.4-109.9	10.6	25.9	06/16/2014	
Hexachlorobutadiene	1590	100	ug/kg wet	2000		79.4	30.2-96.2	14.1	29.9	06/16/2014	
H [illegible]rocyclopentadiene	1530	1000	ug/kg wet	2000		76.3	16.5-91.7	14.7	32.1	06/16/2014	
H [illegible]roethane	1080	100	ug/kg wet	2000		54.2	30.4-82.9	14.7	29.2	06/16/2014	
Indeno(1,2,3-c,d)pyrene	1300	200	ug/kg wet	2000		65.1	36.6-126.1	2.98	34.3	06/16/2014	

Lab Work Order # 1406007

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ENVIRONMENTAL LABORATORY

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

Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F0915 - Method: 3545 Soil SVOC				**Prepared: 06/10/2014**							
LCS Dup (B4F0915-BSD1)											
Isophorone	1120	100	ug/kg wet	2000		56.0	35.3-93.1	11.6	30.4	06/16/2014	
Naphthalene	1360	100	ug/kg wet	2000		68.0	36.2-91.2	10.4	27.4	06/16/2014	
Nitrobenzene	1280	200	ug/kg wet	2000		64.1	38.1-92.5	10.7	30.6	06/16/2014	
N-Nitrosodimethylamine	850	250	ug/kg wet	2000		42.5	15.1-103.7	7.92	34.2	06/16/2014	
N-Nitrosodi-n-propylamine	1170	200	ug/kg wet	2000		58.3	37.8-95.4	12.5	31.3	06/16/2014	
N-Nitrosodiphenylamine	1670	200	ug/kg wet	2000		83.4	24.3-135.2	11.8	49.3	06/16/2014	
Pentachlorophenol	2270	1700	ug/kg wet	4000		56.7	10-112.1	3.04	56	06/16/2014	
Phenanthrene	1560	100	ug/kg wet	2000		77.9	50.9-105.9	8.62	25.3	06/16/2014	
Phenol	2270	330	ug/kg wet	4000		56.6	32.4-98.4	10.3	28.8	06/16/2014	
Pyrene	1450	100	ug/kg wet	2000		72.5	46.2-113.7	11.9	27.9	06/16/2014	
Surrogate: 2,4,6-Tribromophenol	*3470*		ug/kg wet	*4000*		*86.8*	*20.3-115*			06/16/2014	
Surrogate: 2-Fluorobiphenyl	*1580*		ug/kg wet	*2000*		*79.1*	*32.9-115*			06/16/2014	
Surrogate: 2-Fluorophenol	*2080*		ug/kg wet	*4000*		*51.9*	*23.7-115*			06/16/2014	
Surrogate: Nitrobenzene-d5	*1220*		ug/kg wet	*2000*		*61.0*	*31.8-115*			06/16/2014	
Surrogate: Phenol-d6	*2250*		ug/kg wet	*4000*		*56.2*	*29.3-115*			06/16/2014	
Surrogate: p-Terphenyl-d14	*1510*		ug/kg wet	*2000*		*75.7*	*38.5-115*			06/16/2014	
Matrix Spike (B4F0915-MS1)	**Source: 1406007-04**										
1,2,4-Trichlorobenzene	3100	470	ug/kg dry	4692	ND	66.0	33.5-99.6			06/16/2014	
2,4,5-Trichlorophenol	8160	770	ug/kg dry	9384	ND	87.0	41.3-129.6			06/16/2014	A06
2,4,6-Trichlorophenol	7440	770	ug/kg dry	9384	ND	79.2	37.8-122.8			06/16/2014	
2,4-Dichlorophenol	6910	770	ug/kg dry	9384	ND	73.6	40.1-115.1			06/16/2014	
2,4-Dimethylphenol	5450	770	ug/kg dry	9384	ND	58.0	22.5-117.9			06/16/2014	
2,4-Dinitrophenol	4070	4000	ug/kg dry	9384	ND	43.4	10-200.9			06/16/2014	
2,4-Dinitrotoluene	3490	590	ug/kg dry	4692	ND	74.3	48.4-117.6			06/16/2014	
2,6-Dinitrotoluene	3500	590	ug/kg dry	4692	ND	74.7	50.3-113.1			06/16/2014	
2-Chloronaphthalene	3100	470	ug/kg dry	4692	ND	66.1	43.9-103.9			06/16/2014	
2-Chlorophenol	5090	770	ug/kg dry	9384	ND	54.2	34.9-99.2			06/16/2014	
2-Methyl-4,6-dinitrophenol	4210	4000	ug/kg dry	9384	ND	44.9	12.3-124.3			06/16/2014	
2-Methylnaphthalene	3160	590	ug/kg dry	4692	ND	67.3	31.4-113.4			06/16/2014	
2-Methylphenol (o-Cresol)	4780	770	ug/kg dry	9384	ND	50.9	36.3-108.1			06/16/2014	
2-Nitroaniline	3350	1200	ug/kg dry	4692	ND	71.5	49-109.6			06/16/2014	
2-Nitrophenol	6130	770	ug/kg dry	9384	ND	65.4	29.6-108.7			06/16/2014	
3 & 4-Methylphenol	5100	1500	ug/kg dry	9384	ND	54.3	35.7-109.9			06/16/2014	
3-Nitroaniline	2790	1200	ug/kg dry	4692	ND	59.4	10-113.7			06/16/2014	
4-Bromophenyl phenyl ether	3660	470	ug/kg dry	4692	ND	78.0	47.2-120.7			06/16/2014	
4-Chloro-3-methyl-phenol	6320	470	ug/kg dry	9384	ND	67.3	42.6-122.7			06/16/2014	
4-Chlorodiphenylether	3520	230	ug/kg dry	4692	ND	75.0	43.9-113.6			06/16/2014	
4-Nitroaniline	2430	1200	ug/kg dry	4692	ND	51.9	10-120.8			06/16/2014	
4-Nitrophenol	6610	4000	ug/kg dry	9384	ND	70.5	10-187.7			06/16/2014	
Acenaphthene	3340	230	ug/kg dry	4692	ND	71.2	41.1-113.8			06/16/2014	
Acenaphthylene	3310	230	ug/kg dry	4692	ND	70.4	46.8-117.3			06/16/2014	
Anthracene	3500	230	ug/kg dry	4692	ND	74.6	33.6-131			06/16/2014	
Azobenzene	2670	470	ug/kg dry	4692	ND	56.9	44.1-120.3			06/16/2014	
Benz[a]anthracene	3730	230	ug/kg dry	4692	ND	79.5	32.3-137.5			06/16/2014	
Benzo[a]pyrene	3970	470	ug/kg dry	4692	ND	84.6	33.4-140			06/16/2014	
Benzo[b]fluoranthene	4320	470	ug/kg dry	4692	ND	92.2	22.2-153.3			06/16/2014	
Benzo[g,h,i]perylene	2690	470	ug/kg dry	4692	ND	57.3	11.3-135			06/16/2014	

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

Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F0915 - Method: 3545 Soil SVOC				**Prepared: 06/10/2014**							
Matrix Spike (B4F0915-MS1)			**Source: 1406007-04**								
Benzo[k]fluoranthene	4170	470	ug/kg dry	4692	ND	88.8	34.8-138.7			06/16/2014	
Benzyl Alcohol	3860	5900	ug/kg dry	9384	ND	41.1	10-117.7			06/16/2014	A05, T
Bis(2-chloroethoxy)methane	2450	470	ug/kg dry	4692	ND	52.3	35.6-102.7			06/16/2014	
Bis(2-chloroethyl)ether	2300	230	ug/kg dry	4692	ND	49.0	30.5-96.2			06/16/2014	
Bis(2-chloroisopropyl)ether	1760	230	ug/kg dry	4692	ND	37.5	21.5-108			06/16/2014	A05
Bis(2-ethylhexyl)phthalate	3300	590	ug/kg dry	4692	ND	70.4	10-181.4			06/16/2014	
Butyl benzyl phthalate	3150	590	ug/kg dry	4692	ND	67.2	43.2-137			06/16/2014	
Carbazole	3080	590	ug/kg dry	4692	ND	65.7	40-128.2			06/16/2014	
Chrysene	3900	230	ug/kg dry	4692	ND	83.2	34.2-135.8			06/16/2014	
Dibenz[a,h]anthracene	3000	470	ug/kg dry	4692	ND	64.0	15.1-151.4			06/16/2014	
Dibenzofuran	3310	590	ug/kg dry	4692	ND	70.5	39.8-117.2			06/16/2014	
Diethylphthalate	3340	590	ug/kg dry	4692	ND	71.3	45-120			06/16/2014	
Dimethyl phthalate	3520	590	ug/kg dry	4692	ND	75.0	50.1-110			06/16/2014	
Di-n-butyl phthalate	3360	590	ug/kg dry	4692	ND	71.6	49.9-123.5			06/16/2014	
Di-n-octyl phthalate	3590	590	ug/kg dry	4692	ND	76.5	46.5-133.9			06/16/2014	
Fluoranthene	4050	230	ug/kg dry	4692	296	80.0	15.2-153			06/16/2014	
Fluorene	3340	230	ug/kg dry	4692	ND	71.1	40.2-118.3			06/16/2014	
F[illegible]orobenzene	3680	470	ug/kg dry	4692	ND	78.5	44.8-119.4			06/16/2014	
H[illegible]robutadiene	3230	230	ug/kg dry	4692	ND	68.9	28.5-103.4			06/16/2014	
Hexachlorocyclopentadiene	2850	2300	ug/kg dry	4692	ND	60.8	10-150.4			06/16/2014	
Hexachloroethane	2220	230	ug/kg dry	4692	ND	47.3	17.5-94.5			06/16/2014	
Indeno(1,2,3-c,d)pyrene	3020	470	ug/kg dry	4692	ND	64.4	18.8-148.7			06/16/2014	
Isophorone	2320	230	ug/kg dry	4692	ND	49.3	32.7-100.5			06/16/2014	
Naphthalene	2820	230	ug/kg dry	4692	ND	60.0	26.4-107.8			06/16/2014	
Nitrobenzene	2710	470	ug/kg dry	4692	ND	57.8	35.6-100.3			06/16/2014	
N-Nitrosodimethylamine	1710	590	ug/kg dry	4692	ND	36.5	10-108.9			06/16/2014	
N-Nitrosodi-n-propylamine	2350	470	ug/kg dry	4692	ND	50.1	31.1-108.4			06/16/2014	
N-Nitrosodiphenylamine	3540	470	ug/kg dry	4692	ND	75.3	41.3-138.2			06/16/2014	
Pentachlorophenol	3980	4000	ug/kg dry	9384	ND	42.5	10-187.3			06/16/2014	T
Phenanthrene	3560	230	ug/kg dry	4692	ND	75.8	23.1-144.2			06/16/2014	
Phenol	4570	770	ug/kg dry	9384	ND	48.7	34-103.7			06/16/2014	
Pyrene	3380	230	ug/kg dry	4692	ND	72.0	24.1-148.9			06/16/2014	
Surrogate: 2,4,6-Tribromophenol	*7150*		ug/kg dry	*9384*		*76.2*	*20.3-115*			06/16/2014	
Surrogate: 2-Fluorobiphenyl	*3330*		ug/kg dry	*4692*		*71.0*	*32.9-115*			06/16/2014	
Surrogate: 2-Fluorophenol	*4120*		ug/kg dry	*9384*		*43.9*	*23.7-115*			06/16/2014	
Surrogate: Nitrobenzene-d5	*2540*		ug/kg dry	*4692*		*54.1*	*31.8-115*			06/16/2014	
Surrogate: Phenol-d6	*4550*		ug/kg dry	*9384*		*48.5*	*29.3-115*			06/16/2014	
Surrogate: p-Terphenyl-d14	*3340*		ug/kg dry	*4692*		*71.2*	*38.5-115*			06/16/2014	
Matrix Spike Dup (B4F0915-MSD1)			**Source: 1406007-04**								
1,2,4-Trichlorobenzene	3100	470	ug/kg dry	4692	ND	66.0	33.5-99.6	0.0121	38.3	06/16/2014	
2,4,5-Trichlorophenol	8110	770	ug/kg dry	9384	ND	86.4	41.3-129.6	0.718	65.3	06/16/2014	A06
2,4,6-Trichlorophenol	7420	770	ug/kg dry	9384	ND	79.1	37.8-122.8	0.219	65.8	06/16/2014	
2,4-Dichlorophenol	6920	770	ug/kg dry	9384	ND	73.8	40.1-115.1	0.218	38.8	06/16/2014	
2,4-Dimethylphenol	5620	770	ug/kg dry	9384	ND	59.9	22.5-117.9	3.12	47.2	06/16/2014	
2,4-Dinitrophenol	3570	4000	ug/kg dry	9384	ND	38.0	10-200.9	13.1	65	06/16/2014	T
2,4-Dinitrotoluene	3420	590	ug/kg dry	4692	ND	72.9	48.4-117.6	1.87	34.1	06/16/2014	
2,6-Dinitrotoluene	3490	590	ug/kg dry	4692	ND	74.3	50.3-113.1	0.441	32.8	06/16/2014	

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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 B4F0915 - Method: 3545 Soil SVOC				**Prepared: 06/10/2014**							
Matrix Spike Dup (B4F0915-MSD1)				**Source: 1406007-04**							
2-Chloronaphthalene	3140	470	ug/kg dry	4692	ND	66.8	43.9-103.9	1.13	33.4	06/16/2014	
2-Chlorophenol	5370	770	ug/kg dry	9384	ND	57.3	34.9-99.2	5.47	46	06/16/2014	
2-Methyl-4,6-dinitrophenol	3680	4000	ug/kg dry	9384	ND	39.2	12.3-124.3	13.5	60	06/16/2014	T
2-Methylnaphthalene	3240	590	ug/kg dry	4692	ND	69.1	31.4-113.4	2.56	35.6	06/16/2014	
2-Methylphenol (o-Cresol)	5260	770	ug/kg dry	9384	ND	56.1	36.3-108.1	9.62	37.5	06/16/2014	
2-Nitroaniline	3250	1200	ug/kg dry	4692	ND	69.2	49-109.6	3.27	34.4	06/16/2014	
2-Nitrophenol	6350	770	ug/kg dry	9384	ND	67.7	29.6-108.7	3.48	60.3	06/16/2014	
3 & 4-Methylphenol	5580	1500	ug/kg dry	9384	ND	59.5	35.7-109.9	9.13	62.3	06/16/2014	
3-Nitroaniline	2810	1200	ug/kg dry	4692	ND	60.0	10-113.7	0.885	67.6	06/16/2014	
4-Bromophenyl phenyl ether	3600	470	ug/kg dry	4692	ND	76.7	47.2-120.7	1.74	32.4	06/16/2014	
4-Chloro-3-methyl-phenol	6240	470	ug/kg dry	9384	ND	66.5	42.6-122.7	1.23	44.7	06/16/2014	
4-Chlorodiphenylether	3400	230	ug/kg dry	4692	ND	72.6	45.9-113.6	3.25	33.1	06/16/2014	
4-Nitroaniline	2350	1200	ug/kg dry	4692	ND	50.1	10-120.8	3.47	67.8	06/16/2014	
4-Nitrophenol	7220	4000	ug/kg dry	9384	ND	76.9	10-187.7	8.78	56.4	06/16/2014	
Acenaphthene	3290	230	ug/kg dry	4692	ND	70.1	41.1-113.8	1.50	32.4	06/16/2014	
Acenaphthylene	3280	230	ug/kg dry	4692	ND	70.0	46.8-117.3	0.645	32.4	06/16/2014	
Anthracene	3540	230	ug/kg dry	4692	ND	75.4	33.6-131	1.03	49.4	06/16/2014	
Azobenzene	2590	470	ug/kg dry	4692	ND	55.1	44.1-120.3	3.18	34	06/16/2014	
Benz[a]anthracene	3840	230	ug/kg dry	4692	ND	81.8	32.3-137.5	2.88	47.3	06/16/2014	
Benzo[a]pyrene	4060	470	ug/kg dry	4692	ND	86.6	33.4-140	2.31	45	06/16/2014	
Benzo[b]fluoranthene	4480	470	ug/kg dry	4692	ND	95.5	22.2-153.3	3.54	45.7	06/16/2014	
Benzo[g,h,i]perylene	2750	470	ug/kg dry	4692	ND	58.7	11.3-135	2.41	45	06/16/2014	
Benzo[k]fluoranthene	4210	470	ug/kg dry	4692	ND	89.7	34.8-138.7	1.09	41	06/16/2014	
Benzyl Alcohol	4420	5900	ug/kg dry	9384	ND	47.1	10-117.7		49	06/16/2014	A05, T
Bis(2-chloroethoxy)methane	2510	470	ug/kg dry	4692	ND	53.4	35.6-102.7	2.12	37.1	06/16/2014	
Bis(2-chloroethyl)ether	2500	230	ug/kg dry	4692	ND	53.2	30.5-96.2	8.26	39	06/16/2014	
Bis(2-chloroisopropyl)ether	1880	230	ug/kg dry	4692	ND	40.0	21.5-108	6.46	39.7	06/16/2014	A05
Bis(2-ethylhexyl)phthalate	3450	590	ug/kg dry	4692	ND	73.6	10-181.4	4.40	65.4	06/16/2014	
Butyl benzyl phthalate	3280	590	ug/kg dry	4692	ND	69.9	43.2-137	3.98	37.9	06/16/2014	
Carbazole	3430	590	ug/kg dry	4692	ND	73.1	40-128.2	10.7	32.7	06/16/2014	
Chrysene	4020	230	ug/kg dry	4692	ND	85.7	34.2-135.8	2.97	45.5	06/16/2014	
Dibenz[a,h]anthracene	3060	470	ug/kg dry	4692	ND	65.2	15.1-151.4	1.86	64.9	06/16/2014	
Dibenzofuran	3250	590	ug/kg dry	4692	ND	69.2	39.8-117.2	1.81	33.5	06/16/2014	
Diethylphthalate	3400	590	ug/kg dry	4692	ND	72.5	45-120	1.66	35.2	06/16/2014	
Dimethyl phthalate	3520	590	ug/kg dry	4692	ND	75.0	50.1-110	0.0245	31.6	06/16/2014	
Di-n-butyl phthalate	3460	590	ug/kg dry	4692	ND	73.8	49.9-123.5	2.90	32.4	06/16/2014	
Di-n-octyl phthalate	3710	590	ug/kg dry	4692	ND	79.0	46.5-133.9	3.26	62	06/16/2014	
Fluoranthene	4180	230	ug/kg dry	4692	296	82.7	15.2-153	3.10	53.9	06/16/2014	
Fluorene	3330	230	ug/kg dry	4692	ND	71.0	40.2-118.3	0.121	36.8	06/16/2014	
Hexachlorobenzene	3680	470	ug/kg dry	4692	ND	78.4	44.8-119.4	0.0739	36.1	06/16/2014	
Hexachlorobutadiene	3240	230	ug/kg dry	4692	ND	69.1	28.5-103.4	0.348	40.4	06/16/2014	
Hexachlorocyclopentadiene	2750	2300	ug/kg dry	4692	ND	58.5	10-150.4	3.79	65	06/16/2014	
Hexachloroethane	2320	230	ug/kg dry	4692	ND	49.5	17.5-94.5	4.55	46.6	06/16/2014	
Indeno(1,2,3-c,d)pyrene	3070	470	ug/kg dry	4692	ND	65.5	18.8-148.7	1.75	46.1	06/16/2014	
Isophorone	2320	230	ug/kg dry	4692	ND	49.5	32.7-100.5	0.396	38.5	06/16/2014	
Naphthalene	2910	230	ug/kg dry	4692	ND	61.9	26.4-107.8	3.10	36.8	06/16/2014	
Nitrobenzene	2760	470	ug/kg dry	4692	ND	58.9	35.6-100.3	2.00	39.4	06/16/2014	
N-Nitrosodimethylamine	1850	590	ug/kg dry	4692	ND	39.4	10-108.9	7.56	54.7	06/16/2014	

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

Organics-Semivolatiles - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F0915 - Method: 3545 Soil SVOC				**Prepared: 06/10/2014**							
Matrix Spike Dup (B4F0915-MSD1)	**Source: 1406007-04**										
N-Nitrosodi-n-propylamine	2520	470	ug/kg dry	4692	ND	53.7	31.1-108.4	6.88	37.9	06/16/2014	
N-Nitrosodiphenylamine	3480	470	ug/kg dry	4692	ND	74.1	41.3-138.2	1.70	35.8	06/16/2014	
Pentachlorophenol	3540	4000	ug/kg dry	9384	ND	37.7	10-187.3	11.8	77.9	06/16/2014	T
Phenanthrene	3550	230	ug/kg dry	4692	ND	75.6	23.1-144.2	0.231	52.6	06/16/2014	
Phenol	4830	770	ug/kg dry	9384	ND	51.5	34-103.7	5.63	60.7	06/16/2014	
Pyrene	3390	230	ug/kg dry	4692	ND	72.3	24.1-148.9	0.424	53.6	06/16/2014	
Surrogate: 2,4,6-Tribromophenol	*6830*		ug/kg dry	*9384*		*72.8*	*20.3-115*			06/16/2014	
Surrogate: 2-Fluorobiphenyl	*3360*		ug/kg dry	*4692*		*71.6*	*32.9-115*			06/16/2014	
Surrogate: 2-Fluorophenol	*4740*		ug/kg dry	*9384*		*50.5*	*23.7-115*			06/16/2014	
Surrogate: Nitrobenzene-d5	*2590*		ug/kg dry	*4692*		*55.1*	*31.8-115*			06/16/2014	
Surrogate: Phenol-d6	*4740*		ug/kg dry	*9384*		*50.5*	*29.3-115*			06/16/2014	
Surrogate: p-Terphenyl-d14	*3430*		ug/kg dry	*4692*		*73.2*	*38.5-115*			06/16/2014	

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Organics-Pesticides - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F0618 - Method: 3545 Soil Pest/PCB				**Prepared: 06/09/2014**							
Blank (B4F0618-BLK1)											
2,4'-DDT	ND	20	ug/kg wet							06/14/2014	
4,4'-DDD	ND	20	ug/kg wet							06/14/2014	
4,4'-DDE	ND	20	ug/kg wet							06/14/2014	
4,4'-DDT	ND	20	ug/kg wet							06/14/2014	
a-BHC	ND	10	ug/kg wet							06/14/2014	
a-Chlordane	ND	20	ug/kg wet							06/14/2014	
Aldrin	ND	20	ug/kg wet							06/14/2014	
b-BHC	ND	20	ug/kg wet							06/14/2014	
d-BHC	ND	20	ug/kg wet							06/14/2014	
Dieldrin	ND	20	ug/kg wet							06/14/2014	
Endosulfan I	ND	20	ug/kg wet							06/14/2014	
Endosulfan II	ND	20	ug/kg wet							06/14/2014	
Endosulfan sulfate	ND	20	ug/kg wet							06/14/2014	
Endrin	ND	20	ug/kg wet							06/14/2014	
Endrin aldehyde	ND	20	ug/kg wet							06/14/2014	
Endrin ketone	ND	20	ug/kg wet							06/14/2014	
g-BHC (Lindane)	ND	20	ug/kg wet							06/14/2014	
g-Chlordane	ND	20	ug/kg wet							06/14/2014	
Heptachlor	ND	20	ug/kg wet							06/14/2014	
Heptachlor epoxide	ND	20	ug/kg wet							06/14/2014	
Hexabromobenzene	ND	100	ug/kg wet							06/14/2014	
Methoxychlor	ND	50	ug/kg wet							06/14/2014	
Mirex	ND	50	ug/kg wet							06/14/2014	
PBB (BP-6)	ND	250	ug/kg wet							06/14/2014	
Toxaphene	ND	170	ug/kg wet							06/14/2014	
Surrogate: Decachlorobiphenyl	*72.5*		ug/kg wet	*100.0*		*72.5*	*30-150*			06/14/2014	
Surrogate: Tetrachloro-m-xylene	*63.3*		ug/kg wet	*100.0*		*63.3*	*30-150*			06/14/2014	
LCS (B4F0618-BS1)											
2,4'-DDT	76.1	20	ug/kg wet	100.0		76.1	50-120			06/14/2014	
4,4'-DDD	63.8	20	ug/kg wet	100.0		63.8	50-120			06/14/2014	
4,4'-DDE	70.9	20	ug/kg wet	100.0		70.9	50-150			06/14/2014	
4,4'-DDT	90.1	20	ug/kg wet	100.0		90.1	50-120			06/14/2014	
a-BHC	58.3	10	ug/kg wet	100.0		58.3	50-120			06/14/2014	
a-Chlordane	67.1	20	ug/kg wet	100.0		67.1	30-130			06/14/2014	
Aldrin	56.1	20	ug/kg wet	100.0		56.1	30-120			06/14/2014	
b-BHC	74.7	20	ug/kg wet	100.0		74.7	50-120			06/14/2014	
d-BHC	67.9	20	ug/kg wet	100.0		67.9	50-120			06/14/2014	
Dieldrin	57.3	20	ug/kg wet	100.0		57.3	30-130			06/14/2014	
Endosulfan I	45.4	20	ug/kg wet	100.0		45.4	50-120			06/14/2014	A08
Endosulfan II	51.4	20	ug/kg wet	100.0		51.4	50-120			06/14/2014	
Endosulfan sulfate	62.4	20	ug/kg wet	100.0		62.4	50-120			06/14/2014	
Endrin	154	20	ug/kg wet	100.0		154	50-120			06/14/2014	A09
Endrin aldehyde	44.9	20	ug/kg wet	100.0		44.9	30-120			06/14/2014	
Endrin ketone	64.3	20	ug/kg wet	100.0		64.3	50-120			06/14/2014	
g-BHC (Lindane)	58.1	20	ug/kg wet	100.0		58.1	50-120			06/14/2014	
g-Chlordane	66.3	20	ug/kg wet	100.0		66.3	50-120			06/14/2014	
Heptachlor	64.8	20	ug/kg wet	100.0		64.8	50-120			06/14/2014	

Lab Work Order # 1406007

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

Organics-Pesticides - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F0618 - Method: 3545 Soil Pest/PCB				**Prepared: 06/09/2014**							
LCS (B4F0618-BS1)											
Heptachlor epoxide	65.3	20	ug/kg wet	100.0		65.3	30-130			06/14/2014	
Hexabromobenzene	50.3	100	ug/kg wet	100.0		50.3	50-120			06/14/2014	T
Methoxychlor	106	50	ug/kg wet	100.0		106	50-120			06/14/2014	
Mirex	61.2	50	ug/kg wet	100.0		61.2	50-120			06/14/2014	
PBB (BP-6)	76.5	250	ug/kg wet	100.0		76.5	50-120			06/14/2014	T
Surrogate: Decachlorobiphenyl	*66.8*		ug/kg wet	*100.0*		*66.8*	*30-150*			06/14/2014	
Surrogate: Tetrachloro-m-xylene	*56.6*		ug/kg wet	*100.0*		*56.6*	*30-150*			06/14/2014	
LCS Dup (B4F0618-BSD1)											
2,4'-DDT	80.8	20	ug/kg wet	100.0		80.8	50-120	6.00	30	06/14/2014	
4,4'-DDD	70.7	20	ug/kg wet	100.0		70.7	50-120	10.3	30	06/14/2014	
4,4'-DDE	79.7	20	ug/kg wet	100.0		79.7	50-150	11.7	30	06/14/2014	
4,4'-DDT	94.8	20	ug/kg wet	100.0		94.8	50-120	5.14	30	06/14/2014	
a-BHC	61.0	10	ug/kg wet	100.0		61.0	50-120	4.56	30	06/14/2014	
a-Chlordane	74.2	20	ug/kg wet	100.0		74.2	30-130	10.1	30	06/14/2014	
Aldrin	60.2	20	ug/kg wet	100.0		60.2	30-120	7.09	30	06/14/2014	
b-BHC	81.6	20	ug/kg wet	100.0		81.6	50-120	8.79	30	06/14/2014	
[illegible]	66.9	20	ug/kg wet	100.0		66.9	50-120	1.55	30	06/14/2014	
[illegible]	65.5	20	ug/kg wet	100.0		65.5	30-130	13.4	30	06/14/2014	
Endosulfan I	48.0	20	ug/kg wet	100.0		48.0	50-120	5.72	30	06/14/2014	A08
Endosulfan II	53.7	20	ug/kg wet	100.0		53.7	50-120	4.45	30	06/14/2014	
Endosulfan sulfate	69.6	20	ug/kg wet	100.0		69.6	50-120	10.9	30	06/14/2014	
Endrin	171	20	ug/kg wet	100.0		171	50-120	10.4	30	06/14/2014	A09
Endrin aldehyde	46.9	20	ug/kg wet	100.0		46.9	30-120	4.27	30	06/14/2014	
Endrin ketone	70.1	20	ug/kg wet	100.0		70.1	50-120	8.70	30	06/14/2014	
g-BHC (Lindane)	61.8	20	ug/kg wet	100.0		61.8	50-120	6.27	30	06/14/2014	
g-Chlordane	73.0	20	ug/kg wet	100.0		73.0	50-120	9.62	30	06/14/2014	
Heptachlor	67.1	20	ug/kg wet	100.0		67.1	50-120	3.50	30	06/14/2014	
Heptachlor epoxide	71.5	20	ug/kg wet	100.0		71.5	30-130	9.08	30	06/14/2014	
Hexabromobenzene	51.7	100	ug/kg wet	100.0		51.7	50-120	2.62	30	06/14/2014	T
Methoxychlor	112	50	ug/kg wet	100.0		112	50-120	5.47	30	06/14/2014	
Mirex	70.0	50	ug/kg wet	100.0		70.0	50-120	13.3	30	06/14/2014	
PBB (BP-6)	79.8	250	ug/kg wet	100.0		79.8	50-120	4.30	30	06/14/2014	T
Surrogate: Decachlorobiphenyl	*73.7*		ug/kg wet	*100.0*		*73.7*	*30-150*			06/14/2014	
Surrogate: Tetrachloro-m-xylene	*56.8*		ug/kg wet	*100.0*		*56.8*	*30-150*			06/14/2014	
Matrix Spike (B4F0618-MS1)	**Source: 1406007-04**										
2,4'-DDT	93.9	23	ug/kg dry	117.3	ND	80.1	50-120			06/14/2014	
4,4'-DDD	82.1	23	ug/kg dry	117.3	ND	70.0	50-120			06/14/2014	
4,4'-DDE	99.7	23	ug/kg dry	117.3	ND	85.0	50-150			06/14/2014	
4,4'-DDT	122	23	ug/kg dry	117.3	ND	104	50-120			06/14/2014	
a-BHC	83.9	12	ug/kg dry	117.3	ND	71.5	50-120			06/14/2014	
a-Chlordane	78.2	23	ug/kg dry	117.3	ND	66.6	30-130			06/14/2014	
Aldrin	75.9	23	ug/kg dry	117.3	ND	64.7	30-120			06/14/2014	
b-BHC	113	23	ug/kg dry	117.3	ND	96.4	50-120			06/14/2014	
[illegible]	99.6	23	ug/kg dry	117.3	ND	84.9	50-120			06/14/2014	
[illegible]	59.9	23	ug/kg dry	117.3	ND	51.0	30-130			06/14/2014	
Endosulfan I	67.9	23	ug/kg dry	117.3	ND	57.9	50-120			06/14/2014	

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

Organics-Pesticides - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F0618 - Method: 3545 Soil Pest/PCB				**Prepared: 06/09/2014**							
Matrix Spike (B4F0618-MS1)	**Source: 1406007-04**										
Endosulfan II	74.8	23	ug/kg dry	117.3	ND	63.8	50-120			06/14/2014	
Endosulfan sulfate	82.8	23	ug/kg dry	117.3	ND	70.6	50-120			06/14/2014	
Endrin	214	23	ug/kg dry	117.3	ND	182	50-120			06/14/2014	A04
Endrin aldehyde	56.0	23	ug/kg dry	117.3	ND	47.7	30-120			06/14/2014	
Endrin ketone	82.6	23	ug/kg dry	117.3	ND	70.4	50-120			06/14/2014	
g-BHC (Lindane)	78.9	23	ug/kg dry	117.3	ND	67.2	50-120			06/14/2014	
g-Chlordane	90.6	23	ug/kg dry	117.3	ND	77.3	50-120			06/14/2014	
Heptachlor	89.0	23	ug/kg dry	117.3	ND	75.8	50-120			06/14/2014	
Heptachlor epoxide	90.7	23	ug/kg dry	117.3	ND	77.4	30-130			06/14/2014	
Hexabromobenzene	55.5	120	ug/kg dry	117.3	ND	47.3	50-120			06/14/2014	A03, T
Methoxychlor	148	59	ug/kg dry	117.3	ND	126	50-120			06/14/2014	A04
Mirex	75.8	59	ug/kg dry	117.3	ND	64.6	50-120			06/14/2014	
PBB (BP-6)	73.6	290	ug/kg dry	117.3	ND	62.8	50-120			06/14/2014	T
Surrogate: Decachlorobiphenyl	*73.5*		ug/kg dry	*117.3*		*62.6*	*30-150*			06/14/2014	
Surrogate: Tetrachloro-m-xylene	*74.1*		ug/kg dry	*117.3*		*63.2*	*30-150*			06/14/2014	
Matrix Spike Dup (B4F0618-MSD1)	**Source: 1406007-04**										
2,4'-DDT	90.6	23	ug/kg dry	117.3	ND	77.2	50-120	3.59	30	06/14/2014	
4,4'-DDD	79.9	23	ug/kg dry	117.3	ND	68.1	50-120	2.73	30	06/14/2014	
4,4'-DDE	97.3	23	ug/kg dry	117.3	ND	83.0	50-150	2.42	30	06/14/2014	
4,4'-DDT	113	23	ug/kg dry	117.3	ND	96.6	50-120	7.13	30	06/14/2014	
a-BHC	78.3	12	ug/kg dry	117.3	ND	66.8	50-120	6.85	30	06/14/2014	
a-Chlordane	78.8	23	ug/kg dry	117.3	ND	67.2	30-130	0.814	30	06/14/2014	
Aldrin	72.9	23	ug/kg dry	117.3	ND	62.1	30-120	4.02	30	06/14/2014	
b-BHC	108	23	ug/kg dry	117.3	ND	92.2	50-120	4.42	30	06/14/2014	
d-BHC	94.0	23	ug/kg dry	117.3	ND	80.1	50-120	5.76	30	06/14/2014	
Dieldrin	60.0	23	ug/kg dry	117.3	ND	51.1	30-130	0.213	30	06/14/2014	
Endosulfan I	64.1	23	ug/kg dry	117.3	ND	54.6	50-120	5.81	30	06/14/2014	
Endosulfan II	70.1	23	ug/kg dry	117.3	ND	59.8	50-120	6.45	30	06/14/2014	
Endosulfan sulfate	78.7	23	ug/kg dry	117.3	ND	67.1	50-120	5.09	30	06/14/2014	
Endrin	204	23	ug/kg dry	117.3	ND	174	50-120	4.89	30	06/14/2014	A04
Endrin aldehyde	51.5	23	ug/kg dry	117.3	ND	43.9	30-120	8.37	30	06/14/2014	
Endrin ketone	79.3	23	ug/kg dry	117.3	ND	67.6	50-120	4.08	30	06/14/2014	
g-BHC (Lindane)	73.5	23	ug/kg dry	117.3	ND	62.7	50-120	7.04	30	06/14/2014	
g-Chlordane	86.2	23	ug/kg dry	117.3	ND	73.5	50-120	5.03	30	06/14/2014	
Heptachlor	81.1	23	ug/kg dry	117.3	ND	69.2	50-120	9.19	30	06/14/2014	
Heptachlor epoxide	85.7	23	ug/kg dry	117.3	ND	73.0	30-130	5.76	30	06/14/2014	
Hexabromobenzene	55.1	120	ug/kg dry	117.3	ND	47.0	50-120	0.668	30	06/14/2014	A03, T
Methoxychlor	140	59	ug/kg dry	117.3	ND	119	50-120	5.72	30	06/14/2014	
Mirex	74.0	59	ug/kg dry	117.3	ND	63.1	50-120	2.42	30	06/14/2014	
PBB (BP-6)	77.8	290	ug/kg dry	117.3	ND	66.3	50-120	5.43	30	06/14/2014	T
Surrogate: Decachlorobiphenyl	*75.6*		ug/kg dry	*117.3*		*64.5*	*30-150*			06/14/2014	
Surrogate: Tetrachloro-m-xylene	*71.2*		ug/kg dry	*117.3*		*60.7*	*30-150*			06/14/2014	
Batch B4F1020 - Method: 3545 Soil Pest/PCB				**Prepared: 06/11/2014**							

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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

Organics-Pesticides - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F1020 - Method: 3545 Soil Pest/PCB				**Prepared: 06/11/2014**							
Blank (B4F1020-BLK1)											
2,4'-DDT	ND	20	ug/kg wet							06/15/2014	
4,4'-DDD	ND	20	ug/kg wet							06/15/2014	
4,4'-DDE	ND	20	ug/kg wet							06/15/2014	
4,4'-DDT	ND	20	ug/kg wet							06/15/2014	
a-BHC	ND	10	ug/kg wet							06/15/2014	
a-Chlordane	ND	20	ug/kg wet							06/15/2014	
Aldrin	ND	20	ug/kg wet							06/15/2014	
b-BHC	ND	20	ug/kg wet							06/15/2014	
d-BHC	ND	20	ug/kg wet							06/15/2014	
Dieldrin	ND	20	ug/kg wet							06/15/2014	
Endosulfan I	ND	20	ug/kg wet							06/15/2014	
Endosulfan II	ND	20	ug/kg wet							06/15/2014	
Endosulfan sulfate	ND	20	ug/kg wet							06/15/2014	
Endrin	ND	20	ug/kg wet							06/20/2014	
Endrin aldehyde	ND	20	ug/kg wet							06/15/2014	
Endrin ketone	ND	20	ug/kg wet							06/15/2014	
g-BHC (Lindane)	ND	20	ug/kg wet							06/15/2014	
[illegible]ane	ND	20	ug/kg wet							06/15/2014	
[illegible]r	ND	20	ug/kg wet							06/15/2014	
Heptachlor epoxide	ND	20	ug/kg wet							06/15/2014	
Hexabromobenzene	ND	100	ug/kg wet							06/15/2014	
Methoxychlor	ND	50	ug/kg wet							06/15/2014	
Mirex	ND	50	ug/kg wet							06/15/2014	
PBB (BP-6)	ND	250	ug/kg wet							06/15/2014	
Toxaphene	ND	170	ug/kg wet							06/15/2014	
Surrogate: Decachlorobiphenyl	*90.2*		ug/kg wet	*100.0*		*90.2*	*30-150*			06/15/2014	
Surrogate: Tetrachloro-m-xylene	*76.1*		ug/kg wet	*100.0*		*76.1*	*30-150*			06/15/2014	
LCS (B4F1020-BS1)											
2,4'-DDT	87.1	20	ug/kg wet	100.0		87.1	50-120			06/15/2014	
4,4'-DDD	82.4	20	ug/kg wet	100.0		82.4	50-120			06/15/2014	
4,4'-DDE	78.8	20	ug/kg wet	100.0		78.8	50-150			06/15/2014	
4,4'-DDT	92.4	20	ug/kg wet	100.0		92.4	50-120			06/15/2014	
a-BHC	70.9	10	ug/kg wet	100.0		70.9	50-120			06/15/2014	
a-Chlordane	77.4	20	ug/kg wet	100.0		77.4	30-130			06/15/2014	
Aldrin	69.7	20	ug/kg wet	100.0		69.7	30-120			06/15/2014	
b-BHC	68.7	20	ug/kg wet	100.0		68.7	50-120			06/15/2014	
d-BHC	78.9	20	ug/kg wet	100.0		78.9	50-120			06/15/2014	
Dieldrin	73.1	20	ug/kg wet	100.0		73.1	30-130			06/15/2014	
Endosulfan I	66.4	20	ug/kg wet	100.0		66.4	50-120			06/15/2014	
Endosulfan II	71.5	20	ug/kg wet	100.0		71.5	50-120			06/15/2014	
Endosulfan sulfate	80.3	20	ug/kg wet	100.0		80.3	50-120			06/15/2014	
Endrin	120	20	ug/kg wet	100.0		120	50-120			06/20/2014	
Endrin aldehyde	58.9	20	ug/kg wet	100.0		58.9	30-120			06/15/2014	
Endrin ketone	78.5	20	ug/kg wet	100.0		78.5	50-120			06/15/2014	
[illegible]Lindane)	72.6	20	ug/kg wet	100.0		72.6	50-120			06/15/2014	
[illegible]ane	78.1	20	ug/kg wet	100.0		78.1	50-120			06/15/2014	
Heptachlor	82.9	20	ug/kg wet	100.0		82.9	50-120			06/15/2014	

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Organics-Pesticides - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F1020 - Method: 3545 Soil Pest/PCB				**Prepared: 06/11/2014**							
LCS (B4F1020-BS1)											
Heptachlor epoxide	77.5	20	ug/kg wet	100.0		77.5	30-130			06/15/2014	
Hexabromobenzene	62.0	100	ug/kg wet	100.0		62.0	50-120			06/15/2014	T
Methoxychlor	97.6	50	ug/kg wet	100.0		97.6	50-120			06/15/2014	
Mirex	76.2	50	ug/kg wet	100.0		76.2	50-120			06/15/2014	
PBB (BP-6)	85.3	250	ug/kg wet	100.0		85.3	50-120			06/15/2014	T
Surrogate: Decachlorobiphenyl	*75.9*		ug/kg wet	*100.0*		*75.9*	*30-150*			06/15/2014	
Surrogate: Tetrachloro-m-xylene	*63.2*		ug/kg wet	*100.0*		*63.2*	*30-150*			06/15/2014	
LCS Dup (B4F1020-BSD1)											
2,4'-DDT	93.4	20	ug/kg wet	100.0		93.4	50-120	6.96	30	06/15/2014	
4,4'-DDD	87.6	20	ug/kg wet	100.0		87.6	50-120	6.20	30	06/15/2014	
4,4'-DDE	83.8	20	ug/kg wet	100.0		83.8	50-150	6.07	30	06/15/2014	
4,4'-DDT	100	20	ug/kg wet	100.0		100	50-120	8.21	30	06/15/2014	
a-BHC	72.5	10	ug/kg wet	100.0		72.5	50-120	2.24	30	06/15/2014	
a-Chlordane	82.0	20	ug/kg wet	100.0		82.0	30-130	5.82	30	06/15/2014	
Aldrin	72.4	20	ug/kg wet	100.0		72.4	30-120	3.84	30	06/15/2014	
b-BHC	70.8	20	ug/kg wet	100.0		70.8	50-120	3.02	30	06/15/2014	
d-BHC	83.0	20	ug/kg wet	100.0		83.0	50-120	5.09	30	06/15/2014	
Dieldrin	77.6	20	ug/kg wet	100.0		77.6	30-130	6.04	30	06/15/2014	
Endosulfan I	68.9	20	ug/kg wet	100.0		68.9	50-120	3.75	30	06/15/2014	
Endosulfan II	75.8	20	ug/kg wet	100.0		75.8	50-120	5.93	30	06/15/2014	
Endosulfan sulfate	87.6	20	ug/kg wet	100.0		87.6	50-120	8.65	30	06/15/2014	
Endrin	114	20	ug/kg wet	100.0		114	50-120	5.36	30	06/20/2014	
Endrin aldehyde	70.0	20	ug/kg wet	100.0		70.0	30-120	17.1	30	06/15/2014	
Endrin ketone	85.4	20	ug/kg wet	100.0		85.4	50-120	8.51	30	06/15/2014	
g-BHC (Lindane)	74.8	20	ug/kg wet	100.0		74.8	50-120	2.97	30	06/15/2014	
g-Chlordane	82.7	20	ug/kg wet	100.0		82.7	50-120	5.70	30	06/15/2014	
Heptachlor	86.9	20	ug/kg wet	100.0		86.9	50-120	4.64	30	06/15/2014	
Heptachlor epoxide	81.6	20	ug/kg wet	100.0		81.6	30-130	5.10	30	06/15/2014	
Hexabromobenzene	67.7	100	ug/kg wet	100.0		67.7	50-120	8.71	30	06/15/2014	T
Methoxychlor	110	50	ug/kg wet	100.0		110	50-120	12.2	30	06/15/2014	
Mirex	81.9	50	ug/kg wet	100.0		81.9	50-120	7.29	30	06/15/2014	
PBB (BP-6)	95.3	250	ug/kg wet	100.0		95.3	50-120	11.1	30	06/15/2014	T
Surrogate: Decachlorobiphenyl	*83.5*		ug/kg wet	*100.0*		*83.5*	*30-150*			06/15/2014	
Surrogate: Tetrachloro-m-xylene	*61.1*		ug/kg wet	*100.0*		*61.1*	*30-150*			06/15/2014	
Matrix Spike (B4F1020-MS1)	**Source: 1406044-04**										
2,4'-DDT	106	24	ug/kg dry	120.0	ND	88.3	50-120			06/15/2014	
4,4'-DDD	99.1	24	ug/kg dry	120.0	ND	82.6	50-120			06/15/2014	
4,4'-DDE	95.8	24	ug/kg dry	120.0	ND	79.9	50-150			06/15/2014	
4,4'-DDT	113	24	ug/kg dry	120.0	ND	94.1	50-120			06/15/2014	
a-BHC	85.0	12	ug/kg dry	120.0	ND	70.8	50-120			06/15/2014	
a-Chlordane	94.3	24	ug/kg dry	120.0	ND	78.6	30-130			06/15/2014	
Aldrin	85.5	24	ug/kg dry	120.0	ND	71.3	30-120			06/15/2014	
b-BHC	82.1	24	ug/kg dry	120.0	ND	68.4	50-120			06/15/2014	
d-BHC	98.5	24	ug/kg dry	120.0	ND	82.1	50-120			06/15/2014	
Dieldrin	88.3	24	ug/kg dry	120.0	ND	73.6	30-130			06/15/2014	
Endosulfan I	84.2	24	ug/kg dry	120.0	ND	70.2	50-120			06/15/2014	

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Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F1020 - Method: 3545 Soil Pest/PCB					**Prepared: 06/11/2014**						
Matrix Spike (B4F1020-MS1)			**Source: 1406044-04**								
Endosulfan II	88.8	24	ug/kg dry	120.0	ND	74.0	50-120			06/15/2014	
Endosulfan sulfate	96.9	24	ug/kg dry	120.0	ND	80.8	50-120			06/15/2014	
Endrin	177	24	ug/kg dry	120.0	ND	148	50-120			06/21/2014	A04
Endrin aldehyde	52.0	24	ug/kg dry	120.0	ND	43.4	30-120			06/15/2014	
Endrin ketone	94.7	24	ug/kg dry	120.0	ND	79.0	50-120			06/15/2014	
g-BHC (Lindane)	87.9	24	ug/kg dry	120.0	ND	73.3	50-120			06/15/2014	
g-Chlordane	95.3	24	ug/kg dry	120.0	ND	79.4	50-120			06/15/2014	
Heptachlor	103	24	ug/kg dry	120.0	ND	85.9	50-120			06/15/2014	
Heptachlor epoxide	95.7	24	ug/kg dry	120.0	ND	79.7	30-130			06/15/2014	
Hexabromobenzene	75.8	120	ug/kg dry	120.0	ND	63.2	50-120			06/15/2014	T
Methoxychlor	122	60	ug/kg dry	120.0	ND	102	50-120			06/15/2014	
Mirex	90.8	60	ug/kg dry	120.0	ND	75.7	50-120			06/15/2014	
PBB (BP-6)	104	300	ug/kg dry	120.0	ND	86.5	50-120			06/15/2014	T
Surrogate: Decachlorobiphenyl	*92.4*		ug/kg dry	*120.0*		*77.1*	*30-150*			06/15/2014	
Surrogate: Tetrachloro-m-xylene	*74.8*		ug/kg dry	*120.0*		*62.4*	*30-150*			06/15/2014	
Matrix Spike (B4F1020-MS2)			**Source: 1406045-06**								
2 DT	103	23	ug/kg dry	114.5	ND	89.6	50-120			06/15/2014	
4	94.3	23	ug/kg dry	114.5	ND	82.3	50-120			06/15/2014	
4,4'-DDE	94.9	23	ug/kg dry	114.5	ND	82.9	50-150			06/15/2014	
4,4'-DDT	119	23	ug/kg dry	114.5	21.4	85.0	50-120			06/15/2014	
a-BHC	82.3	11	ug/kg dry	114.5	ND	71.8	50-120			06/15/2014	
a-Chlordane	71.0	23	ug/kg dry	114.5	ND	62.0	30-130			06/15/2014	
Aldrin	77.8	23	ug/kg dry	114.5	ND	67.9	30-120			06/15/2014	
b-BHC	78.0	23	ug/kg dry	114.5	ND	68.1	50-120			06/15/2014	
d-BHC	94.7	23	ug/kg dry	114.5	ND	82.7	50-120			06/15/2014	
Dieldrin	70.6	23	ug/kg dry	114.5	ND	61.7	30-130			06/15/2014	
Endosulfan I	76.4	23	ug/kg dry	114.5	ND	66.7	50-120			06/15/2014	
Endosulfan II	85.0	23	ug/kg dry	114.5	ND	74.2	50-120			06/15/2014	
Endosulfan sulfate	94.1	23	ug/kg dry	114.5	ND	82.2	50-120			06/15/2014	
Endrin	154	23	ug/kg dry	114.5	ND	135	50-120			06/20/2014	A04
Endrin aldehyde	63.2	23	ug/kg dry	114.5	ND	55.2	30-120			06/15/2014	A07
Endrin ketone	88.7	23	ug/kg dry	114.5	ND	77.5	50-120			06/15/2014	
g-BHC (Lindane)	86.9	23	ug/kg dry	114.5	ND	75.9	50-120			06/15/2014	
g-Chlordane	91.2	23	ug/kg dry	114.5	ND	79.6	50-120			06/15/2014	
Heptachlor	103	23	ug/kg dry	114.5	ND	90.2	50-120			06/15/2014	
Heptachlor epoxide	92.7	23	ug/kg dry	114.5	ND	80.9	30-130			06/15/2014	
Hexabromobenzene	70.3	110	ug/kg dry	114.5	ND	61.4	50-120			06/15/2014	T
Methoxychlor	122	57	ug/kg dry	114.5	ND	107	50-120			06/15/2014	
Mirex	87.0	57	ug/kg dry	114.5	ND	76.0	50-120			06/15/2014	
PBB (BP-6)	94.9	290	ug/kg dry	114.5	ND	82.9	50-120			06/15/2014	T
Surrogate: Decachlorobiphenyl	*79.8*		ug/kg dry	*114.5*		*69.7*	*30-150*			06/15/2014	
Surrogate: Tetrachloro-m-xylene	*81.9*		ug/kg dry	*114.5*		*71.5*	*30-150*			06/15/2014	
Matrix Spike Dup (B4F1020-MSD1)			**Source: 1406044-04**								
2 T	108	24	ug/kg dry	120.0	ND	89.9	50-120	1.74	30	06/15/2014	
4	100	24	ug/kg dry	120.0	ND	83.3	50-120	0.858	30	06/15/2014	
4,4'-DDE	96.5	24	ug/kg dry	120.0	ND	80.5	50-150	0.746	30	06/15/2014	

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Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F1020 - Method: 3545 Soil Pest/PCB				**Prepared: 06/11/2014**							
Matrix Spike Dup (B4F1020-MSD1)	**Source: 1406044-04**										
4,4'-DDT	115	24	ug/kg dry	120.0	ND	95.8	50-120	1.78	30	06/15/2014	
a-BHC	83.3	12	ug/kg dry	120.0	ND	69.4	50-120	2.03	30	06/15/2014	
a-Chlordane	94.2	24	ug/kg dry	120.0	ND	78.5	30-130	0.0952	30	06/15/2014	
Aldrin	83.9	24	ug/kg dry	120.0	ND	69.9	30-120	1.88	30	06/15/2014	
b-BHC	81.8	24	ug/kg dry	120.0	ND	68.2	50-120	0.264	30	06/15/2014	
d-BHC	98.3	24	ug/kg dry	120.0	ND	82.0	50-120	0.204	30	06/15/2014	
Dieldrin	89.5	24	ug/kg dry	120.0	ND	74.6	30-130	1.34	30	06/15/2014	
Endosulfan I	83.8	24	ug/kg dry	120.0	ND	69.8	50-120	0.501	30	06/15/2014	
Endosulfan II	90.2	24	ug/kg dry	120.0	ND	75.2	50-120	1.62	30	06/15/2014	
Endosulfan sulfate	99.1	24	ug/kg dry	120.0	ND	82.6	50-120	2.29	30	06/15/2014	
Endrin	167	24	ug/kg dry	120.0	ND	140	50-120	5.74	30	06/21/2014	A04
Endrin aldehyde	62.5	24	ug/kg dry	120.0	ND	52.1	30-120	18.2	30	06/15/2014	
Endrin ketone	95.9	24	ug/kg dry	120.0	ND	79.9	50-120	1.17	30	06/15/2014	
g-BHC (Lindane)	86.5	24	ug/kg dry	120.0	ND	72.1	50-120	1.68	30	06/15/2014	
g-Chlordane	95.2	24	ug/kg dry	120.0	ND	79.4	50-120	0.0836	30	06/15/2014	
Heptachlor	102	24	ug/kg dry	120.0	ND	84.9	50-120	1.12	30	06/15/2014	
Heptachlor epoxide	95.0	24	ug/kg dry	120.0	ND	79.2	30-130	0.680	30	06/15/2014	
Hexabromobenzene	77.3	120	ug/kg dry	120.0	ND	64.4	50-120	1.94	30	06/15/2014	
Methoxychlor	122	60	ug/kg dry	120.0	ND	102	50-120	0.122	30	06/15/2014	
Mirex	91.5	60	ug/kg dry	120.0	ND	76.3	50-120	0.759	30	06/15/2014	
PBB (BP-6)	105	300	ug/kg dry	120.0	ND	87.5	50-120	1.15	30	06/15/2014	T
Surrogate: Decachlorobiphenyl	*90.0*		ug/kg dry	*120.0*		*75.0*	*30-150*			06/15/2014	
Surrogate: Tetrachloro-m-xylene	*72.3*		ug/kg dry	*120.0*		*60.3*	*30-150*			06/15/2014	
Matrix Spike Dup (B4F1020-MSD2)	**Source: 1406045-06**										
2,4'-DDT	83.6	23	ug/kg dry	114.5	ND	73.0	50-120	20.4	30	06/15/2014	
4,4'-DDD	76.0	23	ug/kg dry	114.5	ND	66.3	50-120	21.5	30	06/15/2014	
4,4'-DDE	77.1	23	ug/kg dry	114.5	ND	67.3	50-150	20.8	30	06/15/2014	
4,4'-DDT	96.6	23	ug/kg dry	114.5	21.4	65.7	50-120	20.6	30	06/15/2014	
a-BHC	74.4	11	ug/kg dry	114.5	ND	65.0	50-120	9.97	30	06/15/2014	
a-Chlordane	64.5	23	ug/kg dry	114.5	ND	56.3	30-130	9.58	30	06/15/2014	
Aldrin	66.4	23	ug/kg dry	114.5	ND	58.0	30-120	15.8	30	06/15/2014	
b-BHC	65.6	23	ug/kg dry	114.5	ND	57.3	50-120	17.3	30	06/15/2014	
d-BHC	78.9	23	ug/kg dry	114.5	ND	68.9	50-120	18.3	30	06/15/2014	
Dieldrin	62.0	23	ug/kg dry	114.5	ND	54.1	30-130	13.1	30	06/15/2014	
Endosulfan I	62.1	23	ug/kg dry	114.5	ND	54.3	50-120	20.5	30	06/15/2014	
Endosulfan II	67.6	23	ug/kg dry	114.5	ND	59.0	50-120	22.8	30	06/15/2014	
Endosulfan sulfate	73.8	23	ug/kg dry	114.5	ND	64.4	50-120	24.2	30	06/15/2014	
Endrin	165	23	ug/kg dry	114.5	ND	144	50-120	6.78	30	06/21/2014	A04
Endrin aldehyde	45.3	23	ug/kg dry	114.5	ND	39.6	30-120	32.9	30	06/15/2014	A07
Endrin ketone	70.3	23	ug/kg dry	114.5	ND	61.4	50-120	23.1	30	06/15/2014	
g-BHC (Lindane)	72.3	23	ug/kg dry	114.5	ND	63.1	50-120	18.4	30	06/15/2014	
g-Chlordane	74.4	23	ug/kg dry	114.5	ND	65.0	50-120	20.3	30	06/15/2014	
Heptachlor	87.2	23	ug/kg dry	114.5	ND	76.1	50-120	17.0	30	06/15/2014	
Heptachlor epoxide	75.8	23	ug/kg dry	114.5	ND	66.2	50-130	20.0	30	06/15/2014	
Hexabromobenzene	56.4	110	ug/kg dry	114.5	ND	49.2	50-120	22.0	30	06/15/2014	A0
Methoxychlor	97.0	57	ug/kg dry	114.5	ND	84.7	50-120	23.2	30	06/15/2014	
Mirex	68.5	57	ug/kg dry	114.5	ND	59.8	50-120	23.8	30	06/15/2014	

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

Organics-Pesticides - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F1020 - Method: 3545 Soil Pest/PCB				**Prepared: 06/11/2014**							
Matrix Spike Dup (B4F1020-MSD2)	**Source: 1406045-06**										
PBB (BP-6)	74.5	290	ug/kg dry	114.5	ND	65.1	50-120	24.1	30	06/15/2014	T
Surrogate: Decachlorobiphenyl	*61.1*		ug/kg dry	*114.5*		*53.3*	*30-150*			06/15/2014	
Surrogate: Tetrachloro-m-xylene	*72.6*		ug/kg dry	*114.5*		*63.4*	*30-150*			06/15/2014	

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Organics-PCBs as Aroclors - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F0618 - Method: 3545 Soil Pest/PCB				**Prepared: 06/09/2014**							
Blank (B4F0618-BLK1)											
Aroclor 1016	ND	100	ug/kg wet							06/14/2014	
Aroclor 1221	ND	100	ug/kg wet							06/14/2014	
Aroclor 1232	ND	100	ug/kg wet							06/14/2014	
Aroclor 1242	ND	100	ug/kg wet							06/14/2014	
Aroclor 1248	ND	100	ug/kg wet							06/14/2014	
Aroclor 1254	ND	100	ug/kg wet							06/14/2014	
Aroclor 1260	ND	100	ug/kg wet							06/14/2014	
Aroclor 1262	ND	100	ug/kg wet							06/14/2014	
Aroclor 1268	ND	100	ug/kg wet							06/14/2014	
Surrogate: Decachlorobiphenyl	*81.0*		ug/kg wet	*100.0*		*81.0*	*30-150*			06/14/2014	
Surrogate: Tetrachloro-m-xylene	*67.4*		ug/kg wet	*100.0*		*67.4*	*30-150*			06/14/2014	
LCS (B4F0618-BS1)											
Aroclor 1016	ND	100	ug/kg wet				50-150			06/14/2014	
Aroclor 1260	ND	100	ug/kg wet				50-150			06/14/2014	
Surrogate: Decachlorobiphenyl	*75.0*		ug/kg wet	*100.0*		*75.0*	*30-150*			06/14/2014	
Surrogate: Tetrachloro-m-xylene	*60.7*		ug/kg wet	*100.0*		*60.7*	*30-150*			06/14/2014	
Matrix Spike (B4F0618-MS1)	**Source: 1406007-04**										1
Aroclor 1016	ND	120	ug/kg dry		ND		29-135			06/14/2014	
Aroclor 1260	ND	120	ug/kg dry		ND		29-135			06/14/2014	
Surrogate: Decachlorobiphenyl	*83.4*		ug/kg dry	*117.3*		*71.1*	*30-150*			06/14/2014	
Surrogate: Tetrachloro-m-xylene	*79.6*		ug/kg dry	*117.3*		*67.8*	*30-150*			06/14/2014	
Matrix Spike Dup (B4F0618-MSD1)	**Source: 1406007-04**										100
Aroclor 1016	ND	120	ug/kg dry		ND		29-135	15		06/14/2014	
Aroclor 1260	ND	120	ug/kg dry		ND		29-135	20		06/14/2014	
Surrogate: Decachlorobiphenyl	*86.6*		ug/kg dry	*117.3*		*73.8*	*30-150*			06/14/2014	
Surrogate: Tetrachloro-m-xylene	*76.6*		ug/kg dry	*117.3*		*65.3*	*30-150*			06/14/2014	
Batch B4F1020 - Method: 3545 Soil Pest/PCB				**Prepared: 06/11/2014**							
Blank (B4F1020-BLK1)											
Aroclor 1016	ND	100	ug/kg wet							06/15/2014	
Aroclor 1221	ND	100	ug/kg wet							06/15/2014	
Aroclor 1232	ND	100	ug/kg wet							06/15/2014	
Aroclor 1242	ND	100	ug/kg wet							06/15/2014	
Aroclor 1248	ND	100	ug/kg wet							06/15/2014	
Aroclor 1254	ND	100	ug/kg wet							06/15/2014	
Aroclor 1260	ND	100	ug/kg wet							06/15/2014	
Aroclor 1262	ND	100	ug/kg wet							06/15/2014	
Aroclor 1268	ND	100	ug/kg wet							06/15/2014	
Surrogate: Decachlorobiphenyl	*90.2*		ug/kg wet	*100.0*		*90.2*	*30-150*			06/15/2014	
Surrogate: Tetrachloro-m-xylene	*76.1*		ug/kg wet	*100.0*		*76.1*	*30-150*			06/15/2014	
Matrix Spike (B4F1020-MS1)	**Source: 1406044-04**										100

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Organics-PCBs as Aroclors - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F1020 - Method: 3545 Soil Pest/PCB				**Prepared: 06/11/2014**							
Matrix Spike (B4F1020-MS1)	**Source: 1406044-04**										**100**
Aroclor 1016	ND	120	ug/kg dry		ND		29-135			06/15/2014	
Aroclor 1260	ND	120	ug/kg dry		ND		29-135			06/15/2014	
Surrogate: Decachlorobiphenyl	*92.4*		ug/kg dry	*120.0*		*77.1*	*30-150*			06/15/2014	
Surrogate: Tetrachloro-m-xylene	*74.8*		ug/kg dry	*120.0*		*62.4*	*30-150*			06/15/2014	
Matrix Spike (B4F1020-MS2)	**Source: 1406045-06**										**100**
Aroclor 1016	ND	110	ug/kg dry		ND		29-135			06/15/2014	
Aroclor 1260	ND	110	ug/kg dry		ND		29-135			06/15/2014	
Surrogate: Decachlorobiphenyl	*79.8*		ug/kg dry	*114.5*		*69.7*	*30-150*			06/15/2014	
Surrogate: Tetrachloro-m-xylene	*81.9*		ug/kg dry	*114.5*		*71.5*	*30-150*			06/15/2014	
Matrix Spike Dup (B4F1020-MSD1)	**Source: 1406044-04**										**100**
Aroclor 1016	ND	120	ug/kg dry		ND		29-135		15	06/15/2014	
Aroclor 1260	ND	120	ug/kg dry		ND		29-135		20	06/15/2014	
Surrogate: Decachlorobiphenyl	*90.0*		ug/kg dry	*120.0*		*75.0*	*30-150*			06/15/2014	
Surrogate: Tetrachloro-m-xylene	*72.3*		ug/kg dry	*120.0*		*60.3*	*30-150*			06/15/2014	
Matrix Spike Dup (B4F1020-MSD2)	**Source: 1406045-06**										**100**
Aroclor 1016	ND	110	ug/kg dry		ND		29-135		15	06/15/2014	
Aroclor 1260	ND	110	ug/kg dry		ND		29-135		20	06/15/2014	
Surrogate: Decachlorobiphenyl	*61.1*		ug/kg dry	*114.5*		*53.3*	*30-150*			06/15/2014	
Surrogate: Tetrachloro-m-xylene	*72.6*		ug/kg dry	*114.5*		*63.4*	*30-150*			06/15/2014	

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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 B4F0319 - Method: Solids				**Prepared: 06/03/2014**							
Duplicate (B4F0319-DUP1)	**Source: 1406007-13**										
% Total Solids	78.5	0.1	%		77.1			1.77	20	06/03/2014	
Batch B4F1005 - Method: 9013				**Prepared: 06/10/2014**							
Blank (B4F1005-BLK1)											
Total Cyanide	ND	0.10	mg/kg wet							06/12/2014	
Blank (B4F1005-BLK2)											
Total Cyanide	ND	0.005	mg/kg wet							06/12/2014	
Blank (B4F1005-BLK3)											
Total Cyanide	ND	0.005	mg/kg wet							06/12/2014	
LCS (B4F1005-BS1)											
Total Cyanide	0.095	0.005	mg/kg wet	0.1000		94.7	80-120			06/12/2014	
LCS (B4F1005-BS2)											
Total Cyanide	0.094	0.005	mg/kg wet	0.1000		94.3	80-120			06/12/2014	
LCS (B4F1005-BS3)											
Total Cyanide	0.099	0.005	mg/kg wet	0.1000		98.7	80-120			06/12/2014	
Matrix Spike (B4F1005-MS1)	**Source: 1405335-12**										
Total Cyanide	1.97	0.11	mg/kg dry	2.170	ND	90.6	80-120			06/12/2014	
Matrix Spike (B4F1005-MS2)	**Source: 1406007-01**										
Total Cyanide	2.38	0.13	mg/kg dry	2.501	ND	95.3	80-120			06/12/2014	
Matrix Spike (B4F1005-MS3)	**Source: 1406007-13**										
Total Cyanide	2.48	0.13	mg/kg dry	2.593	ND	95.6	80-120			06/12/2014	
Matrix Spike Dup (B4F1005-MSD1)	**Source: 1405335-12**										
Total Cyanide	1.98	0.11	mg/kg dry	2.170	ND	91.2	80-120	0.629	20	06/12/2014	
Matrix Spike Dup (B4F1005-MSD2)	**Source: 1406007-01**										
Total Cyanide	2.44	0.13	mg/kg dry	2.501	ND	97.4	80-120	2.15	20	06/12/2014	
Matrix Spike Dup (B4F1005-MSD3)	**Source: 1406007-13**										
Total Cyanide	2.51	0.13	mg/kg dry	2.593	ND	96.6	80-120	1.09	20	06/12/2014	

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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 B4F0901 - Method: 3050				**Prepared: 06/09/2014**							
Blank (B4F0901-BLK1)											
Arsenic	ND	0.5	mg/kg dry							06/18/2014	
Barium	ND	1.0	mg/kg dry							06/18/2014	
Beryllium	ND	0.2	mg/kg dry							06/18/2014	
Cadmium	ND	0.2	mg/kg dry							06/18/2014	
Chromium	ND	2.0	mg/kg dry							06/18/2014	
Cobalt	ND	0.5	mg/kg dry							06/18/2014	
Copper	ND	1.0	mg/kg dry							06/18/2014	
Iron	1.7	0.5	mg/kg dry							06/19/2014	A09
Lead	ND	1.0	mg/kg dry							06/18/2014	
Manganese	ND	1.0	mg/kg dry							06/18/2014	
Molybdenum	ND	1.0	mg/kg dry							06/18/2014	
Nickel	ND	1.0	mg/kg dry							06/18/2014	
Selenium	ND	0.2	mg/kg dry							06/18/2014	
Silver	ND	0.1	mg/kg dry							06/18/2014	
Thallium	ND	0.5	mg/kg dry							06/18/2014	
Vanadium	ND	1.0	mg/kg dry							06/18/2014	
Zinc	1.6	1.0	mg/kg dry							06/18/2014	
4F0901-BS1)											
Arsenic	108	5.0	mg/kg dry	100.0		108	85-115			06/18/2014	
Barium	111	10	mg/kg dry	100.0		111	85-115			06/18/2014	
Beryllium	97.8	2.0	mg/kg dry	100.0		97.8	85-115			06/18/2014	
Cadmium	10.5	2.0	mg/kg dry	10.00		105	85-115			06/18/2014	
Chromium	103	20	mg/kg dry	100.0		103	85-115			06/18/2014	
Cobalt	106	5.0	mg/kg dry	100.0		106	85-115			06/18/2014	
Copper	106	10	mg/kg dry	100.0		106	85-115			06/18/2014	
Iron	584	0.5	mg/kg dry	500.0		117	85-115			06/19/2014	A09
Lead	105	10	mg/kg dry	100.0		105	85-115			06/18/2014	
Manganese	103	10	mg/kg dry	100.0		103	85-115			06/18/2014	
Molybdenum	113	10	mg/kg dry	100.0		113	85-115			06/18/2014	
Nickel	104	10	mg/kg dry	100.0		104	85-115			06/18/2014	
Selenium	104	2.0	mg/kg dry	100.0		104	85-115			06/18/2014	
Silver	11.3	1.0	mg/kg dry	10.00		113	85-115			06/18/2014	
Thallium	102	5.0	mg/kg dry	100.0		102	85-115			06/18/2014	
Vanadium	102	10	mg/kg dry	100.0		102	85-115			06/18/2014	
Zinc	106	10	mg/kg dry	100.0		106	85-115			06/18/2014	
Matrix Spike (B4F0901-MS1)	**Source: 1406007-06**										
Arsenic	104	5.0	mg/kg dry	100.0	6.6	97.9	80-120			06/18/2014	
Barium	229	10	mg/kg dry	100.0	96.7	132	80-120			06/18/2014	A04
Beryllium	98.0	2.0	mg/kg dry	100.0	0.8	97.2	80-120			06/18/2014	
Cadmium	10.6	2.0	mg/kg dry	10.00	0.3	103	80-120			06/18/2014	
Chromium	123	20	mg/kg dry	100.0	21.1	101	80-120			06/18/2014	
Cobalt	115	5.0	mg/kg dry	100.0	13.7	101	80-120			06/18/2014	
Copper	125	10	mg/kg dry	100.0	23.2	102	80-120			06/18/2014	
Iron	35300	5.0	mg/kg dry	500.0	33300	406	80-120			06/19/2014	X3
[illegible]	112	10	mg/kg dry	100.0	10.0	102	80-120			06/18/2014	
[illegible]ese	671	10	mg/kg dry	100.0	503	168	80-120			06/18/2014	X3
Molybdenum	107	10	mg/kg dry	100.0	2.3	104	80-120			06/18/2014	

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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 B4F0901 - Method: 3050				**Prepared: 06/09/2014**							
Matrix Spike (B4F0901-MS1)	**Source: 1406007-06**										
Nickel	132	10	mg/kg dry	100.0	30.2	102	80-120			06/18/2014	
Selenium	97.6	2.0	mg/kg dry	100.0	0.3	97.3	80-120			06/18/2014	
Silver	11.0	1.0	mg/kg dry	10.00	ND	110	80-120			06/18/2014	
Thallium	95.1	5.0	mg/kg dry	100.0	ND	95	80-120			06/18/2014	
Vanadium	132	10	mg/kg dry	100.0	32.0	100	80-120			06/18/2014	
Zinc	162	10	mg/kg dry	100.0	54.9	107	80-120			06/18/2014	
Matrix Spike Dup (B4F0901-MSD1)	**Source: 1406007-06**										
Arsenic	107	5.0	mg/kg dry	100.0	6.6	100	80-120	2.23	20	06/18/2014	
Barium	226	10	mg/kg dry	100.0	96.7	129	80-120	1.23	20	06/18/2014	A04
Beryllium	103	2.0	mg/kg dry	100.0	0.8	102	80-120	4.94	20	06/18/2014	
Cadmium	10.6	2.0	mg/kg dry	10.00	0.3	103	80-120	0.464	20	06/18/2014	
Chromium	123	20	mg/kg dry	100.0	21.1	102	80-120	0.711	20	06/18/2014	
Cobalt	118	5.0	mg/kg dry	100.0	13.7	105	80-120	2.85	20	06/18/2014	
Copper	128	10	mg/kg dry	100.0	23.2	105	80-120	2.76	20	06/18/2014	
Iron	35700	5.0	mg/kg dry	500.0	33300	486	80-120	1.13	20	06/19/2014	X3
Lead	113	10	mg/kg dry	100.0	10.0	103	80-120	0.877	20	06/18/2014	
Manganese	711	10	mg/kg dry	100.0	503	208	80-120	6.84	20	06/18/2014	X3
Molybdenum	103	10	mg/kg dry	100.0	2.3	101	80-120	3.55	20	06/18/2014	
Nickel	135	10	mg/kg dry	100.0	30.2	105	80-120	2.58	20	06/18/2014	
Selenium	98.8	2.0	mg/kg dry	100.0	0.3	98.5	80-120	1.27	20	06/18/2014	
Silver	10.9	1.0	mg/kg dry	10.00	ND	109	80-120	0.527	20	06/18/2014	
Thallium	95.3	5.0	mg/kg dry	100.0	ND	95.3	80-120	0.207	20	06/18/2014	
Vanadium	136	10	mg/kg dry	100.0	32.0	104	80-120	2.86	20	06/18/2014	
Zinc	164	10	mg/kg dry	100.0	54.9	110	80-120	1.62	20	06/18/2014	
Reference (B4F0901-SRM1)											
Arsenic	393		mg/kg dry	352.0		112	80-120			06/18/2014	
Barium	1200		mg/kg dry	1010		119	80-120			06/18/2014	
Beryllium	69.0		mg/kg dry	53.90		128	80-120			06/18/2014	
Cadmium	299		mg/kg dry	265.0		113	80-120			06/18/2014	
Chromium	194		mg/kg dry	165.0		117	80-120			06/18/2014	
Cobalt	157		mg/kg dry	123.0		128	80-120			06/18/2014	
Copper	201		mg/kg dry	171.0		118	80-120			06/18/2014	
Lead	218		mg/kg dry	178.0		122	80-120			06/18/2014	
Manganese	431		mg/kg dry	372.0		116	80-120			06/18/2014	
Molybdenum	207		mg/kg dry	171.0		121	80-120			06/18/2014	
Nickel	246		mg/kg dry	206.0		119	80-120			06/18/2014	
Selenium	235		mg/kg dry	220.0		107	80-120			06/18/2014	
Silver	86.8		mg/kg dry	73.10		119	80-120			06/18/2014	
Thallium	188		mg/kg dry	152.0		124	80-120			06/18/2014	
Vanadium	188		mg/kg dry	165.0		114	80-120			06/18/2014	
Zinc	409		mg/kg dry	374.0		109	80-120			06/18/2014	
Batch B4F0902 - Method: 3050				**Prepared: 06/09/2014**							
Blank (B4F0902-BLK1)											
Arsenic	ND	0.5	mg/kg dry							06/18/2014	

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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 B4F0902 - Method: 3050				**Prepared: 06/09/2014**							
Blank (B4F0902-BLK1)											
Barium	ND	1.0	mg/kg dry							06/18/2014	
Beryllium	ND	0.2	mg/kg dry							06/18/2014	
Cadmium	ND	0.2	mg/kg dry							06/18/2014	
Chromium	ND	2.0	mg/kg dry							06/18/2014	
Cobalt	ND	0.5	mg/kg dry							06/18/2014	
Copper	ND	1.0	mg/kg dry							06/18/2014	
Iron	0.9	0.5	mg/kg dry							06/23/2014	
Lead	ND	1.0	mg/kg dry							06/18/2014	
Manganese	ND	1.0	mg/kg dry							06/18/2014	
Molybdenum	ND	1.0	mg/kg dry							06/18/2014	
Nickel	ND	1.0	mg/kg dry							06/18/2014	
Selenium	ND	0.2	mg/kg dry							06/18/2014	
Silver	ND	0.1	mg/kg dry							06/18/2014	
Thallium	ND	0.5	mg/kg dry							06/18/2014	
Vanadium	ND	1.0	mg/kg dry							06/18/2014	
Zinc	1.1	1.0	mg/kg dry							06/18/2014	
LCS (B4F0902-BS1)											
[illegible]	111	5.0	mg/kg dry	100.0		111	85-115			06/19/2014	
Barium	110	10	mg/kg dry	100.0		110	85-115			06/18/2014	
Beryllium	109	2.0	mg/kg dry	100.0		109	85-115			06/19/2014	
Cadmium	10.8	2.0	mg/kg dry	10.00		108	85-115			06/18/2014	
Chromium	105	20	mg/kg dry	100.0		105	85-115			06/19/2014	
Cobalt	109	5.0	mg/kg dry	100.0		109	85-115			06/18/2014	
Copper	110	10	mg/kg dry	100.0		110	85-115			06/18/2014	
Iron	573	0.5	mg/kg dry	500.0		115	85-115			06/23/2014	
Lead	108	10	mg/kg dry	100.0		108	85-115			06/18/2014	
Manganese	109	10	mg/kg dry	100.0		109	85-115			06/19/2014	
Molybdenum	112	10	mg/kg dry	100.0		112	85-115			06/19/2014	
Nickel	108	10	mg/kg dry	100.0		108	85-115			06/18/2014	
Selenium	108	2.0	mg/kg dry	100.0		108	85-115			06/18/2014	
Silver	10.5	1.0	mg/kg dry	10.00		105	85-115			06/18/2014	
Thallium	104	5.0	mg/kg dry	100.0		104	85-115			06/19/2014	
Vanadium	104	10	mg/kg dry	100.0		104	85-115			06/19/2014	
Zinc	109	10	mg/kg dry	100.0		109	85-115			06/19/2014	
Matrix Spike (B4F0902-MS1)	**Source: 1406045-01**										
Arsenic	115	5.0	mg/kg dry	100.0	7.0	108	80-120			06/19/2014	
Barium	184	10	mg/kg dry	100.0	66.6	117	80-120			06/18/2014	
Beryllium	109	2.0	mg/kg dry	100.0	0.5	108	80-120			06/19/2014	
Cadmium	11.0	2.0	mg/kg dry	10.00	ND	110	80-120			06/18/2014	
Chromium	124	20	mg/kg dry	100.0	18.2	106	80-120			06/19/2014	
Cobalt	117	5.0	mg/kg dry	100.0	8.2	109	80-120			06/18/2014	
Copper	124	10	mg/kg dry	100.0	13.9	110	80-120			06/18/2014	
Iron	21200	5.0	mg/kg dry	500.0	20900	52.0	80-120			06/23/2014	X3
Lead	130	10	mg/kg dry	100.0	21.3	109	80-120			06/18/2014	
[illegible]se	654	10	mg/kg dry	100.0	573	81.6	80-120			06/19/2014	X3
M[illegible]num	106	10	mg/kg dry	100.0	1.4	105	80-120			06/19/2014	
Nickel	130	10	mg/kg dry	100.0	20.2	110	80-120			06/18/2014	

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

Inorganics-Metals - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Analyzed	Qualifier
Batch B4F0902 - Method: 3050				**Prepared: 06/09/2014**							
Matrix Spike (B4F0902-MS1)	**Source: 1406045-01**										
Selenium	107	2.0	mg/kg dry	100.0	0.3	107	80-120			06/18/2014	
Silver	10.6	1.0	mg/kg dry	10.00	ND	106	80-120			06/18/2014	
Thallium	102	5.0	mg/kg dry	100.0	ND	102	80-120			06/19/2014	
Vanadium	130	10	mg/kg dry	100.0	24.9	105	80-120			06/19/2014	
Zinc	166	10	mg/kg dry	100.0	53.4	112	80-120			06/19/2014	
Matrix Spike Dup (B4F0902-MSD1)	**Source: 1406045-01**										
Arsenic	114	5.0	mg/kg dry	100.0	7.0	107	80-120	0.516	20	06/19/2014	
Barium	176	10	mg/kg dry	100.0	66.6	109	80-120	4.45	20	06/18/2014	
Beryllium	109	2.0	mg/kg dry	100.0	0.5	108	80-120	0.0548	20	06/19/2014	
Cadmium	10.9	2.0	mg/kg dry	10.00	ND	109	80-120	1.29	20	06/18/2014	
Chromium	120	20	mg/kg dry	100.0	18.2	102	80-120	3.31	20	06/19/2014	
Cobalt	114	5.0	mg/kg dry	100.0	8.2	105	80-120	3.09	20	06/18/2014	
Copper	120	10	mg/kg dry	100.0	13.9	106	80-120	3.75	20	06/18/2014	
Iron	21700	5.0	mg/kg dry	500.0	20900	162	80-120	2.56	20	06/23/2014	X3
Lead	130	10	mg/kg dry	100.0	21.3	109	80-120	0.246	20	06/18/2014	
Manganese	608	10	mg/kg dry	100.0	573	35.8	80-120	7.25	20	06/19/2014	X3
Molybdenum	106	10	mg/kg dry	100.0	1.4	104	80-120	0.674	20	06/19/2014	
Nickel	126	10	mg/kg dry	100.0	20.2	106	80-120	2.68	20	06/18/2014	
Selenium	106	2.0	mg/kg dry	100.0	0.3	106	80-120	1.32	20	06/18/2014	
Silver	10.4	1.0	mg/kg dry	10.00	ND	104	80-120	1.90	20	06/18/2014	
Thallium	102	5.0	mg/kg dry	100.0	ND	102	80-120	0.109	20	06/19/2014	
Vanadium	127	10	mg/kg dry	100.0	24.9	102	80-120	2.15	20	06/19/2014	
Zinc	163	10	mg/kg dry	100.0	53.4	109	80-120	1.87	20	06/19/2014	
Reference (B4F0902-SRM1)											
Arsenic	341		mg/kg dry	352.0		96.9	80-120			06/19/2014	
Barium	1100		mg/kg dry	1010		109	80-120			06/18/2014	
Beryllium	58.8		mg/kg dry	53.90		109	80-120			06/19/2014	
Cadmium	263		mg/kg dry	265.0		99.3	80-120			06/18/2014	
Chromium	161		mg/kg dry	165.0		97.9	80-120			06/19/2014	
Cobalt	133		mg/kg dry	123.0		108	80-120			06/18/2014	
Copper	163		mg/kg dry	171.0		95.6	80-120			06/18/2014	
Lead	195		mg/kg dry	178.0		110	80-120			06/18/2014	
Manganese	375		mg/kg dry	372.0		101	80-120			06/19/2014	
Molybdenum	164		mg/kg dry	171.0		96	80-120			06/19/2014	
Nickel	217		mg/kg dry	206.0		106	80-120			06/18/2014	
Selenium	208		mg/kg dry	220.0		94.6	80-120			06/18/2014	
Silver	71.4		mg/kg dry	73.10		97.7	80-120			06/18/2014	
Thallium	159		mg/kg dry	152.0		104	80-120			06/19/2014	
Vanadium	160		mg/kg dry	165.0		97.2	80-120			06/19/2014	
Zinc	354		mg/kg dry	374.0		94.6	80-120			06/19/2014	
Batch B4F0904 - Method: 3050-Sb				**Prepared: 06/09/2014**							
Blank (B4F0904-BLK1)											
Antimony	ND	0.3	mg/kg dry							06/18/2014	

STATE OF MICHIGAN
MENT OF ENVIRONMENTAL QUALITY

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY

P.O. Box 30270
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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 B4F0904 - Method: 3050-Sb				**Prepared: 06/09/2014**							
LCS (B4F0904-BS1)											
Antimony	50.9	0.6	mg/kg dry	50.00		102	85-115			06/18/2014	
Matrix Spike (B4F0904-MS1)	**Source: 1406044-03**										
Antimony	28.5	0.6	mg/kg dry	50.00	ND	56.9	80-120			06/18/2014	A03
Matrix Spike Dup (B4F0904-MSD1)	**Source: 1406044-03**										
Antimony	27.9	0.6	mg/kg dry	50.00	ND	55.8	80-120	1.98	20	06/18/2014	A03
Batch B4F1721 - Method: 7471				**Prepared: 06/17/2014**							
Blank (B4F1721-BLK1)											
Mercury	ND	0.05	mg/kg wet							06/19/2014	
LCS (B4F1721-BS1)											
Mercury	0.4	0.05	mg/kg wet	0.4000		101	85-115			06/19/2014	
Matrix Spike (B4F1721-MS1)	**Source: 1406007-11**										
Mercury	0.5	0.06	mg/kg dry	0.5012	0.04	99.7	80-120			06/19/2014	
Spike Dup (B4F1721-MSD1)	**Source: 1406007-11**										
Mercury	0.5	0.06	mg/kg dry	0.5012	0.04	99.2	80-120	0.513	20	06/19/2014	
Batch B4F2518 - Method: 7471				**Prepared: 06/25/2014**							
Blank (B4F2518-BLK1)											
Mercury	ND	0.05	mg/kg wet							06/27/2014	
LCS (B4F2518-BS1)											
Mercury	0.4	0.05	mg/kg wet	0.4000		99.4	85-115			06/27/2014	
Matrix Spike (B4F2518-MS1)	**Source: 1406045-01**										
Mercury	0.5	0.06	mg/kg dry	0.4612	0.03	101	80-120			06/27/2014	
Matrix Spike Dup (B4F2518-MSD1)	**Source: 1406045-01**										
Mercury	0.5	0.06	mg/kg dry	0.4612	0.03	105	80-120	3.90	20	06/27/2014	

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY
ANALYSIS REQUEST SHEET

Goldenrod
Page 1 of 2

LAB ORDER # 1406007

MATRIX=SEDIMENT/SOIL/SOLIDS

SITE CODE NUMBER	SITE NAME	ACCEPT HT CODES? YES / NO If yes, which parameters?
RRDSF184	5250 Conner Detroit	

DIVISION	DISTRICT/OFFICE	MDEQ PROJECT MANAGER	E-MAIL ADDRESS	PHONE
RRD	Superfund/Lansing	John E. Spielberg	spielbergj@michigan.gov	517-284-5155 o 517-242-6640 c

PRIMARY CONTACT PERSON	CONTRACT FIRM NAME (if applicable)	PHONE	AY:	INDEX: 44092	PCA:
John E. Spielberg			PROJECT: 456999		PH:

OVERFLOW LAB (Required)		E-MAIL ADDRESSES TO SEND ADDITIONAL REPORTS TO:
1ST CHOICE: Trimatrix	2ND CHOICE:	1.)
COLLECTED BY: John E. Spielberg	PHONE:	2.)

****** 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	AC 01	C-SB-01	06/02/14	1105			
2	AC 02	C-SB-02		1210			
3	AC 03	C-SB-02 DUP		1210			
4	AC 04	C-SB-03		1230			MS/MSD
5	AC 05	C-SB-04		1305			
6	AC 06	C-SB-05		1450			
7	AC 07	C-SB-06		1505			
8	AC 08	C-SB-07		1525			
9	AC 09	C-SB-08		1610			
10	AC 10	C-SB-09		1410			

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
Total CN	1 2 3 4 5 6 7 8 9 10
Available Cyanide	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
Ca Mg K Na	1 2 3 4 5 6 7 8 9 10
Low Level Mercury	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	John Spielberg / MDEQ	Rm 100		
Signature	John Spielberg			
Print Name & Organization	Rm 100	Melissa Smith	6/3/14	0910
Signature				
Print Name & Organization				
Signature				

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY
ANALYSIS REQUEST SHEET

Goldenrod

LAB ORDER # 406007

MATRIX=SEDIMENT/SOIL/SOLIDS

SITE CODE NUMBER	SITE NAME	ACCEPT HT CODES?
RRDSF184	5250 Conner Detroit	YES / NO (NO) If yes, which parameters?

DIVISION	DISTRICT/OFFICE	MDEQ PROJECT MANAGER	E-MAIL ADDRESS	PHONE
RRD	Superfund/Lansing	John E. Spielberg	spielbergj@michigan.gov	517-284-5155 o 517-242-6640 c

PRIMARY CONTACT PERSON	CONTRACT FIRM NAME (if applicable)	PHONE	AY:	INDEX: 44092	PCA:
John E. Spielberg			PROJECT: 456999		PH:

OVERFLOW LAB (Required)		E-MAIL ADDRESSES TO SEND ADDITIONAL REPORTS TO:
1ST CHOICE: Trimatrix	2ND CHOICE:	1.)
COLLECTED BY: John E. Spielberg	PHONE:	2.)

****** 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	AC 11	C-SB-10	06/02/14	1350			
2	AC 12	C-SB-11	"	1145			
3	AC 13	C-SB-12	"	1550			
4	AC 14	C-SB-03-MS	"	1230			
5	AC 15	C-SB-03-MSD	"	1230			
6	AC 16	Trip Blank	5/30/14				
7	AC						
8	AC						
9	AC						
10	AC						

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
Total CN	1 2 3 4 5 6 7 8 9 10
Available Cyanide	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 1 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
Ca Mg K Na	1 2 3 4 5 6 7 8 9 10
Low Level Mercury	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	John Spielberg, MDEQ	Joseph Wzlezak /MDEQ	6/2/14	1640
Signature				
Print Name & Organization	Joseph Wzlezak /MDEQ	Rm 100		
Signature				
Print Name & Organization	Rm 100	Melissa Smith	6/3/14	0910
Signature				

APPENDIX E

PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS

TABLE 2. SOIL: RESIDENTIAL

PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS/PART 213 RISK-BASED SCREENING LEVELS

All criteria, unless otherwise noted, are expressed in units of parts per billion (ppb). One ppb is equivalent to 1 microgram per kilogram (ug/kg). Criteria with 6 or more digits are expressed in scientific notation. For example, 200,000 is presented as 2.0E+5. 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 (§324.20120a(10)). In these cases, 2 numbers are present in the cell. The first number is the criterion (i.e., TDL), and the second number is the risk-based value.

			Groundwater Protection		Indoor Air	Ambient Air (Y) (C)				Contact	Csat
Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Level	Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels
Acenaphthene	83329	NA	3.00E+05	8,700	1.90E+08	8.10E+07	8.10E+07	8.10E+07	1.40E+10	4.10E+07	NA
Acenaphthylene	208968	NA	5,900	ID	1.60E+06	2.20E+06	2.20E+06	2.20E+06	2.30E+09	1.60E+06	NA
Acetaldehyde (I)	75070	NA	19,000	2,600	2.20E+05	1.70E+05	1.70E+05	2.80E+05	6.00E+08	2.90E+07	1.10E+08
Acetate	71501	NA	ID	(G)	ID	ID	ID	ID	ID	ID	ID
Acetic acid	64197	NA	84,000	(G)	NLV	NLV	NLV	NLV	1.70E+10	1.30E+08	6.50E+08
Acetone (I)	67641	NA	15,000	34,000	2.9E+8 (C)	1.30E+08	1.30E+08	1.90E+08	3.90E+11	2.30E+07	1.10E+08
Acetonitrile	75058	NA	2,800	NA	4.80E+06	1.60E+06	1.60E+06	2.10E+06	4.00E+09	4.30E+06	2.20E+07
Acetophenone	98862	NA	30,000	ID	1.2E+8 (C)	4.40E+07	4.40E+07	4.40E+07	3.30E+10	4.7E+7 (C)	1.10E+06
Acrolein (I)	107028	NA	2,400	NA	410	310	310	610	1.30E+06	3.60E+06	2.30E+07
Acrylamide	79061	NA	10	200 (X)	NLV	NLV	NLV	NLV	2.40E+06	1,900	NA
Acrylic acid	79107	NA	78,000	NA	2.40E+06	1.90E+05	2.30E+05	2.30E+05	6.70E+07	3.5E+7 (DD)	1.10E+08
Acrylonitrile (I)	107131	NA	100 (M); 52	100 (M); 40	6,600	5,000	5,100	10,000	4.60E+07	16,000	8.30E+06
Alachlor	15972608	NA	52	290 (X)	NLV	NLV	NLV	NLV	ID	93,000	NA
Aldicarb	116063	NA	60	NA	NLV	NLV	NLV	NLV	ID	2.30E+05	NA
Aldicarb sulfone	1646884	NA	200 (M); 40	NA	NLV	NLV	NLV	NLV	ID	2.50E+05	NA
Aldicarb sulfoxide	1646873	NA	200(M); 80	NA	NLV	NLV	NLV	NLV	ID	2.90E+05	NA
Aldrin	309002	NA	NLL	NLL	1.30E+06	58,000	58,000	58,000	6.40E+05	1,000	NA
Aluminum (B)	7429905	6.90E+06	1,000	NA	NLV	NLV	NLV	NLV	ID	5.0E+7 (DD)	NA
Ammonia	7664417	NA	ID	(CC)	ID	ID	ID	ID	6.70E+09	ID	1.00E+07
t-Amyl methyl ether (TAME)	994058	NA	3,900	NA	58,000	3.40E+05	7.60E+05	1.80E+06	4.10E+09	2.9E+7 (C)	4.40E+05
Aniline	62533	NA	1,100	330 (M); 80	NLV	NLV	NLV	NLV	6.70E+07	3.30E+05	4.50E+06
Anthracene	120127	NA	41,000	ID	1.0E+9 (D)	1.40E+09	1.40E+09	1.40E+09	6.70E+10	2.30E+08	NA
Antimony	7440360	NA	4,300	94,000 (X)	NLV	NLV	NLV	NLV	1.30E+07	1.80E+05	NA
Arsenic	7440382	5,800	4,600	4,600	NLV	NLV	NLV	NLV	7.20E+05	7,600	NA
Asbestos (BB)	1332214	NA	NLL	NLL	NLV	NLV	NLV	NLV	1.0E+7 (M); 68,000	ID	NA
Atrazine	1912249	NA	60	150	NLV	NLV	NLV	NLV	ID	71,000 (DD)	NA
Azobenzene	103333	NA	4,200	ID	6.10E+06	6.30E+05	6.30E+05	6.30E+05	1.00E+08	1.40E+05	NA

TABLE 2. SOIL: RESIDENTIAL

PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS/PART 213 RISK-BASED SCREENING LEVELS

All criteria, unless otherwise noted, are expressed in units of parts per billion (ppb). One ppb is equivalent to 1 microgram per kilogram (ug/kg). Criteria with 6 or more digits are expressed in scientific notation. For example, 200,000 is presented as 2.0E+5. 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 (§324.20120a(10)). In these cases, 2 numbers are present in the cell. The first number is the criterion (i.e., TDL), and the second number is the risk-based value.

			Groundwater Protection		Indoor Air	Ambient Air (Y) (C)				Contact	Csat
Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Level	Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels
Barium (B)	7440393	75,000	1.30E+06	(G)	NLV	NLV	NLV	NLV	3.30E+08	3.70E+07	NA
Benzene (I)	71432	NA	100	4,000 (X)	1,600	13,000	34,000	79,000	3.80E+08	1.80E+05	4.00E+05
Benzidine	92875	NA	1,000 (M); 6.0	1,000 (M); 6.0	NLV	NLV	NLV	NLV	46,000	1,000 (M); 23	NA
Benzo(a)anthracene (Q)	56553	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	20,000	NA
Benzo(b)fluoranthene (Q)	205992	NA	NLL	NLL	ID	ID	ID	ID	ID	20,000	NA
Benzo(k)fluoranthene (Q)	207089	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	2.00E+05	NA
Benzo(g,h,i)perylene	191242	NA	NLL	NLL	NLV	NLV	NLV	NLV	8.00E+08	2.50E+06	NA
Benzo(a)pyrene (Q)	50328	NA	NLL	NLL	NLV	NLV	NLV	NLV	1.50E+06	2,000	NA
Benzoic acid	65850	NA	6.40E+05	NA	NLV	NLV	NLV	NLV	ID	9.90E+08	NA
Benzyl alcohol	100516	NA	2.00E+05	NA	NLV	NLV	NLV	NLV	3.30E+11	3.2E+8 (C)	5.80E+06
Benzyl chloride	100447	NA	150	NA	6,300	14,000	14,000	17,000	6.20E+07	48,000	2.30E+05
Beryllium	7440417	NA	51,000	(G)	NLV	NLV	NLV	NLV	1.30E+06	4.10E+05	NA
bis(2-Chloroethoxy)ethane	112265	NA	ID	ID	NLV	NLV	NLV	NLV	ID	ID	2.70E+06
bis(2-Chloroethyl)ether (I)	111444	NA	100	100 (M); 20	8,300	3,800	3,800	3,800	9.40E+06	13,000	2.20E+06
bis(2-Ethylhexyl)phthalate	117817	NA	NLL	NLL	NLV	NLV	NLV	NLV	7.00E+08	2.80E+06	1.00E+07
Boron (B)	7440428	NA	10,000	1.4E+5 (X)	NLV	NLV	NLV	NLV	ID	4.8E+7 (DD)	NA
Bromate	15541454	NA	200	800 (X)	NLV	NLV	NLV	NLV	ID	17,000	NA
Bromobenzene (I)	108861	NA	550	NA	3.10E+05	4.50E+05	4.50E+05	4.50E+05	5.30E+08	5.40E+05	7.60E+05
Bromodichloromethane	75274	NA	1,600 (W)	ID	1,200	9,100	9,700	19,000	8.40E+07	1.10E+05	1.50E+06
Bromoform	75252	NA	1,600 (W)	ID	1.50E+05	9.00E+05	9.00E+05	9.00E+05	2.80E+09	8.20E+05	8.70E+05
Bromomethane	74839	NA	200	700	860	11,000	57,000	1.40E+05	3.30E+08	3.20E+05	2.20E+06
n-Butanol (I)	71363	NA	19,000	2.00E+05	NLV	NLV	NLV	NLV	2.30E+10	2.9E+7 (C)	8.70E+06
2-Butanone (MEK) (I)	78933	NA	2.60E+05	44,000	5.4E+7 (C)	2.90E+07	2.90E+07	3.50E+07	6.70E+10	1.2E+8 (C, DD)	2.70E+07
n-Butyl acetate	123864	NA	11,000	NA	5.6E+7 (C)	1.10E+08	2.60E+08	3.20E+08	4.70E+11	1.7E+7 (C)	1.10E+06
t-Butyl alcohol	75650	NA	78,000	NA	3.1E+8 (C)	9.70E+07	2.00E+08	2.00E+08	1.30E+11	1.2E+8 (C)	1.10E+08
Butyl benzyl phthalate	85687	NA	2.2E+6 (C)	1.2E+5 (X)	NLV	NLV	NLV	NLV	4.70E+10	3.6E+7 (C)	3.10E+05
n-Butylbenzene	104518	NA	1,600	ID	ID	ID	ID	ID	2.00E+09	2.50E+06	1.00E+07

TABLE 2. SOIL: RESIDENTIAL

PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS/PART 213 RISK-BASED SCREENING LEVELS

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sec-Butylbenzene	135988	NA	1,600	ID	ID	ID	ID	ID	4.00E+08	2.50E+06	1.00E+07
t-Butylbenzene (I)	98066	NA	1,600	ID	ID	ID	ID	ID	6.70E+08	2.50E+06	1.00E+07
Cadmium (B)	7440439	1,200	6,000	(G,X)	NLV	NLV	NLV	NLV	1.70E+06	5.50E+05	NA
Camphene (I)	79925	NA	ID	NA	3,700	1.50E+05	9.10E+05	2.20E+06	5.30E+09	ID	NA
Caprolactam	105602	NA	1.20E+05	NA	NLV	NLV	NLV	NLV	6.70E+08	5.3E+7 (DD)	NA
Carbaryl	63252	NA	14,000	NA	ID	ID	ID	ID	ID	2.20E+07	NA
Carbazole	86748	NA	9,400	1,100	NLV	NLV	NLV	NLV	6.20E+07	5.30E+05	NA
Carbofuran	1563662	NA	800	NA	NLV	NLV	NLV	NLV	ID	1.10E+06	NA
Carbon disulfide (I,R)	75150	NA	16,000	ID	76,000	1.30E+06	7.90E+06	1.90E+07	4.70E+10	7.2E+6 (C, DD)	2.80E+05
Carbon tetrachloride	56235	NA	100	900 (X)	190	3,500	12,000	28,000	1.30E+08	96,000	3.90E+05
Chlordane (J)	57749	NA	NLL	NLL	1.10E+07	1.20E+06	1.20E+06	1.20E+06	3.10E+07	31,000	NA
Chloride	16887006	NA	5.00E+06	(X)	NLV	NLV	NLV	NLV	ID	5.0E+5 (F)	NA
Chlorobenzene (I)	108907	NA	2,000	500	1.20E+05	7.70E+05	9.90E+05	2.10E+06	4.70E+09	4.3E+6 (C)	2.60E+05
p-Chlorobenzene sulfonic acid	98668	NA	1.50E+05	ID	ID	ID	ID	ID	ID	2.30E+08	ID
1-Chloro-1,1-difluoroethane	75683	NA	3.00E+05	NA	2.9E+6 (C)	7.90E+07	5.60E+08	1.40E+09	3.30E+12	4.7E+8 (C)	9.60E+05
Chloroethane	75003	NA	8,600	22,000 (X)	2.9E+6 (C)	3.00E+07	1.20E+08	2.80E+08	6.70E+11	2.6E+6 (C)	9.50E+05
2-Chloroethyl vinyl ether	110758	NA	ID	NA	ID	ID	ID	ID	ID	ID	1.90E+06
Chloroform	67663	NA	1,600 (W)	7,000	7,200	45,000	1.20E+05	2.70E+05	1.30E+09	1.20E+06	1.50E+06
Chloromethane (I)	74873	NA	5,200	ID	2,300	40,000	4.10E+05	1.00E+06	4.90E+09	1.6E+6 (C)	1.10E+06
4-Chloro-3-methylphenol	59507	NA	5,800	280	NLV	NLV	NLV	NLV	ID	4.50E+06	NA
beta-Chloronaphthalene	91587	NA	6.20E+05	NA	ID	ID	ID	ID	ID	5.60E+07	NA
2-Chlorophenol	95578	NA	900	360	4.30E+05	9.60E+05	9.60E+05	9.60E+05	1.20E+09	1.40E+06	1.90E+07
o-Chlorotoluene (I)	95498	NA	3,300	ID	2.70E+05	1.20E+06	2.90E+06	6.30E+06	4.70E+09	4.5E+6 (C)	5.00E+05
Chlorpyrifos	2921882	NA	17,000	1,500	130	4,600	23,000	55,000	1.30E+08	1.10E+07	NA
Chromium (III) (B,H)	16065831	18,000 (total)	1.0E+9 (D)	(G,X)	NLV	NLV	NLV	NLV	3.30E+08	7.90E+08	NA
Chromium (VI)	18540299	NA	30,000	3,300	NLV	NLV	NLV	NLV	2.60E+05	2.50E+06	NA
Chrysene (Q)	218019	NA	NLL	NLL	ID	ID	ID	ID	ID	2.00E+06	NA

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Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Level	Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels
Cobalt	7440484	6,800	800	2,000	NLV	NLV	NLV	NLV	1.30E+07	2.60E+06	NA
Copper (B)	7440508	32,000	5.80E+06	(G)	NLV	NLV	NLV	NLV	1.30E+08	2.00E+07	NA
Cyanazine	21725462	NA	200	1,100 (X)	NLV	NLV	NLV	NLV	ID	14,000	NA
Cyanide (P;R)	57125	390 (total)	4,000	100	NLV	NLV	NLV	NLV	2.50E+05	12,000	NA
Cyclohexanone	108941	NA	5.20E+06	NA	17,000	1.00E+06	1.10E+07	2.70E+07	6.70E+10	1.0E+9 (C,D)	2.20E+08
Dacthal	1861321	NA	50,000	NA	NLV	NLV	NLV	NLV	ID	2.30E+06	NA
Dalapon	75990	NA	4,000	NA	NLV	NLV	NLV	NLV	ID	1.90E+07	5.90E+07
4-4'-DDD	72548	NA	NLL	NLL	NLV	NLV	NLV	NLV	4.40E+07	95,000	NA
4-4'-DDE	72559	NA	NLL	NLL	NLV	NLV	NLV	NLV	3.20E+07	45,000	NA
4-4'-DDT	50293	NA	NLL	NLL	NLV	NLV	NLV	NLV	3.20E+07	57,000	NA
Decabromodiphenyl ether	1163195	NA	1.40E+05	NA	1.0E+9 (D)	8.60E+07	8.60E+07	8.60E+07	2.30E+09	3.80E+06	NA
Di-n-butyl phthalate	84742	NA	9.6E+5 (C)	11,000	NLV	NLV	NLV	NLV	3.30E+09	2.7E+7 (C)	7.60E+05
Di(2-ethylhexyl) adipate	103231	NA	1.3E+7 (C)	ID	NLV	NLV	NLV	NLV	9.20E+09	1.5E+7 (C, DD)	9.60E+05
Di-n-octyl phthalate	117840	NA	1.00E+08	ID	NLV	NLV	NLV	NLV	3.10E+10	6.90E+06	1.40E+08
Diacetone alcohol (I)	123422	NA	ID	NA	NLV	NLV	NLV	NLV	1.60E+11	ID	1.10E+08
Diazinon	333415	NA	95	72	NLV	NLV	NLV	NLV	ID	12,000 (DD)	3.10E+05
Dibenzo(a,h)anthracene (Q)	53703	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	2,000	NA
Dibenzofuran	132649	NA	ID	1,700	2.00E+06	1.30E+05	1.30E+05	1.30E+05	6.70E+06	ID	NA
Dibromochloromethane	124481	NA	1,600 (W)	ID	3,900	24,000	24,000	33,000	1.30E+08	1.10E+05	6.10E+05
Dibromochloropropane	96128	NA	10 (M); 4.0	ID	220	260	260	260	5.60E+05	4,400 (C)	1,200
Dibromomethane	74953	NA	1,600	NA	ID	ID	ID	ID	ID	2.5E+6 (C)	2.00E+06
Dicamba	1918009	NA	4,400	NA	NA	NLV	NLV	NLV	ID	3.40E+06	NA
1,2-Dichlorobenzene	95501	NA	14,000	280	1.1E+7 (C)	3.90E+07	3.90E+07	5.20E+07	1.00E+11	1.9E+7 (C)	2.10E+05
1,3-Dichlorobenzene	541731	NA	170	680	26,000	79,000	79,000	1.10E+05	2.00E+08	2.0E+5 (C)	1.70E+05
1,4-Dichlorobenzene	106467	NA	1,700	360	19,000	77,000	77,000	1.10E+05	4.50E+08	4.00E+05	NA
3,3'-Dichlorobenzidine	91941	NA	2,000 (M); 28	2,000 (M); 7.4	NLV	NLV	NLV	NLV	6.50E+06	6,600	NA
Dichlorodifluoromethane	75718	NA	95,000	ID	9.00E+05	5.30E+07	5.50E+08	1.40E+09	3.30E+12	5.2E+7 (C)	1.00E+06

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1,1-Dichloroethane	75343	NA	18,000	15,000	2.30E+05	2.10E+06	5.90E+06	1.40E+07	3.30E+10	2.7E+7 (C)	8.90E+05
1,2-Dichloroethane (I)	107062	NA	100	7,200 (X)	2,100	6,200	11,000	26,000	1.20E+08	91,000	1.20E+06
1,1-Dichloroethylene (I)	75354	NA	140	2,600	62	1,100	5,300	13,000	6.20E+07	2.00E+05	5.70E+05
cis-1,2-Dichloroethylene	156592	NA	1,400	12,000	22,000	1.80E+05	4.20E+05	9.90E+05	2.30E+09	2.5E+6 (C)	6.40E+05
trans-1,2-Dichloroethylene	156605	NA	2,000	30,000 (X)	23,000	2.80E+05	8.30E+05	2.00E+06	4.70E+09	3.8E+6 (C)	1.40E+06
2,6-Dichloro-4-nitroaniline	99309	NA	44,000	NA	NLV	NLV	NLV	NLV	ID	6.80E+07	NA
2,4-Dichlorophenol	120832	NA	1,500	330 (M); 220	NLV	NLV	NLV	NLV	5.10E+09	6.6E+5 (DD)	1.80E+06
2,4-Dichlorophenoxy acetic acid	94757	NA	1,400	4,400	NLV	NLV	NLV	NLV	6.70E+09	2.50E+06	NA
1,2-Dichloropropane (I)	78875	NA	100	4,600 (X)	4,000	25,000	50,000	1.10E+05	2.70E+08	1.40E+05	5.50E+05
1,3-Dichloropropene	542756	NA	170	180 (X)	1,000	18,000	68,000	1.60E+05	7.80E+08	10,000	6.20E+05
Dichlorovos	62737	NA	50 (M); 32	NA	NLV	NLV	NLV	NLV	3.30E+07	10,000	2.20E+06
Dicyclohexyl phthalate	84617	NA	ID	NA	ID	ID	ID	ID	ID	ID	NA
Dieldrin	60571	NA	NLL	NLL	1.40E+05	19,000	19,000	19,000	6.80E+05	1,100	NA
Diethyl ether	60297	NA	200	ID	2.8E+7 (C)	8.50E+07	1.50E+08	3.40E+08	8.00E+11	1.1E+8 (C)	7.40E+06
Diethyl phthalate	84662	NA	1.10E+05	2,200	NLV	NLV	NLV	NLV	3.30E+09	1.7E+8 (C)	7.40E+05
Diethylene glycol monobutyl ether	112345	NA	1,800	NA	NLV	NLV	NLV	NLV	1.30E+09	2.70E+06	1.10E+08
Diisopropyl ether	108203	NA	600	ID	6.7E+5 (C)	3.40E+05	7.60E+05	1.80E+06	4.10E+09	9.2E+5 (C)	1,300
Diisopropylamine (I)	108189	NA	110	NA	5.50E+06	6.20E+06	6.20E+06	7.30E+06	1.30E+10	1.70E+05	6.70E+06
Dimethyl phthalate	131113	NA	1.5E+6 (C)	NA	NLV	NLV	NLV	NLV	3.30E+09	1.0E+9 (C,D)	7.90E+05
N,N-Dimethylacetamide	127195	NA	3,600	82,000 (X)	NLV	NLV	NLV	NLV	ID	5.60E+06	1.10E+08
N,N-Dimethylaniline	121697	NA	320	NA	1.70E+05	1.50E+05	1.50E+05	1.50E+05	2.60E+08	5.00E+05	8.00E+05
Dimethylformamide (I)	68122	NA	14,000	NA	NLV	NLV	NLV	NLV	2.00E+09	2.20E+07	1.10E+08
2,4-Dimethylphenol	105679	NA	7,400	7,600	NLV	NLV	NLV	NLV	4.70E+09	1.10E+07	NA
2,6-Dimethylphenol	576261	NA	330 (M); 88	NA	NLV	NLV	NLV	NLV	1.30E+08	1.40E+05	NA
3,4-Dimethylphenol	95658	NA	330 (M); 200	500	NLV	NLV	NLV	NLV	2.30E+08	3.20E+05	NA
Dimethylsulfoxide	67685	NA	4.40E+06	3.80E+06	NLV	NLV	NLV	NLV	1.30E+09	1.0E+9 (C,D)	1.80E+07
2,4-Dinitrotoluene	121142	NA	430	NA	NLV	NLV	NLV	NLV	1.60E+07	48,000	NA

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Dinoseb	88857	NA	300	200 (M); 43	NLV	NLV	NLV	NLV	2.70E+08	66,000 (DD)	1.40E+05
1,4-Dioxane (I)	123911	NA	1,700	56,000 (X)	NLV	NLV	NLV	NLV	5.70E+08	5.30E+05	9.70E+07
Diquat	85007	NA	400	400	NLV	NLV	NLV	NLV	ID	5.00E+05	NA
Diuron	330541	NA	620	NA	NLV	NLV	NLV	NLV	4.70E+08	9.70E+05	NA
Endosulfan (J)	115297	NA	NLL	NLL	ID	ID	ID	ID	ID	1.40E+06	NA
Endothall	145733	NA	NLL	NLL	NLV	NLV	NLV	NLV	2.30E+09	3.80E+06	NA
Endrin	72208	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	65,000	NA
Epichlorohydrin (I)	106898	NA	100	NA	64,000	31,000	31,000	35,000	6.70E+07	8,900	7.30E+06
Ethanol (I)	64175	NA	3.80E+07	ID	NLV	NLV	NLV	NLV	1.30E+12	1.0E+9 (C,D,DD)	1.10E+08
Ethyl acetate (I)	141786	NA	1.30E+05	NA	3.8E+7 (C)	4.90E+07	4.90E+07	9.80E+07	2.10E+11	2.0E+8 (C)	7.50E+06
Ethyl-tert-butyl ether (ETBE)	637923	NA	980	ID	5.40E+05	1.90E+06	4.50E+06	1.10E+07	2.50E+10	ID	6.50E+05
Ethylbenzene (I)	100414	NA	1,500	360	87,000	7.20E+05	1.00E+06	2.20E+06	1.00E+10	2.2E+7 (C)	1.40E+05
Ethylene dibromide	106934	NA	20 (M); 1.0	110 (X)	670	1,700	1,700	3,300	1.40E+07	92	8.90E+05
Ethylene glycol	107211	NA	3.00E+05	3.8E+6 (X)	NLV	NLV	NLV	NLV	6.70E+10	4.5E+8 (C)	1.10E+08
Ethylene glycol monobutyl ether	111762	NA	74,000	NA	7.40E+05	1.80E+07	1.50E+08	3.60E+08	8.70E+11	1.1E+8 (C)	4.10E+07
Fluoranthene	206440	NA	7.30E+05	5,500	1.0E+9 (D)	7.40E+08	7.40E+08	7.40E+08	9.30E+09	4.60E+07	NA
Fluorene	86737	NA	3.90E+05	5,300	5.80E+08	1.30E+08	1.30E+08	1.30E+08	9.30E+09	2.70E+07	NA
Fluorine (soluble fluoride) (B)	7782414	NA	40,000	ID	NLV	NLV	NLV	NLV	ID	9.0E+6 (DD)	NA
Formaldehyde	50000	NA	26,000	2,400	12,000	13,000	23,000	52,000	2.40E+08	4.10E+07	6.00E+07
Formic acid (I,U)	64186	NA	2.00E+05	ID	1.50E+06	2.10E+05	1.40E+05	1.40E+05	1.30E+08	3.2E+8 (C)	1.10E+08
1-Formylpiperidine	2591868	NA	1,600	NA	ID	ID	ID	ID	ID	2.50E+06	1.00E+07
Gentian violet	548629	NA	300	NA	NLV	NLV	NLV	NLV	ID	96,000	NA
Glyphosate	1071836	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	1.1E+7 (DD)	NA
Heptachlor	76448	NA	NLL	NLL	3.50E+05	62,000	62,000	62,000	2.40E+06	5,600	NA
Heptachlor epoxide	1024573	NA	NLL	NLL	NLV	NLV	NLV	NLV	1.20E+06	3,100	NA
n-Heptane	142825	NA	4.6E+7 (C)	NA	1.5E+6 (C)	2.10E+07	4.40E+07	1.00E+08	2.30E+11	9.9E+8 (C)	2.40E+05
Hexabromobenzene	87821	NA	5,400	ID	ID	ID	ID	ID	ID	1.10E+06	NA

TABLE 2. SOIL: RESIDENTIAL

PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS/PART 213 RISK-BASED SCREENING LEVELS

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Hexachlorobenzene (C-66)	118741	NA	1,800	350	41,000	17,000	17,000	17,000	6.80E+06	8,900	NA
Hexachlorobutadiene (C-46)	87683	NA	26,000	91	1.30E+05	1.30E+05	1.30E+05	1.30E+05	1.40E+08	1.00E+05	3.50E+05
alpha-Hexachlorocyclohexane	319846	NA	18	ID	30,000	12,000	22,000	25,000	1.70E+06	2,600	NA
beta-Hexachlorocyclohexane	319857	NA	37	ID	NLV	NLV	NLV	NLV	5.90E+06	5,400	NA
Hexachlorocyclopentadiene (C-56)	77474	NA	3.20E+05	ID	30,000	50,000	50,000	50,000	1.30E+07	2.3E+6 (C)	7.20E+05
Hexachloroethane	67721	NA	430	1,800 (X)	40,000	5.50E+05	9.30E+05	9.30E+05	2.30E+08	2.30E+05	NA
n-Hexane	110543	NA	1.8E+5 (C)	NA	5.1E+5 (C)	3.00E+06	3.20E+06	6.20E+06	1.30E+10	9.2E+7 (C)	44,000
2-Hexanone	591786	NA	20,000	ID	9.90E+05	1.10E+06	1.10E+06	1.40E+06	2.70E+09	3.2E+7 (C)	2.50E+06
Indeno(1,2,3-cd) pyrene (Q)	193395	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	20,000	NA
Iron (B)	7439896	1.20E+07	6,000	NA	NLV	NLV	NLV	NLV	ID	1.60E+08	NA
Isobutyl alcohol (I)	78831	NA	46,000	NA	2.3E+8 (C)	7.90E+07	7.90E+07	7.90E+07	1.00E+11	7.2E+7 (C)	8.90E+06
Isophorone	78591	NA	15,000	26,000 (X)	NLV	NLV	NLV	NLV	1.20E+10	4.8E+6 (C)	2.40E+06
Isopropyl alcohol (I)	67630	NA	9,400	1.1E+6 (X)	NLV	NLV	NLV	NLV	1.50E+10	1.40E+07	1.10E+08
Isopropyl benzene	98828	NA	91,000	3,200	4.0E+5 (C)	1.70E+06	1.70E+06	2.80E+06	5.80E+09	2.5E+7 (C)	3.90E+05
Lead (B)	7439921	21,000	7.00E+05	(G,X)	NLV	NLV	NLV	NLV	1.00E+08	4.00E+05	NA
Lindane	58899	NA	20 (M); 7.0	20 (M); 1.1	ID	ID	ID	ID	ID	8,300	NA
Lithium (B)	7439932	9,800	3,400	8,800	NLV	NLV	NLV	NLV	2.30E+09	4.2E+6 (DD)	NA
Magnesium (B)	7439954	NA	8.00E+06	NA	NLV	NLV	NLV	NLV	6.70E+09	1.0E+9 (D)	NA
Manganese (B)	7439965	4.40E+05	1,000	(G,X)	NLV	NLV	NLV	NLV	3.30E+06	2.50E+07	NA
Mercury (Total) (B,Z)	Varies	130	1,700	50 (M); 1.2	48,000	52,000	52,000	52,000	2.00E+07	1.60E+05	NA
Methane	74828	NA	ID	NA	8.4E+6 ug/m3 (GG)	ID	ID	ID	ID	ID	ID
Methanol	67561	NA	74,000	1.2E+7 (C)	3.7E+7 (C)	3.10E+07	4.40E+07	9.60E+07	2.20E+11	1.1E+8 (C)	3.10E+06
Methoxychlor	72435	NA	16,000	NA	ID	ID	ID	ID	ID	1.90E+06	NA
2-Methoxyethanol (I)	109864	NA	150	NA	NLV	NLV	NLV	NLV	1.30E+09	2.30E+05	1.10E+08
2-Methyl-4-chlorophenoxyacetic acid	94746	NA	390	NA	NLV	NLV	NLV	NLV	ID	2.30E+05	NA
2-Methyl-4,6-dinitrophenol	534521	NA	830 (M); 400	NA	NLV	NLV	NLV	NLV	1.30E+08	79,000	NA
N-Methyl-morpholine (I)	109024	NA	400	NA	NLV	NLV	NLV	NLV	ID	6.10E+05	1.10E+08

TABLE 2. SOIL: RESIDENTIAL

PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS/PART 213 RISK-BASED SCREENING LEVELS

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Methyl parathion	298000	NA	46	NA	NLV	NLV	NLV	NLV	ID	56,000	NA
4-Methyl-2-pentanone (MIBK) (I)	108101	NA	36,000	ID	3.7E+7 (C)	4.50E+07	4.50E+07	6.70E+07	1.40E+11	5.6E+7 (C)	2.70E+06
Methyl-tert-butyl ether (MTBE)	1634044	NA	800	1.4E+5 (X)	9.9E+6 (C)	2.50E+07	3.90E+07	8.70E+07	2.00E+11	1.50E+06	5.90E+06
Methylcyclopentane (I)	96377	NA	ID	NA	92,000	2.30E+06	8.20E+06	2.00E+07	4.70E+10	ID	3.50E+05
4,4'-Methylene-bis-2-chloroaniline (MBOCA)	101144	NA	NLL	NLL	NLV	NLV	NLV	NLV	8.40E+07	6,800	NA
Methylene chloride	75092	NA	100	30,000 (X)	45,000	2.10E+05	5.90E+05	1.40E+06	6.60E+09	1.30E+06	2.30E+06
2-Methylnaphthalene	91576	NA	57,000	4,200	2.70E+06	1.50E+06	1.50E+06	1.50E+06	6.70E+08	8.10E+06	NA
Methylphenols (J)	1319773	NA	7,400	1,000 (M); 600	NLV	NLV	NLV	NLV	6.70E+09	1.10E+07	NA
Metolachlor	51218452	NA	4,800	300	NLV	NLV	NLV	NLV	ID	1.5E+6 (C, DD)	4.40E+05
Metribuzin	21087649	NA	3,600	NA	ID	ID	ID	ID	ID	9.60E+06	NA
Mirex	2385855	NA	NLL	NLL	ID	ID	ID	ID	ID	9,600	NA
Molybdenum (B)	7439987	NA	1,500	64,000 (X)	NLV	NLV	NLV	NLV	ID	2.60E+06	NA
Naphthalene	91203	NA	35,000	730	2.50E+05	3.00E+05	3.00E+05	3.00E+05	2.00E+08	1.60E+07	NA
Nickel (B)	7440020	20,000	1.00E+05	(G)	NLV	NLV	NLV	NLV	1.30E+07	4.00E+07	NA
Nitrate (B,N)	14797558	NA	2.0E+5 (N)	ID	NLV	NLV	NLV	NLV	ID	ID	NA
Nitrite (B,N)	14797650	NA	20,000 (N)	NA	NLV	NLV	NLV	NLV	ID	ID	NA
Nitrobenzene (I)	98953	NA	330 (M); 68	3,600 (X)	91,000	54,000	54,000	54,000	4.70E+07	1.00E+05	4.90E+05
2-Nitrophenol	88755	NA	400	ID	NLV	NLV	NLV	NLV	ID	6.30E+05	NA
n-Nitroso-di-n-propylamine	621647	NA	330 (M); 100	NA	NLV	NLV	NLV	NLV	1.60E+06	1,200	1.50E+06
N-Nitrosodiphenylamine	86306	NA	5,400	NA	NLV	NLV	NLV	NLV	2.20E+09	1.70E+06	NA
Oxamyl	23135220	NA	4,000	NA	NLV	NLV	NLV	NLV	ID	8.60E+06	NA
Oxo-hexyl acetate	88230357	NA	1,500	NA	ID	ID	ID	ID	5.40E+09	2.30E+06	1.00E+07
Pendimethalin	40487421	NA	1.10E+06	NA	NLV	NLV	NLV	NLV	ID	4.60E+07	NA
Pentachlorobenzene	608935	NA	29,000	9,500	ID	ID	ID	ID	ID	3.2E+5 (C)	1.90E+05
Pentachloronitrobenzene	82688	NA	37,000	NA	1.20E+05	2.30E+05	2.30E+05	2.30E+05	3.30E+08	1.70E+06	NA
Pentachlorophenol	87865	NA	22	(G,X)	NLV	NLV	NLV	NLV	1.00E+08	90,000	NA
Pentane	109660	NA	ID	NA	9.7E+5 (C)	3.70E+07	3.10E+08	5.80E+08	1.20E+12	ID	2.40E+05

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2-Pentene (I)	109682	NA	ID	NA	ID	ID	ID	ID	ID	ID	2.20E+05
Phenanthrene	85018	NA	56,000	2,100	2.80E+06	1.60E+05	1.60E+05	1.60E+05	6.70E+06	1.60E+06	NA
Phenol	108952	NA	88,000	9,000	NLV	NLV	NLV	NLV	4.00E+10	4.0E+7 (C, DD)	1.20E+07
Phenytoin	57410	NA	830	4300 (X)	NLV	NLV	NLV	NLV	2.20E+08	1.00E+05	NA
Phosphorus (Total)	7723140	NA	1.30E+06	(EE)	NLV	NLV	NLV	NLV	6.70E+07	1.0E+9 (D)	NA
Phthalic acid	88993	NA	2.80E+05	NA	NLV	NLV	NLV	NLV	ID	4.3E+8 (C)	1.70E+06
Phthalic anhydride	85449	NA	3.00E+05	NA	NLV	NLV	NLV	NLV	ID	4.7E+8 (C)	1.10E+06
Picloram	1918021	NA	10,000	920	NLV	NLV	NLV	NLV	ID	1.60E+07	NA
Piperidine	110894	NA	64	NA	NLV	NLV	NLV	NLV	9.30E+09	99,000	1.20E+08
Polybrominated biphenyls (J)	67774327	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	1,200	NA
Polychlorinated biphenyls (PCBs) (J,T)	1336363	NA	NLL	NLL	3.00E+06	2.40E+05	7.90E+06	7.90E+06	5.20E+06	(T)	NA
Prometon	1610180	NA	4,900	NA	NLV	NLV	NLV	NLV	ID	5.00E+06	NA
Propachlor	1918167	NA	1,900	NA	NLV	NLV	NLV	NLV	ID	2.90E+06	NA
Propazine	139402	NA	4,000	NA	NLV	NLV	NLV	NLV	ID	6.10E+06	NA
Propionic acid	79094	NA	2.40E+05	ID	NLV	NLV	NLV	NLV	2.00E+10	3.8E+8 (C)	1.10E+08
Propyl alcohol (I)	71238	NA	28,000	NA	NLV	NLV	NLV	NLV	4.90E+10	1.3E+7 (DD)	1.10E+08
n-Propylbenzene (I)	103651	NA	1,600	ID	ID	ID	ID	ID	1.30E+09	2.50E+06	1.00E+07
Propylene glycol	57556	NA	3.00E+06	5.80E+06	NLV	NLV	NLV	NLV	4.00E+11	1.0E+9 (C,D)	1.10E+08
Pyrene	129000	NA	4.80E+05	ID	1.0E+9 (D)	6.50E+08	6.50E+08	6.50E+08	6.70E+09	2.90E+07	NA
Pyridine (I)	110861	NA	400	NA	1,100	8,200	40,000	97,000	2.30E+08	2.3E+5 (C)	37,000
Selenium (B)	7782492	410	4,000	400	NLV	NLV	NLV	NLV	1.30E+08	2.60E+06	NA
Silver (B)	7440224	1,000	4,500	100 (M); 27	NLV	NLV	NLV	NLV	6.70E+06	2.50E+06	NA
Silvex (2,4,5-TP)	93721	NA	3,600	2,200	NLV	NLV	NLV	NLV	ID	1.70E+06	NA
Simazine	122349	NA	80	340	NLV	NLV	NLV	NLV	ID	1.20E+06	NA
Sodium	17341252	NA	4.60E+06	NA	NLV	NLV	NLV	NLV	ID	1.0E+9 (D)	NA
Sodium azide	26628228	NA	1,800	1,000	ID	ID	ID	ID	ID	2.70E+06	NA
Strontium (B)	7440246	NA	92,000	4.20E+05	NLV	NLV	NLV	NLV	ID	3.30E+08	NA

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Styrene	100425	NA	2,700	2,100 (X)	2.50E+05	9.70E+05	9.70E+05	1.40E+06	5.50E+09	4.00E+05	5.20E+05
Sulfate	14808798	NA	5.00E+06	NA	NLV	NLV	NLV	NLV	ID	ID	NA
Tebuthiuron	34014181	NA	10,000	NA	NLV	NLV	NLV	NLV	ID	4.6E+6 (DD)	NA
2,3,7,8-Tetrabromodibenzo-p-dioxin (O)	50585416	NA	NLL	NLL	NLV	NLV	NLV	NLV	(O)	(O)	NA
1,2,4,5-Tetrachlorobenzene	95943	NA	1.50E+06	3,400 (X)	5.80E+05	2.30E+05	2.30E+05	2.30E+05	6.70E+07	7.70E+07	NA
2,3,7,8-Tetrachlorodibenzo-p-dioxin (O)	1746016	NA	NLL	NLL	NLV	NLV	NLV	NLV	71 (O)	0.09 (O)	NA
1,1,1,2-Tetrachloroethane	630206	NA	1,500	ID	6,200	36,000	54,000	1.00E+05	4.20E+08	4.8E+5 (C)	4.40E+05
1,1,2,2-Tetrachloroethane	79345	NA	170	1,600 (X)	4,300	10,000	10,000	14,000	5.40E+07	53,000	8.70E+05
Tetrachloroethylene	127184	NA	100	1,200 (X)	11,000	1.70E+05	4.80E+05	1.10E+06	2.70E+09	2.0E+5 (C)	88,000
Tetrahydrofuran	109999	NA	1,900	2.2E+5 (X)	1.30E+06	1.30E+07	6.70E+07	1.60E+08	3.90E+11	2.90E+06	1.20E+08
Tetranitromethane	509148	NA	ID	NA	500(M); 110	500 (M); 51	ID	ID	2.10E+05	ID	ID
Thallium (B)	7440280	NA	2,300	4,200 (X)	NLV	NLV	NLV	NLV	1.30E+07	35,000	NA
Toluene (I)	108883	NA	16,000	5,400	3.3E+5 (C)	2.80E+06	5.10E+06	1.20E+07	2.70E+10	5.0E+7 (C)	2.50E+05
p-Toluidine	106490	NA	660 (M); 300	NA	NLV	NLV	NLV	NLV	1.00E+08	94,000	1.20E+06
Toxaphene	8001352	NA	24,000	8,200	NLV	NLV	NLV	NLV	9.70E+06	20,000	NA
Triallate	2303175	NA	95,000	NA	ID	ID	ID	ID	ID	2.9E+6 (C)	2.50E+05
Tributylamine	102829	NA	7,800	ID	5.80E+05	6.00E+05	6.00E+05	6.00E+05	4.70E+08	7.90E+05	3.70E+06
1,2,4-Trichlorobenzene	120821	NA	4,200	5,900 (X)	9.6E+6 (C)	2.80E+07	2.80E+07	2.80E+07	2.50E+10	9.9E+5 (DD)	1.10E+06
1,1,1-Trichloroethane	71556	NA	4,000	1,800	2.50E+05	3.80E+06	1.20E+07	2.80E+07	6.70E+10	5.0E+8 (C)	4.60E+05
1,1,2-Trichloroethane	79005	NA	100	6,600 (X)	4,600	17,000	21,000	44,000	1.90E+08	1.80E+05	9.20E+05
Trichloroethylene	79016	NA	100	4,000 (X)	1,000	11,000	25,000	57,000	1.30E+08	1.1E+5 (DD)	5.00E+05
Trichlorofluoromethane	75694	NA	52,000	NA	2.8E+6 (C)	9.20E+07	6.30E+08	1.50E+09	3.80E+12	7.9E+7 (C)	5.60E+05
2,4,5-Trichlorophenol	95954	NA	39,000	NA	NLV	NLV	NLV	NLV	2.30E+10	2.30E+07	NA
2,4,6-Trichlorophenol	88062	NA	2,400	330 (M); 100	NLV	NLV	NLV	NLV	1.00E+09	7.10E+05	NA
1,2,3-Trichloropropane	96184	NA	840	NA	4,000	9,200	9,200	11,000	2.00E+07	1.3E+6 (C)	8.30E+05
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	NA	9.0E+6 (C)	1,700	5.1E+6 (C)	1.80E+08	8.80E+08	2.10E+09	5.10E+12	1.0E+9 (C,D)	5.50E+05
Triethanolamine	102716	NA	74,000	NA	NLV	NLV	NLV	NLV	3.30E+09	1.10E+08	1.10E+08

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			Groundwater Protection		Indoor Air	Ambient Air (Y) (C)				Contact	Csat
Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Level	Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels
Triethylene glycol	112276	NA	86,000	NA	NLV	NLV	NLV	NLV	ID	3.9E+7 (C,DD)	1.10E+05
3-Trifluoromethyl-4-nitrophenol	88302	NA	1.10E+05	NA	NLV	NLV	NLV	NLV	ID	4.1E+7 (DD)	NA
Trifluralin	1582098	NA	1.90E+05	NA	ID	ID	ID	ID	ID	2.00E+06	NA
2,2,4-Trimethyl pentane	540841	NA	ID	NA	1.1E+5 (C)	5.20E+06	3.90E+07	9.60E+07	2.30E+11	ID	19,000
2,4,4-Trimethyl-2-pentene (I)	107404	NA	ID	NA	ID	ID	ID	ID	ID	ID	56,000
1,2,4-Trimethylbenzene (I)	95636	NA	2,100	570	4.3E+6 (C)	2.10E+07	5.00E+08	5.00E+08	8.20E+10	3.2E+7 (C)	1.10E+05
1,3,5-Trimethylbenzene (I)	108678	NA	1,800	1,100	2.6E+6 (C)	1.60E+07	3.80E+08	3.80E+08	8.20E+10	3.2E+7 (C)	94,000
Triphenyl phosphate	115866	NA	1.5E+6 (C)	NA	NLV	NLV	NLV	NLV	ID	3.6E+7 (C)	1.10E+05
tris(2,3-Dibromopropyl)phosphate	126727	NA	930	ID	82,000 (C)	18,000	18,000	18,000	5.90E+06	4,400	27,000
Urea	57136	NA	ID	NA	NLV	NLV	NLV	NLV	ID	ID	NA
Vanadium	7440622	NA	72,000	4.30E+05	NLV	NLV	NLV	NLV	ID	7.5E+5 (DD)	NA
Vinyl acetate (I)	108054	NA	13,000	NA	7.90E+05	1.70E+06	2.60E+06	5.80E+06	1.30E+10	5.8E+6 (C,DD)	2.40E+06
Vinyl chloride	75014	NA	40	260 (X)	270	4,200	30,000	73,000	3.50E+08	3,800	4.90E+05
White phosphorus (R)	12185103	NA	2.2	NA	NLV	NLV	NLV	NLV	ID	2,300 (DD)	NA
Xylenes (I)	1330207	NA	5,600	820	6.3E+6 (C)	4.60E+07	6.10E+07	1.30E+08	2.90E+11	4.1E+8 (C)	1.50E+05
Zinc (B)	7440666	47,000	2.40E+06	(G)	NLV	NLV	NLV	NLV	ID	1.70E+08	NA

TABLE 3. SOIL: NONRESIDENTIAL

PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS/PART 213 RISK-BASED SCREENING LEVELS

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Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Levels	Residential Drinking Water Protection Criteria	Nonresidential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels
Acenaphthene	83329	NA	3.00E+05	8.80E+05	8,700	3.50E+08	9.70E+07	9.70E+07	9.70E+07	6.20E+09	1.30E+08	NA
Acenaphthylene	208968	NA	5,900	17,000	ID	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA
Acetaldehyde (I)	75070	NA	19,000	54,000	2,600	4.00E+05	2.10E+05	2.10E+05	2.90E+05	2.60E+08	9.50E+07	1.10E+08
Acetate	71501	NA	ID	ID	(G)	ID	ID	ID	ID	ID	ID	ID
Acetic acid	64197	NA	84,000	2.40E+05	(G)	NLV	NLV	NLV	NLV	7.40E+09	4.20E+08	6.50E+08
Acetone (I)	67641	NA	15,000	42,000	34,000	5.4E+8 (C)	1.60E+08	1.60E+08	2.00E+08	1.70E+11	7.30E+07	1.10E+08
Acetonitrile	75058	NA	2,800	8,000	NA	8.80E+06	1.90E+06	1.90E+06	2.20E+06	1.80E+09	1.40E+07	2.20E+07
Acetophenone	98862	NA	30,000	88,000	ID	2.1E+8 (C)	5.20E+07	5.20E+07	5.20E+07	1.40E+10	1.5E+8 (C)	1.10E+06
Acrolein (I)	107028	NA	2,400	6,600	NA	760	370	370	630	5.90E+05	1.20E+07	2.30E+07
Acrylamide	79061	NA	10	10	200 (X)	NLV	NLV	NLV	NLV	3.00E+06	8,700	NA
Acrylic acid	79107	NA	78,000	2.20E+05	NA	5.50E+06	2.20E+05	2.70E+05	2.70E+05	2.90E+07	2.1E+8 (C,DD)	1.10E+08
Acrylonitrile (I)	107131	NA	100 (M); 52	220	100 (M); 40	35,000	17,000	17,000	31,000	5.80E+07	74,000	8.30E+06
Alachlor	15972608	NA	52	52	290 (X)	NLV	NLV	NLV	NLV	ID	3.90E+05	NA
Aldicarb	116063	NA	60	60	NA	NLV	NLV	NLV	NLV	ID	7.30E+05	NA
Aldicarb sulfone	1646884	NA	200 (M); 40	200 (M); 40	NA	NLV	NLV	NLV	NLV	ID	8.00E+05	NA
Aldicarb sulfoxide	1646873	NA	200(M); 80	200 (M); 80	NA	NLV	NLV	NLV	NLV	ID	9.50E+05	NA
Aldrin	309002	NA	NLL	NLL	NLL	7.10E+06	2.00E+05	2.00E+05	2.00E+05	8.00E+05	4,300	NA
Aluminum (B)	7429905	6.90E+06	1,000	1,000	NA	NLV	NLV	NLV	NLV	ID	3.7E+8 (DD)	NA
Ammonia	7664417	NA	ID	ID	(CC)	ID	ID	ID	ID	2.90E+09	ID	1.00E+07
t-Amyl methyl ether (TAME)	994058	NA	3,900	3,900	NA	1.10E+05	4.00E+05	7.80E+05	1.80E+06	1.80E+09	9.5E+7 (C)	4.40E+05
Aniline	62533	NA	1,100	4,400	330 (M); 80	NLV	NLV	NLV	NLV	2.90E+07	1.50E+06	4.50E+06
Anthracene	120127	NA	41,000	41,000	ID	1.0E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA
Antimony	7440360	NA	4,300	4,300	94,000 (X)	NLV	NLV	NLV	NLV	5.90E+06	6.70E+05	NA
Arsenic	7440382	5,800	4,600	4,600	4,600	NLV	NLV	NLV	NLV	9.10E+05	37,000	NA
Asbestos (BB)	1332214	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	1.0E+7 (M); 85,000	ID	NA
Atrazine	1912249	NA	60	60	150	NLV	NLV	NLV	NLV	ID	3.3E+5 (DD)	NA
Azobenzene	103333	NA	4,200	17,000	ID	3.20E+07	2.10E+06	2.10E+06	2.10E+06	1.30E+08	6.60E+05	NA

PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS/PART 213 RISK-BASED SCREENING LEVELS

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Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Levels	Residential Drinking Water Protection Criteria	Nonresidential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels
Barium (B)	7440393	75,000	1.30E+06	1.30E+06	(G)	NLV	NLV	NLV	NLV	1.50E+08	1.30E+08	NA
Benzene (I)	71432	NA	100	100	4,000 (X)	8,400	45,000	99,000	2.30E+05	4.70E+08	8.4E+5 (C)	4.00E+05
Benzidine	92875	NA	1,000 (M); 6.0	1,000 (M); 6.0	1,000 (M); 6.0	NLV	NLV	NLV	NLV	59,000	1,000 (M); 110	NA
Benzo(a)anthracene (Q)	56553	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	80,000	NA
Benzo(b)fluoranthene (Q)	205992	NA	NLL	NLL	NLL	ID	ID	ID	ID	ID	80,000	NA
Benzo(k)fluoranthene (Q)	207089	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	8.00E+05	NA
Benzo(g,h,i)perylene	191242	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	3.50E+08	7.00E+06	NA
Benzo(a)pyrene (Q)	50328	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	1.90E+06	8,000	NA
Benzoic acid	65850	NA	6.40E+05	1.80E+06	NA	NLV	NLV	NLV	NLV	ID	1.0E+9 (D)	NA
Benzyl alcohol	100516	NA	2.00E+05	5.80E+05	NA	NLV	NLV	NLV	NLV	1.50E+11	1.0E+9 (C,D)	5.80E+06
Benzyl chloride	100447	NA	150	640	NA	33,000	48,000	48,000	52,000	7.80E+07	2.20E+05	2.30E+05
Beryllium	7440417	NA	51,000	51,000	(G)	NLV	NLV	NLV	NLV	5.90E+05	1.60E+06	NA
bis(2-Chloroethoxy)ethane	112265	NA	ID	ID	ID	NLV	NLV	NLV	NLV	ID	ID	2.70E+06
bis(2-Chloroethyl)ether (I)	111444	NA	100	170	100 (M); 20	44,000	13,000	13,000	13,000	1.20E+07	58,000	2.20E+06
bis(2-Ethylhexyl)phthalate	117817	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	8.90E+08	1.2E+7 (C)	1.00E+07
Boron (B)	7440428	NA	10,000	10,000	1.4E+5 (X)	NLV	NLV	NLV	NLV	ID	3.5E+8 (DD)	NA
Bromate	15541454	NA	200	200	800 (X)	NLV	NLV	NLV	NLV	ID	91,000	NA
Bromobenzene (I)	108861	NA	550	1,500	NA	5.80E+05	5.40E+05	5.40E+05	5.40E+05	2.40E+08	1.7E+6 (C)	7.60E+05
Bromodichloromethane	75274	NA	1,600 (W)	1,600 (W)	ID	6,400	31,000	31,000	57,000	1.10E+08	4.90E+05	1.50E+06
Bromoform	75252	NA	1,600 (W)	1,600 (W)	ID	7.70E+05	3.10E+06	3.10E+06	3.10E+06	3.60E+09	3.8E+6 (C)	8.70E+05
Bromomethane	74839	NA	200	580	700	1,600	13,000	57,000	1.40E+05	1.50E+08	1.00E+06	2.20E+06
n-Butanol (I)	71363	NA	19,000	54,000	2.00E+05	NLV	NLV	NLV	NLV	1.00E+10	9.5E+7 (C)	8.70E+06
2-Butanone (MEK) (I)	78933	NA	2.60E+05	7.60E+05	44,000	9.9E+7 (C)	3.50E+07	3.50E+07	3.60E+07	2.90E+10	7.0E+8 (C,DD)	2.70E+07
n-Butyl acetate	123864	NA	11,000	32,000	NA	1.0E+8 (C)	1.40E+08	3.10E+08	3.50E+08	2.10E+11	5.5E+7 (C)	1.10E+06
t-Butyl alcohol	75650	NA	78,000	2.20E+05	NA	5.8E+8 (C)	1.20E+08	2.40E+08	2.40E+08	5.60E+10	3.9E+8 (C)	1.10E+08
Butyl benzyl phthalate	85687	NA	2.2E+6 (C)	5.0E+6 (C)	1.2E+5 (X)	NLV	NLV	NLV	NLV	2.10E+10	1.2E+8 (C)	3.10E+05
n-Butylbenzene	104518	NA	1,600	4,600	ID	ID	ID	ID	ID	8.80E+08	8.00E+06	1.00E+07

TABLE 3. SOIL: NONRESIDENTIAL

PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS/PART 213 RISK-BASED SCREENING LEVELS

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Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Levels	Residential Drinking Water Protection Criteria	Nonresidential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels
sec-Butylbenzene	135988	NA	1,600	4,600	ID	ID	ID	ID	ID	1.80E+08	8.00E+06	1.00E+07
t-Butylbenzene (I)	98066	NA	1,600	4,600	ID	ID	ID	ID	ID	2.90E+08	8.00E+06	1.00E+07
Cadmium (B)	7440439	1,200	6,000	6,000	(G,X)	NLV	NLV	NLV	NLV	2.20E+06	2.10E+06	NA
Camphene (I)	79925	NA	ID	ID	NA	6,700	1.80E+05	9.10E+05	2.20E+06	2.40E+09	ID	NA
Caprolactam	105602	NA	1.20E+05	3.40E+05	NA	NLV	NLV	NLV	NLV	2.90E+08	3.1E+8 (DD)	NA
Carbaryl	63252	NA	14,000	40,000	NA	ID	ID	ID	ID	ID	7.00E+07	NA
Carbazole	86748	NA	9,400	39,000	1,100	NLV	NLV	NLV	NLV	7.80E+07	2.40E+06	NA
Carbofuran	1563662	NA	800	800	NA	NLV	NLV	NLV	NLV	ID	3.60E+06	NA
Carbon disulfide (I,R)	75150	NA	16,000	46,000	ID	1.40E+05	1.60E+06	8.00E+06	1.90E+07	2.10E+10	4.3E+7 (C,DD)	2.80E+05
Carbon tetrachloride	56235	NA	100	100	900 (X)	990	12,000	34,000	79,000	1.70E+08	4.4E+5 (C)	3.90E+05
Chlordane (J)	57749	NA	NLL	NLL	NLL	5.90E+07	4.20E+06	4.20E+06	4.20E+06	2.10E+07	1.50E+05	NA
Chloride	16887006	NA	5.00E+06	5.00E+06	(X)	NLV	NLV	NLV	NLV	ID	5.0E+5 (F)	NA
Chlorobenzene (I)	108907	NA	2,000	2,000	500	2.20E+05	9.20E+05	1.10E+06	2.10E+06	2.10E+09	1.4E+7 (C)	2.60E+05
p-Chlorobenzene sulfonic acid	98668	NA	1.50E+05	4.20E+05	ID	ID	ID	ID	ID	ID	7.30E+08	ID
1-Chloro-1,1-difluoroethane	75683	NA	3.00E+05	8.80E+05	NA	5.4E+6 (C)	9.40E+07	5.70E+08	1.40E+09	1.50E+12	1.0E+9 (C,D)	9.60E+05
Chloroethane	75003	NA	8,600	34,000	22,000 (X)	5.3E+6 (C)	3.60E+07	1.20E+08	2.80E+08	2.90E+11	1.2E+7 (C)	9.50E+05
2-Chloroethyl vinyl ether	110758	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	1.90E+06
Chloroform	67663	NA	1,600 (W)	1,600 (W)	7,000	38,000	1.50E+05	3.40E+05	7.90E+05	1.60E+09	5.5E+6 (C)	1.50E+06
Chloromethane (I)	74873	NA	5,200	22,000	ID	10,000	1.20E+05	1.00E+06	2.50E+06	2.60E+09	7.4E+6 (C)	1.10E+06
4-Chloro-3-methylphenol	59507	NA	5,800	16,000	280	NLV	NLV	NLV	NLV	ID	1.50E+07	NA
beta-Chloronaphthalene	91587	NA	6.20E+05	1.80E+06	NA	ID	ID	ID	ID	ID	1.80E+08	NA
2-Chlorophenol	95578	NA	900	2,600	360	8.00E+05	1.10E+06	1.10E+06	1.10E+06	5.30E+08	4.50E+06	1.90E+07
o-Chlorotoluene (I)	95498	NA	3,300	9,300	ID	5.00E+05	1.50E+06	3.10E+06	6.40E+06	2.10E+09	1.5E+7 (C)	5.00E+05
Chlorpyrifos	2921882	NA	17,000	48,000	1,500	240	5,500	23,000	56,000	5.90E+07	3.40E+07	NA
Chromium (III) (B,H)	16065831	18,000 (total)	1.0E+9 (D)	1.0E+9 (D)	(G,X)	NLV	NLV	NLV	NLV	1.50E+08	1.0E+9 (D)	NA
Chromium (VI)	18540299	NA	30,000	30,000	3,300	NLV	NLV	NLV	NLV	2.40E+05	9.20E+06	NA
Chrysene (Q)	218019	NA	NLL	NLL	NLL	ID	ID	ID	ID	ID	8.00E+06	NA

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			Groundwater Protection			Indoor Air	Ambient Air (Y) (C)				Contact	Csat
Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Levels	Residential Drinking Water Protection Criteria	Nonresidential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels
Cobalt	7440484	6,800	800	2,000	2,000	NLV	NLV	NLV	NLV	5.90E+06	9.00E+06	NA
Copper (B)	7440508	32,000	5.80E+06	5.80E+06	(G)	NLV	NLV	NLV	NLV	5.90E+07	7.30E+07	NA
Cyanazine	21725462	NA	200	200	1,100 (X)	NLV	NLV	NLV	NLV	ID	66,000	NA
Cyanide (P,R)	57125	390 (total)	4,000	4,000	100	NLV	NLV	NLV	NLV	2.50E+05	2.50E+05	NA
Cyclohexanone	108941	NA	5.20E+06	1.50E+07	NA	32,000	1.30E+06	1.10E+07	2.70E+07	2.90E+10	1.0E+9 (C,D)	2.20E+08
Dacthal	1861321	NA	50,000	1.40E+05	NA	NLV	NLV	NLV	NLV	ID	7.30E+06	NA
Dalapon	75990	NA	4,000	4,000	NA	NLV	NLV	NLV	NLV	ID	6.2E+7 (C)	5.90E+07
4-4'-DDD	72548	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	5.60E+07	4.00E+05	NA
4-4'-DDE	72559	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	4.00E+07	1.90E+05	NA
4-4'-DDT	50293	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	4.00E+07	2.80E+05	NA
Decabromodiphenyl ether	1163195	NA	1.40E+05	1.40E+05	NA	1.0E+9 (D)	1.00E+08	1.00E+08	1.00E+08	1.00E+09	1.10E+07	NA
Di-n-butyl phthalate	84742	NA	9.6E+5 (C)	2.7E+6 (C)	11,000	NLV	NLV	NLV	NLV	1.50E+09	8.7E+7 (C)	7.60E+05
Di(2-ethylhexyl) adipate	103231	NA	1.3E+7 (C)	1.3E+7 (C)	ID	NLV	NLV	NLV	NLV	1.20E+10	6.3E+7 (C,DD)	9.60E+05
Di-n-octyl phthalate	117840	NA	1.00E+08	2.9E+8 (C)	ID	NLV	NLV	NLV	NLV	1.40E+10	2.00E+07	1.40E+08
Diacetone alcohol (I)	123422	NA	ID	ID	NA	NLV	NLV	NLV	NLV	7.10E+10	ID	1.10E+08
Diazinon	333415	NA	95	280	72	NLV	NLV	NLV	NLV	ID	70,000 (DD)	3.10E+05
Dibenzo(a,h)anthracene (Q)	53703	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	8,000	NA
Dibenzofuran	132649	NA	ID	ID	1,700	3.60E+06	1.60E+05	1.60E+05	1.60E+05	2.90E+06	ID	NA
Dibromochloromethane	124481	NA	1,600 (W)	1,600 (W)	ID	21,000	80,000	80,000	98,000	1.60E+08	5.00E+05	6.10E+05
Dibromochloropropane	96128	NA	10 (M); 4.0	10 (M); 4.0	ID	1,200	900	900	900	7.00E+05	20,000 (C)	1,200
Dibromomethane	74953	NA	1,600	4,600	NA	ID	ID	ID	ID	ID	8.0E+6 (C)	2.00E+06
Dicamba	1918009	NA	4,400	13,000	NA	NLV	NLV	NLV	NLV	ID	1.70E+07	NA
1,2-Dichlorobenzene	95501	NA	14,000	14,000	280	2.0E+7 (C)	4.60E+07	4.60E+07	5.50E+07	4.40E+10	6.3E+7 (C)	2.10E+05
1,3-Dichlorobenzene	541731	NA	170	480	680	48,000	94,000	94,000	1.10E+05	8.80E+07	6.6E+5 (C)	1.70E+05
1,4-Dichlorobenzene	106467	NA	1,700	1,700	360	1.00E+05	2.60E+05	2.60E+05	3.40E+05	5.70E+08	1.90E+06	NA
3,3'-Dichlorobenzidine	91941	NA	2,000 (M); 28	2,000 (M); 110	2,000 (M); 7.4	NLV	NLV	NLV	NLV	8.20E+06	30,000	NA
Dichlorodifluoromethane	75718	NA	95,000	2.70E+05	ID	1.70E+06	6.30E+07	5.50E+08	1.40E+09	1.50E+12	1.7E+8 (C)	1.00E+06

TABLE 3. SOIL: NONRESIDENTIAL

PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS/PART 213 RISK-BASED SCREENING LEVELS

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1,1-Dichloroethane	75343	NA	18,000	50,000	15,000	4.30E+05	2.50E+06	6.00E+06	1.40E+07	1.50E+10	8.7E+7 (C)	8.90E+05
1,2-Dichloroethane (I)	107062	NA	100	100	7,200 (X)	11,000	21,000	33,000	74,000	1.50E+08	4.20E+05	1.20E+06
1,1-Dichloroethylene (I)	75354	NA	140	140	2,600	330	3,700	15,000	37,000	7.80E+07	6.6E+5 (C)	5.70E+05
cis-1,2-Dichloroethylene	156592	NA	1,400	1,400	12,000	41,000	2.10E+05	4.30E+05	1.00E+06	1.00E+09	8.0E+6 (C)	6.40E+05
trans-1,2-Dichloroethylene	156605	NA	2,000	2,000	30,000 (X)	43,000	3.30E+05	8.40E+05	2.00E+06	2.10E+09	1.2E+7 (C)	1.40E+06
2,6-Dichloro-4-nitroaniline	99309	NA	44,000	1.30E+05	NA	NLV	NLV	NLV	NLV	ID	2.20E+08	NA
2,4-Dichlorophenol	120832	NA	1,500	4,200	330 (M); 220	NLV	NLV	NLV	NLV	2.30E+09	3.9E+6 (C,DD)	1.80E+06
2,4-Dichlorophenoxyacetic acid	94757	NA	1,400	1,400	4,400	NLV	NLV	NLV	NLV	2.90E+09	8.60E+06	NA
1,2-Dichloropropane (I)	78875	NA	100	100	4,600 (X)	7,400	30,000	51,000	1.20E+05	1.20E+08	6.6E+5 (C)	5.50E+05
1,3-Dichloropropene	542756	NA	170	700	180 (X)	5,400	60,000	2.00E+05	4.70E+05	5.90E+08	2.40E+05	6.20E+05
Dichlorovos	62737	NA	50 (M); 32	130	NA	NLV	NLV	NLV	NLV	1.50E+07	47,000	2.20E+06
Dicyclohexyl phthalate	84617	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	NA
Dieldrin	60571	NA	NLL	NLL	NLL	7.20E+05	64,000	64,000	64,000	8.50E+05	4,700	NA
Diethyl ether	60297	NA	200	200	ID	5.2E+7 (C)	1.00E+08	1.60E+08	3.50E+08	3.50E+11	3.6E+8 (C)	7.40E+06
Diethyl phthalate	84662	NA	1.10E+05	3.20E+05	2,200	NLV	NLV	NLV	NLV	1.50E+09	5.5E+8 (C)	7.40E+05
Diethylene glycol monobutyl ether	112345	NA	1,800	5,000	NA	NLV	NLV	NLV	NLV	5.90E+08	8.70E+06	1.10E+08
Diisopropyl ether	108203	NA	600	1,700 (C)	ID	1.2E+6 (C)	3.20E+06	4.80E+06	1.00E+07	1.10E+10	3.0E+6 (C)	1,300
Diisopropylamine (I)	108189	NA	110	320	NA	1.0E+7 (C)	7.40E+06	7.40E+06	7.70E+06	5.90E+09	5.60E+05	6.70E+06
Dimethyl phthalate	131113	NA	1.5E+6 (C)	4.2E+6 (C)	NA	NLV	NLV	NLV	NLV	1.50E+09	1.0E+9 (C,D)	7.90E+05
N,N-Dimethylacetamide	127195	NA	3,600	10,000	82,000 (X)	NLV	NLV	NLV	NLV	ID	1.80E+07	1.10E+08
N,N-Dimethylaniline	121697	NA	320	920	NA	8.9E+5 (C)	5.20E+05	5.20E+05	5.20E+05	3.30E+08	1.6E+6 (C)	8.00E+05
Dimethylformamide (I)	68122	NA	14,000	40,000	NA	NLV	NLV	NLV	NLV	8.80E+08	7.00E+07	1.10E+08
2,4-Dimethylphenol	105679	NA	7,400	20,000	7,600	NLV	NLV	NLV	NLV	2.10E+09	3.60E+07	NA
2,6-Dimethylphenol	576261	NA	330 (M); 88	330 (M); 260	NA	NLV	NLV	NLV	NLV	5.90E+07	4.40E+05	NA
3,4-Dimethylphenol	95658	NA	330 (M); 200	580	500	NLV	NLV	NLV	NLV	1.00E+08	1.00E+06	NA
Dimethylsulfoxide	67685	NA	4.40E+06	1.30E+07	3.80E+06	NLV	NLV	NLV	NLV	5.90E+08	1.0E+9 (C,D)	1.80E+07
2,4-Dinitrotoluene	121142	NA	430	640	NA	NLV	NLV	NLV	NLV	2.00E+07	2.20E+05	NA

PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS/PART 213 RISK-BASED SCREENING LEVELS

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			Groundwater Protection			Indoor Air	Ambient Air (Y) (C)				Contact	Csat
Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Levels	Residential Drinking Water Protection Criteria	Nonresidential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels
Dinoseb	88857	NA	300	300	200 (M); 43	NLV	NLV	NLV	NLV	1.20E+08	3.9E+5 (C,DD)	1.40E+05
1,4-Dioxane (I)	123911	NA	1,700	7,000	56,000 (X)	NLV	NLV	NLV	NLV	7.10E+08	2.40E+06	9.70E+07
Diquat	85007	NA	400	400	400	NLV	NLV	NLV	NLV	ID	1.60E+06	NA
Diuron	330541	NA	620	1,800	NA	NLV	NLV	NLV	NLV	2.10E+08	3.10E+06	NA
Endosulfan (J)	115297	NA	NLL	NLL	NLL	ID	ID	ID	ID	ID	4.40E+06	NA
Endothall	145733	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	1.00E+09	1.20E+07	NA
Endrin	72208	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	1.90E+05	NA
Epichlorohydrin (I)	106898	NA	100	100	NA	1.20E+05	37,000	37,000	37,000	2.90E+07	41,000	7.30E+06
Ethanol (I)	64175	NA	3.80E+07	7.60E+07	ID	NLV	NLV	NLV	NLV	5.60E+11	1.0E+9 (C,D,DDD)	1.10E+08
Ethyl acetate (I)	141786	NA	1.30E+05	3.80E+05	NA	7.0E+7 (C)	5.90E+07	5.90E+07	1.00E+08	9.40E+10	6.6E+8 (C)	7.50E+06
Ethyl-tert-butyl ether (ETBE)	637923	NA	980	980	ID	1.7E+6 (C)	2.30E+06	4.60E+06	1.10E+07	1.10E+10	ID	6.50E+05
Ethylbenzene (I)	100414	NA	1,500	1,500	360	4.6E+5 (C)	2.40E+06	3.10E+06	6.50E+06	1.30E+10	7.1E+7 (C)	1.40E+05
Ethylene dibromide	106934	NA	20 (M); 1.0	20 (M); 1.0	110 (X)	3,600	5,800	5,800	9,800	1.80E+07	430	8.90E+05
Ethylene glycol	107211	NA	3.00E+05	8.40E+05	3.8E+6 (X)	NLV	NLV	NLV	NLV	2.90E+10	1.0E+9 (C,D)	1.10E+08
Ethylene glycol monobutyl ether	111762	NA	74,000	2.00E+05	NA	1.40E+06	2.10E+07	1.50E+08	3.60E+08	3.80E+11	3.6E+8 (C)	4.10E+07
Fluoranthene	206440	NA	7.30E+05	7.30E+05	5,500	1.0E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA
Fluorene	86737	NA	3.90E+05	8.90E+05	5,300	1.0E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA
Fluorine (soluble fluoride) (B)	7782414	NA	40,000	40,000	ID	NLV	NLV	NLV	NLV	ID	6.7E+7 (DD)	NA
Formaldehyde	50000	NA	26,000	76,000	2,400	65,000	43,000	69,000	1.50E+05	2.60E+08	1.3E+8 (C)	6.00E+07
Formic acid (I,U)	64186	NA	2.00E+05	5.80E+05	ID	2.80E+06	2.60E+05	1.60E+05	1.60E+05	5.90E+07	1.0E+9 (C,D)	1.10E+08
1-Formylpiperidine	2591868	NA	1,600	4,600	NA	ID	ID	ID	ID	ID	8.00E+06	1.00E+07
Gentian violet	548629	NA	300	1,300	NA	NLV	NLV	NLV	NLV	ID	4.40E+05	NA
Glyphosate	1071836	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	5.7E+7 (DD)	NA
Heptachlor	76448	NA	NLL	NLL	NLL	1.90E+06	2.10E+05	2.10E+05	2.10E+05	3.00E+06	23,000	NA
Heptachlor epoxide	1024573	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	1.50E+06	9,500	NA
n-Heptane	142825	NA	4.6E+7 (C)	1.3E+8 (C)	NA	2.7E+6 (C)	2.50E+07	4.50E+07	1.00E+08	1.00E+11	1.0E+9 (C,D)	2.40E+05

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Hexabromobenzene	87821	NA	5,400	5,400	ID	ID	ID	ID	ID	ID	3.10E+06	NA
Hexachlorobenzene (C-66)	118741	NA	1,800	1,800	350	2.20E+05	56,000	56,000	56,000	8.50E+06	37,000	NA
Hexachlorobutadiene (C-46)	87683	NA	26,000	72,000	91	7.1E+5 (C)	4.60E+05	4.60E+05	4.60E+05	1.80E+08	4.7E+5 (C)	3.50E+05
alpha-Hexachlorocyclohexane	319846	NA	18	71	ID	1.60E+05	41,000	86,000	86,000	2.10E+06	12,000	NA
beta-Hexachlorocyclohexane	319857	NA	37	150	ID	NLV	NLV	NLV	NLV	7.40E+06	25,000	NA
Hexachlorocyclopentadiene (C-56)	77474	NA	3.20E+05	3.20E+05	ID	56,000	60,000	60,000	60,000	5.90E+06	6.7E+6 (C)	7.20E+05
Hexachloroethane	67721	NA	430	1,200	1,800 (X)	79,000	6.60E+05	1.40E+06	1.40E+06	1.00E+08	7.30E+05	NA
n-Hexane	110543	NA	1.8E+5 (C)	5.1E+5 (C)	NA	9.5E+5 (C)	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C)	44,000
2-Hexanone	591786	NA	20,000	58,000	ID	1.80E+06	1.30E+06	1.30E+06	1.50E+06	1.20E+09	1.0E+8 (C)	2.50E+06
Indeno(1,2,3-cd)pyrene (Q)	193395	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	80,000	NA
Iron (B)	7439896	1.20E+07	6,000	6,000	NA	NLV	NLV	NLV	NLV	ID	5.80E+08	NA
Isobutyl alcohol (I)	78831	NA	46,000	1.30E+05	NA	4.3E+8 (C)	9.50E+07	9.50E+07	9.50E+07	4.40E+10	2.3E+8 (C)	8.90E+06
Isophorone	78591	NA	15,000	62,000	26,000 (X)	NLV	NLV	NLV	NLV	8.20E+09	2.2E+7 (C)	2.40E+06
Isopropyl alcohol (I)	67630	NA	9,400	26,000	1.1E+6 (X)	NLV	NLV	NLV	NLV	6.50E+09	4.70E+07	1.10E+08
Isopropyl benzene	98828	NA	91,000	2.60E+05	3,200	7.3E+5 (C)	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C)	3.90E+05
Lead (B)	7439921	21,000	7.00E+05	7.00E+05	(G,X)	NLV	NLV	NLV	NLV	4.40E+07	9.0E+5 (DD)	NA
Lindane	58899	NA	20 (M); 7.0	20 (M); 7.0	20 (M); 1.1	ID	ID	ID	ID	ID	42,000	NA
Lithium (B)	7439932	9,800	3,400	7,000	8,800	NLV	NLV	NLV	NLV	1.00E+09	3.1E+7 (DD)	NA
Magnesium (B)	7439954	NA	8.00E+06	2.20E+07	NA	NLV	NLV	NLV	NLV	2.90E+09	1.0E+9 (D)	NA
Manganese (B)	7439965	4.40E+05	1,000	1,000	(G,X)	NLV	NLV	NLV	NLV	1.50E+06	9.00E+07	NA
Mercury (Total) (B,Z)	Varies	130	1,700	1,700	50 (M); 1.2	89,000	62,000	62,000	62,000	8.80E+06	5.80E+05	NA
Methane	74828	NA	ID	ID	NA	8.4E+6 ug/m^3 (GG)	ID	ID	ID	ID	ID	ID
Methanol	67561	NA	74,000	2.00E+05	1.2E+7 (C)	6.7E+7 (C)	3.70E+07	4.60E+07	9.70E+07	9.60E+10	3.6E+8 (C)	3.10E+06
Methoxychlor	72435	NA	16,000	16,000	NA	ID	ID	ID	ID	ID	5.60E+06	NA
2-Methoxyethanol (I)	109864	NA	150	420	NA	NLV	NLV	NLV	NLV	5.90E+08	7.30E+05	1.10E+08
2-Methyl-4-chlorophenoxyacetic acid	94746	NA	390	1,100	NA	NLV	NLV	NLV	NLV	ID	7.30E+05	NA
2-Methyl-4,6-dinitrophenol	534521	NA	830 (M); 400	830 (M); 400	NA	NLV	NLV	NLV	NLV	5.90E+07	2.60E+05	NA

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Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Levels	Residential Drinking Water Protection Criteria	Nonresidential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels
N-Methyl-morpholine (I)	109024	NA	400	1,100	NA	NLV	NLV	NLV	NLV	ID	2.00E+06	1.10E+08
Methyl parathion	298000	NA	46	130	NA	NLV	NLV	NLV	NLV	ID	1.80E+05	NA
4-Methyl-2-pentanone (MIBK) (I)	108101	NA	36,000	1.00E+05	ID	6.9E+7 (C)	5.30E+07	5.30E+07	7.00E+07	6.00E+10	1.8E+8 (C)	2.70E+06
Methyl-tert-butyl ether (MTBE)	1634044	NA	800	800	1.4E+5 (X)	1.8E+7 (C)	3.00E+07	4.10E+07	8.90E+07	8.80E+10	7.1E+6 (C)	5.90E+06
Methylcyclopentane (I)	96377	NA	ID	ID	NA	1.70E+05	2.80E+06	8.30E+06	2.00E+07	2.10E+10	ID	3.50E+05
4,4'-Methylene-bis-2-chloroaniline	101144	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	1.10E+08	32,000	NA
Methylene chloride	75092	NA	100	100	30,000 (X)	2.40E+05	7.00E+05	1.70E+06	4.00E+06	8.30E+09	5.8E+6 (C)	2.30E+06
2-Methylnaphthalene	91576	NA	57,000	1.70E+05	4,200	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA
Methylphenols (J)	1319773	NA	7,400	20,000	1,000 (M); 600	NLV	NLV	NLV	NLV	2.90E+09	3.60E+07	NA
Metolachlor	51218452	NA	4,800	20,000	300	NLV	NLV	NLV	NLV	ID	6.9E+6 (C,DD)	4.40E+05
Metribuzin	21087649	NA	3,600	10,000	NA	ID	ID	ID	ID	ID	2.80E+07	NA
Mirex	2385855	NA	NLL	NLL	NLL	ID	ID	ID	ID	ID	40,000	NA
Molybdenum (B)	7439987	NA	1,500	4,200	64,000 (X)	NLV	NLV	NLV	NLV	ID	9.60E+06	NA
Naphthalene	91203	NA	35,000	1.00E+05	730	4.70E+05	3.50E+05	3.50E+05	3.50E+05	8.80E+07	5.20E+07	NA
Nickel (B)	7440020	20,000	1.00E+05	1.00E+05	(G)	NLV	NLV	NLV	NLV	1.60E+07	1.50E+08	NA
Nitrate (B,N)	14797558	NA	2.0E+5 (N)	2.0E+5 (N)	ID	NLV	NLV	NLV	NLV	ID	ID	NA
Nitrite (B,N)	14797650	NA	20,000 (N)	20,000 (N)	NA	NLV	NLV	NLV	NLV	ID	ID	NA
Nitrobenzene (I)	98953	NA	330 (M); 68	330 (M); 190	3,600 (X)	1.70E+05	64,000	64,000	64,000	2.10E+07	3.40E+05	4.90E+05
2-Nitrophenol	88755	NA	400	1,200	ID	NLV	NLV	NLV	NLV	ID	2.00E+06	NA
n-Nitroso-di-n-propylamine	621647	NA	330 (M); 100	330 (M); 100	NA	NLV	NLV	NLV	NLV	2.00E+06	5,400	1.50E+06
N-Nitrosodiphenylamine	86306	NA	5,400	22,000	NA	NLV	NLV	NLV	NLV	2.80E+09	7.80E+06	NA
Oxamyl	23135220	NA	4,000	4,000	NA	NLV	NLV	NLV	NLV	ID	2.80E+07	NA
Oxo-hexyl acetate	88230357	NA	1,500	4,200	NA	ID	ID	ID	ID	2.40E+09	7.30E+06	1.00E+07
Pendimethalin	40487421	NA	1.10E+06	1.10E+06	NA	NLV	NLV	NLV	NLV	ID	1.30E+08	NA
Pentachlorobenzene	608935	NA	29,000	81,000	9,500	ID	ID	ID	ID	ID	9.3E+5 (C)	1.90E+05
Pentachloronitrobenzene	82688	NA	37,000	37,000	NA	2.20E+05	2.80E+05	2.80E+05	2.80E+05	1.50E+08	5.50E+06	NA

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Pentachlorophenol	87865	NA	22	22	(G,X)	NLV	NLV	NLV	NLV	1.30E+08	3.20E+05	NA
Pentane	109660	NA	ID	ID	NA	1.80E+05	4.40E+07	3.40E+08	6.00E+08	5.30E+11	ID	2.40E+05
2-Pentene (I)	109682	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	2.20E+05
Phenanthrene	85018	NA	56,000	1.60E+05	2,100	5.10E+06	1.90E+05	1.90E+05	1.90E+05	2.90E+06	5.20E+06	NA
Phenol	108952	NA	88,000	2.60E+05	9,000	NLV	NLV	NLV	NLV	1.80E+10	2.3E+8 (C,DD)	1.20E+07
Phenytoin	57410	NA	830	3300	4300 (X)	NLV	NLV	NLV	NLV	2.80E+08	4.80E+05	NA
Phosphorus (Total)	7723140	NA	1.30E+06	4.80E+06	(EE)	NLV	NLV	NLV	NLV	2.90E+07	1.0E+9 (D)	NA
Phthalic acid	88993	NA	2.80E+05	8.00E+05	NA	NLV	NLV	NLV	NLV	ID	1.0E+9 (C,D)	1.70E+06
Phthalic anhydride	85449	NA	3.00E+05	8.80E+05	NA	NLV	NLV	NLV	NLV	ID	1.0E+9 (C,D)	1.10E+06
Picloram	1918021	NA	10,000	10,000	920	NLV	NLV	NLV	NLV	ID	5.10E+07	NA
Piperidine	110894	NA	64	180	NA	NLV	NLV	NLV	NLV	4.10E+09	3.20E+05	1.20E+08
Polybrominated biphenyls (J)	67774327	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	ID	4,800	NA
Polychlorinated biphenyls (PCBs) (J,T)	1336363	NA	NLL	NLL	NLL	1.60E+07	8.10E+05	2.80E+07	2.80E+07	6.50E+06	(T)	NA
Prometon	1610180	NA	4,900	14,000	NA	NLV	NLV	NLV	NLV	ID	1.60E+07	NA
Propachlor	1918167	NA	1,900	5,400	NA	NLV	NLV	NLV	NLV	ID	9.50E+06	NA
Propazine	139402	NA	4,000	11,000	NA	NLV	NLV	NLV	NLV	ID	2.00E+07	NA
Propionic acid	79094	NA	2.40E+05	7.00E+05	ID	NLV	NLV	NLV	NLV	8.80E+09	1.0E+9 (C,D)	1.10E+08
Propyl alcohol (I)	71238	NA	28,000	80,000	NA	NLV	NLV	NLV	NLV	2.10E+10	7.4E+7 (DD)	1.10E+08
n-Propylbenzene (I)	103651	NA	1,600	4,600	ID	ID	ID	ID	ID	5.90E+08	8.00E+06	1.00E+07
Propylene glycol	57556	NA	3.00E+06	8.40E+06	5.80E+06	NLV	NLV	NLV	NLV	1.80E+11	1.0E+9 (C,D)	1.10E+08
Pyrene	129000	NA	4.80E+05	4.80E+05	ID	1.0E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA
Pyridine (I)	110861	NA	400	420	NA	2,000	9,800	40,000	97,000	1.00E+08	7.3E+5 (C)	37,000
Selenium (B)	7782492	410	4,000	4,000	400	NLV	NLV	NLV	NLV	5.90E+07	9.60E+06	NA
Silver (B)	7440224	1,000	4,500	13,000	100 (M); 27	NLV	NLV	NLV	NLV	2.90E+06	9.00E+06	NA
Silvex (2,4,5-TP)	93721	NA	3,600	3,600	2,200	NLV	NLV	NLV	NLV	ID	5.50E+06	NA
Simazine	122349	NA	80	80	340	NLV	NLV	NLV	NLV	ID	3.80E+06	NA
Sodium	17341252	NA	4.60E+06	7.00E+06	NA	NLV	NLV	NLV	NLV	ID	1.0E+9 (D)	NA

TABLE 3. SOIL: RESIDENTIAL

PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS/PART 213 RISK-BASED SCREENING LEVELS

All criteria, unless otherwise noted, are expressed in units of parts per billion (ppb). One ppb is equivalent to 1 microgram per kilogram (ug/kg). Criteria with 6 or more digits are expressed in scientific notation. For example, 200,000 is presented as 2.0E+5. 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 (§324.20120a(10)). In these cases, 2 numbers are present in the cell. The first number is the criterion (i.e., TDL), and the second number is the risk-based value.

			Groundwater Protection			Indoor Air	Ambient Air (Y) (C)				Contact	Csat
Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Levels	Residential Drinking Water Protection Criteria	Nonresidential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels
Sodium azide	26628228	NA	1,800	5,000	1,000	ID	ID	ID	ID	ID	8.70E+06	NA
Strontium (B)	7440246	NA	92,000	2.60E+05	4.20E+05	NLV	NLV	NLV	NLV	ID	1.0E+9 (D)	NA
Styrene	100425	NA	2,700	2,700	2,100 (X)	1.3E+6 (C)	3.30E+06	3.30E+06	4.20E+06	6.90E+09	1.9E+6 (C)	5.20E+05
Sulfate	14808798	NA	5.00E+06	5.00E+06	NA	NLV	NLV	NLV	NLV	ID	ID	NA
Tebuthiuron	34014181	NA	10,000	30,000	NA	NLV	NLV	NLV	NLV	ID	2.7E+7 (DD)	NA
2,3,7,8-Tetrabromodibenzo-p-dioxin (O)	50585416	NA	NLL	NLL	NLL	NLV	NLV	NLV	NLV	(O)	(O)	NA
1,2,4,5-Tetrachlorobenzene	95943	NA	1.50E+06	1.50E+06	3,400 (X)	1.10E+06	2.70E+05	2.70E+05	2.70E+05	2.90E+07	2.50E+08	NA
2,3,7,8-Tetrachlorodibenzo-p-dioxin (O)	1746016	NA	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	33,000	1.20E+05	2.10E+05	3.30E+05	5.30E+08	2.2E+6 (C)	4.40E+05
1,1,2,2-Tetrachloroethane	79345	NA	170	700	1,600 (X)	23,000	34,000	34,000	34,000	6.80E+07	2.40E+05	8.70E+05
Tetrachloroethylene	127184	NA	100	100	1,200 (X)	21,000	2.10E+05	4.90E+05	1.10E+06	1.20E+09	9.3E+5 (C)	88,000
Tetrahydrofuran	109999	NA	1,900	5,400	2.2E+5 (X)	2.40E+06	1.50E+07	6.70E+07	1.60E+08	1.70E+11	9.50E+06	1.20E+08
Tetranitromethane	509148	NA	ID	ID	NA	600	500 (M); 180	ID	ID	2.60E+05	ID	ID
Thallium (B)	7440280	NA	2,300	2,300	4,200 (X)	NLV	NLV	NLV	NLV	5.90E+06	1.30E+05	NA
Toluene (I)	108883	NA	16,000	16,000	5,400	6.1E+5 (C)	3.30E+06	3.60E+07	3.60E+07	1.20E+10	1.6E+8 (C)	2.50E+05
p-Toluidine	106490	NA	660 (M); 300	1,200	NA	NLV	NLV	NLV	NLV	1.30E+08	4.30E+05	1.20E+06
Toxaphene	8001352	NA	24,000	24,000	8,200	NLV	NLV	NLV	NLV	1.20E+07	85,000	NA
Triallate	2303175	NA	95,000	2.7E+5 (C)	NA	ID	ID	ID	ID	ID	9.5E+6 (C)	2.50E+05
Tributylamine	102829	NA	7,800	23,000	ID	1.10E+06	7.20E+05	7.20E+05	7.20E+05	2.10E+08	2.60E+06	3.70E+06
1,2,4-Trichlorobenzene	120821	NA	4,200	4,200	5,900 (X)	1.8E+7 (C)	3.40E+07	3.40E+07	3.40E+07	1.10E+10	5.8E+6 (C,DD)	1.10E+06
1,1,1-Trichloroethane	71556	NA	4,000	4,000	1,800	4.60E+05	4.50E+06	1.50E+07	3.10E+07	2.90E+10	1.0E+9 (C,D)	4.60E+05
1,1,2-Trichloroethane	79005	NA	100	100	6,600 (X)	24,000	57,000	57,000	1.20E+05	2.50E+08	8.40E+05	9.20E+05
Trichloroethylene	79016	NA	100	100	4,000 (X)	1,900	14,000	25,000	58,000	5.90E+07	6.6E+5 (C,DD)	5.00E+05
Trichlorofluoromethane	75694	NA	52,000	1.50E+05	NA	5.1E+6(C)	1.10E+08	1.40E+11	1.40E+11	1.70E+12	2.6E+8 (C)	5.60E+05
2,4,5-Trichlorophenol	95954	NA	39,000	1.10E+05	NA	NLV	NLV	NLV	NLV	1.00E+10	7.30E+07	NA
2,4,6-Trichlorophenol	88062	NA	2,400	9,400	330 (M); 100	NLV	NLV	NLV	NLV	1.30E+09	3.30E+06	NA

PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS/PART 213 RISK-BASED SCREENING LEVELS

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1,2,3-Trichloropropane	96184	NA	840	2,400	NA	7,500	11,000	11,000	12,000	8.80E+06	4.2E+6 (C)	8.30E+05
1,1,2-Trichloro-1,2,2-trifluoroethane	76131	NA	9.0E+6 (C)	9.0E+6 (C)	1,700	9.3E+6 (C)	2.10E+08	8.90E+08	2.10E+09	2.30E+12	1.0E+9 (C,D)	5.50E+05
Triethanolamine	102716	NA	74,000	2.00E+05	NA	NLV	NLV	NLV	NLV	1.50E+09	3.6E+8 (C)	1.10E+08
Triethylene glycol	112276	NA	86,000	2.4E+5 (C)	NA	NLV	NLV	NLV	NLV	ID	2.3E+8 (C,DD)	1.10E+05
3-Trifluoromethyl-4-nitrophenol	88302	NA	1.10E+05	3.10E+05	NA	NLV	NLV	NLV	NLV	ID	2.4E+8 (DD)	NA
Trifluralin	1582098	NA	1.90E+05	5.70E+05	NA	ID	ID	ID	ID	ID	5.70E+06	NA
2,2,4-Trimethyl pentane	540841	NA	ID	ID	NA	2.0E+5 (C)	6.30E+06	4.00E+07	9.60E+07	1.00E+11	ID	19,000
2,4,4-Trimethyl-2-pentene (I)	107404	NA	ID	ID	NA	ID	ID	ID	ID	ID	ID	56,000
1,2,4-Trimethylbenzene (I)	95636	NA	2,100	2,100	570	8.0E+6 (C)	2.50E+07	6.00E+08	6.00E+08	3.60E+10	1.0E+8 (C)	1.10E+05
1,3,5-Trimethylbenzene (I)	108678	NA	1,800	1,800	1,100	4.8E+6 (C)	1.90E+07	4.60E+08	4.60E+08	3.60E+10	1.0E+8 (C)	94,000
Triphenyl phosphate	115866	NA	1.5E+6 (C)	1.8E+6 (C)	NA	NLV	NLV	NLV	NLV	ID	1.2E+8 (C)	1.10E+05
tris(2,3-Dibromopropyl)phosphate	126727	NA	930	930	ID	4.3E+5 (C)	60,000	60,000	60,000	7.40E+06	20,000	27,000
Urea	57136	NA	ID	ID	NA	NLV	NLV	NLV	NLV	ID	ID	NA
Vanadium	7440622	NA	72,000	9.90E+05	4.30E+05	NLV	NLV	NLV	NLV	ID	5.5E+6 (DD)	NA
Vinyl acetate (I)	108054	NA	13,000	36,000	NA	1.50E+06	2.00E+06	2.70E+06	5.90E+06	5.90E+09	3.4E+7 (C,DD)	2.40E+06
Vinyl chloride	75014	NA	40	40	260 (X)	2,800	29,000	1.70E+05	4.20E+05	8.90E+08	34,000	4.90E+05
White phosphorus (R)	12185103	NA	2.2	6	NA	NLV	NLV	NLV	NLV	ID	17,000 (DD)	NA
Xylenes (I)	1330207	NA	5,600	5,600	820	1.2E+7 (C)	5.40E+07	6.50E+07	1.30E+08	1.30E+11	1.0E+9 (C,D)	1.50E+05
Zinc (B)	7440666	47,000	2.40E+06	5.00E+06	(G)	NLV	NLV	NLV	NLV	ID	6.30E+08	NA

DEQ

R 299.49 FOOTNOTES FOR GENERIC CLEANUP CRITERIA TABLES
Cleanup Criteria Requirements for Response Activity (formerly the Part 201 Generic Cleanup Criteria and Screening Levels)

Effective Date December 30, 2013

COVER PAGE

R 299.49 Footnotes for generic cleanup criteria tables.

Rule 49. (1) The footnotes that apply to the generic criteria tables in R 299.44, R 299.46, and R 299.48 are as follows:

(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 299.1(b), may be substituted if higher than the calculated cleanup criterion. Background levels may be less than criteria for some inorganic compounds.

(C) The criterion developed under R 299.20 to R 299.26 exceeds the chemical-specific soil saturation screening level (C_{sat}). The person proposing or implementing response activity shall document whether additional response activity is required to control free-phase liquids or NAPL to protect against risks associated with free-phase liquids by using methods appropriate for the free-phase liquids present. Development of a site-specific C_{sat} or methods presented in R 299.22, R 299.24(5), and R 299.26(8) may be conducted for the relevant exposure pathways.

(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(9) 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) and 20120b 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 299.14 to R 299.26. 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) and 20120b 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. See Footnote (C).

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) Use 10,000 ug/l where groundwater enters a structure through the use of a water well, sump or other device. Use 28,000 ug/l for all other uses.

(BB) The state drinking water standard for asbestos (fibers greater than 10 micrometers in length) is in units of a million fibers per liter of water (MFL). 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 °C and pH 6-10

Temp (°F)	Temp (°C)	pH 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 20120e 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.

(HH) The residential criterion for sodium is 230,000 ug/l in accordance with the Sodium Advisory Council recommendation and revised Groundwater Discharge Standards.

"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.

R 299.50 Toxicological and chemical-physical properties.

Rule 50. (1) The toxicological and chemical-physical properties used to calculate generic shall be as shown in table 4, except as provided in section 20120a(9) of the act, R 299.49(1)(l) and R 299.49(1)(o).

(2) Abbreviations used in table 4 have the following meanings when used in this rule:

(a) "NA" means not available.

(b) "NR" means not relevant.

Appendix L
Part 201 Generic Cleanup Criteria and Screening Levels
GSI and GSI Protection Criteria Calculated According to Footnote {G}
5250 Conner Detroit BFRA

Calculate GSI in ug/L (ppb)											
Hazardous Substance	Chemical Abstract Service Number (CAS #)	* ENTER Hardness in mg CaCO3/L	* ENTER pH	Final Acute Value (FAV)	FAV Conversion Factor	Final Chronic Value (FCV)	FCV Conversion Factor	Wildlife Value (WV)	Surface Water Human Non-Drinking Water Value (HNDV)	Surface Water Human Drinking Water Value (HDV)	GSI Criteria for Surface Water Not Protected for Drinking Water Use
Acetate	71501	NA	7	138538.009	NA	7.7E+3	NA	NA	1.3E+6	16,000	7,700
Barium	7440393	150	NA	3844.136403	NA	6.7E+2	NA	NA	1.6E+5	1,900	670
Beryllium	7440417	150	NA	120.0471953	NA	6.7E+0	NA	NA	1,200	160	6.7
Cadmium	7440439	150	NA	13.23243782	0.927027019	3.0E+0	0.892027019	NA	130	3	3.0
Chromium (III)	16065831	150	NA	1588.339518	NA	1.0E+2	0.86	NA	9,400	120	100
Copper	7440508	150	NA	39.38345326	NA	1.3E+1	0.96	NA	64,000	790	13
Lead	7439921	150	NA	284.2391509	0.731930331	1.6E+1	0.731930331	NA	190	14	16
Manganese	7439965	150	NA	11888.68091	NA	2.8E+3	NA	NA	59,000	3,600	2,800
Nickel	7440020	150	NA	1319.677459	NA	7.3E+1	0.997	NA	2.1E+5	2,600	73
Zinc	7440666	150	NA	330.4359543	NA	1.7E+2	0.986	NA	22,000	4,500	170
Pentachlorophenol	87865	NA	7	17.44664176	NA	6.7E+0	NA	NA	2.8	1.8	2.8

NA = Criterion or value is not available or not applicable.

* The formulas in this spreadsheet depend upon appropriate entries in these cells. Do not leave these cells blank. If numeric hardness or pH values are not available, enter the word "hardness" or "pH" in the appropriate cell.

Shaded cells are the criteria to be used

Appendix E
Part 201 Generic Cleanup Criteria and Screening Levels
GSI and GSI Protection Criteria Calculated According to Footnote {G}
5250 Conner Detroit BFRA

Calculate Soil GSI PC in ug/Kg (ppb)									
Hazardous Substance	Chemical Abstract Service Number (CAS #)	* ENTER GSI	Soil-Water Distribution Coefficients (Kd) L/Kg	Henry's Law Constant (HLC) atm-m3/mol	Soil Organic Carbon-Water Partition Coefficient (Koc) L/Kg	Soil-Water Partition Value for GSI ug/Kg	20 X GSI ug/Kg	Soil GSI PC ug/Kg	Soil GSI PC mg/Kg
Acetate	71501	7.7E+3	NA	NA	NA	NA	1.5E+5	150,000	
Barium	7440393	6.7E+2	41	NA	NA	4.4E+5	1.3E+4	4.4E+5	440
Beryllium	7440417	6.7E+0	790	NA	NA	8.4E+4	1.3E+2	8.4E+4	84
Cadmium	7440439	2.5E+0	75	NA	NA	3.0E+3	5.0E+1	3.0E+3	3.0
Chromium (III)	16065831	1.0E+2	1.8E+6	NA	NA	3.0E+9	2.1E+3	3.0E+9	3,000,000
Copper	7440508	1.3E+1	360	NA	NA	7.3E+4	2.5E+2	7.3E+4	73
Lead	7439921	1.4E+1	11,000	NA	NA	2.5E+6	2.8E+2	2.5E+6	2,500
Manganese	7439965	2.8E+3	NA	NA	NA	NA	5.5E+4	5.5E+4	55
Nickel	7440020	7.3E+1	65	NA	NA	7.6E+4	1.5E+3	7.6E+4	76
Zinc	7440666	1.7E+2	62	NA	NA	1.7E+5	3.3E+3	1.7E+5	170
Pentachlorophenol	87865	1.8E+0	NA	2.44E-8	592	1.7E+4	3.6E+1	17,000	

NA = Criterion or value is not available or not applicable.

* The formulas in this spreadsheet depend upon appropriate entries in these cells. Do not leave these cells blank. If numeric GSI values are not available, enter "GSI" in the appropriate cell.

Shaded cells are the criteria to be used

Soil Background Evaluation (Conner

SS#	soil	
1	sand	
2	silty clay	≤ bkd.
3	silty clay	≤ bkd.
4	sand	≤ bkd.
5	~~sand~~ silty clay	

SB#	soil	
1	clay	
2	clay	
3	sand	← nearest to W
4	clay	
5	clay	
6	clay	
7	clay	
8	clay	
9	~~silt~~	←
10	clay	
11	clay	
12	clay	

TABLE 1
Statewide Data

METAL	Number of samples	Percent Non-detect	Assumed Distribution of Data	{a} Mean (mg/kg)	{b} Standard Deviation	Median (mg/kg)	{c} Typical Range of data (mg/kg)
Aluminum (Al)	295	0 %	Lognormal	3215	2.291	3420	2603 - 16,324
Antimony (Sb)	35	94 %	Nonparametric	--	--	< 5	< 0.04 – 2.5
Arsenic (As)	926	3 %	Lognormal	3.6	2.829	3.8	0.47 - 27.7
Barium (Ba)	463	1 %	Lognormal	31	2.707	38	4 - 220
Beryllium (Be)	128	77 %	Nonparametric	--	--	< 0.5	< 0.2 - 1.8
Cadmium (Cd)	535	72 %	Nonparametric	--	--	< 2	< 0.05 - 2.5
Chromium (Cr)	595	9 %	Lognormal	8.8	2.559	10	1.4 - 55
Cobalt (Co)	265	60 %	Nonparametric	--	--	< 5	< 3 - 12
Copper (Cu)	580	8 %	Lognormal	7.4	2.565	10	1 - 58
Iron (Fe)	266	0 %	Lognormal	5403	2.565	5645	852 - 34,233
Lead (Pb)	682	21 %	Censored-Log	7.1	2.562	7.73	1 - 45
Lithium (Li)	259	30 %	Censored-Log	3.8	3.373	3.5	0.35 - 41
Magnesium (Mg)	86	0 %	Lognormal	1360	4.837	824	62 - 29,875
Manganese (Mn)	326	0 %	Lognormal	139	3.235	190	14 - 1391
Mercury (Hg)	431	83 %	Nonparametric	--	--	< 0.1	< 0.025 - 0.6
Molybdenum (Mo)	100	100 %	--	--	--	< 5	< 5
Nickel (Ni)	492	23 %	Censored-Nor	12.3	13	11	2.4 - 39
Selenium (Se)	430	82 %	Nonparametric	--	--	< 0.5	< 0.05 - 1.2
Silver (Ag)	202	84 %	Nonparametric	--	--	< 0.5	< 0.2 - 2
Sodium (Na)	82	10 %	Normal	101.5	46.5	98	8.5 - 194.5
Strontium (Sr)	39	0 %	Nonparametric	--	--	100	30 - 150
Thallium (Tl)	90	86 %	Nonparametric	--	--	< 1	< 0.08 - 3.8
Titanium (Ti)	68	0 %	Normal	124	46.4	112	31 - 217
Vanadium (V)	122	1 %	Lognormal	12.5	2.729	10.9	2 - 89
Zinc (Zn)	582	3 %	Normal	33	21.1	32	2.5 - 75

{a} For lognormal distributions, this represents the geometric mean. For normal distributions this represents the arithmetic mean. The mean was not estimated for data with non-parametric distributions (greater than 50% non-detect).
{b} For lognormal distributions, this represents the geometric standard deviation. The standard deviation is not estimated for data with non-parametric distributions.
{c} Typical range given is the central 95% of the data, or two standard deviations, calculated using the appropriate normal or lognormal formulas. The non-parametric range is based on the 2.5 and 97.5 quantiles of the data set.

TABLE 3
SAND

			Glacial Lobe Area HURON - ERIE					Statewide SAND - Combined Statewide Data									
Chem	order	Dist.	n	x	SD	1 SD	2 SD	n	min	max	x	SD	1 SD	2 SD	# initial exceedances	Maximum concentration	Comments related to MBSS
Al	1	L	2	1699	1.171	1990	2315	93	260	16400	2373	1.891	4487	8272	1	8000	pom. bkd.
Sb	2	non	1	6.45	--			7	< 1	6.45	< 1	--	2.7	5.9			
As	3	L	34	3.42	2.437	8.3	20	208	< 0.4	40	2.2	3.139	6.9	20.7	1	7.2	bkd.
Ba	4	L	22	75.2	2.914	219	612	147	2.6	200	17.7	2.693	47.7	123			
Be	5	non	3	< 0.2	--			60	< 0.2	0.645	< 0.2	--	< 1	0.37			
Cd	6	non	22	< 2	--			131	<0.01	2.1	< 2	--	< 2	1.8			
Cr	7	L	22	4.0	2.29	9.2	20	182	1	50	4.6	2.125	9.8	20.2	4, 1	12, 20	bkd.
Co	8	non	2	< 5	--			82	< 3	8.7	< 5	--	< 5	7			
Cu	9	L	22	6.3	2.204	14	30	182	0.4	28	3.6	2.523	9.1	22.1			
Fe	10	L	2	4247	1.051	4464	4682	77	99.5	20400	3559	2.063	7342	14715	1	15k	prob. bkd.
Pb	11	L	25	4.7	2.358	11	25	175	1.0	30	3.5	2.906	10.2	28.3			
Li	12	L	2	< 2	--			78	< 2	20	2.14	2.402	5.1	11.9			
Mg	13	L	2	840	1.017	854	868	59	35	28000	821	3.471	2850	9411	4, 1	9.9K-11K	bkd.
Mn	14	L	2	41	1.071	44	47	91	1	1500	60.5	3.773	228	817			
Hg	15	non	17	< 0.04	--			108	<0.018	0.62	<0.05	--	< 0.1	0.08			
Mo	16	--	2	< 5	--			59	< 5	< 5	< 5	--	< 5	< 5			
Ni	17	L	8	9.3	1.875	17	32	129	1.2	34	4.6	2.243	10.3	22.4			
Se	18	non	18	< 0.4	--			103	<0.05	1.5	< 0.5	--	<0.5	0.56	4, 1	0.7, 1.0	bkd.
Ag	19	non	8	<1	--			69	<0.01	0.71	<0.25	--	<0.5	0.66			
Na	20	N	2	140	14.1	154	168	58	25	210	92	42.9	135	178			
Sr	21	non	0	--	--			13	30	150	70	--	104	150	—		in clay samples
Tl	22	non	3	<0.5	--			58	<0.5	6.13	< 1	--	< 1	5			
Ti	23	N	2	186	10.6	197	207	46	13	227	124	44.4	168	213			
V	24	L	2	9	1	9.0	9.0	72	0.05	98	9	2.519	22.7	55			
Zn	25	N	22	27	19.4	46	66	169	1.3	95	19	16.9	36	53			

Dist. = Distribution of data (L~ Lognormal, non ~ nonparametric, N ~ Normal).
n = number of samples.
x = arithmetic or geometric mean, nonparametric median (mg/kg).
SD = arithmetic or geometric standard deviation, not applicable for nonparametric.
min = minimum value in data set (mg/kg).
max = maximum value in data set (mg/kg).

Data Range	Lognormal	Normal	Nonparametric
1 SD	(x)(SD)	x + (1)SD	84th quantile
2 SD	(x)(SD)1.96	x + (2)SD	97.5 quantile

Note: 1 and 2 standard deviation values (1 SD and 2 SD) in the lobe specific tables were calculated according to the algorithms shown above.

TABLE 4
CLAY

Chem	order	Dist.	Glacial Lobe Area HURON - ERIE n	x	SD	1 SD	2 SD	Statewide CLAY - Combined Statewide Data n	min	max	x	SD	1 SD	2 SD	# initial exceedances	Maximum concentration	Comments related to MBSS
Al	1	L	23	8182	1.248	10211	12631	83	1720	15570	7416	1.40	10382	14341	2,3,5	7.2k-8.1k	< blk.
Sb	2	non	8	6	--			20	<0.04	7.2	<0.4	--	6.2	6.9			
As	3	L	126	9	2.047	18	37	370	0.2	88	5.6	2.201	12.3	26.3	2,3,5	6.1-6.7	< blk.
Ba	4	L	104	74.2	1.959	145	277	161	6.8	291	63.2	1.906	120	224			
Be	5	non	11	0.65	--			32	<0.2	1.82	0.275	--	0.7	1.6			
Cd	6	non	128	< 2	--			255	<0.12	4.7	< 2	--	1.5	2.9			
Cr	7	L	107	22	1.708	38	63	238	< 5	70	17.1	1.753	30	51.4	2,3,5	18-21	< blk.
Co	8	non	29	9.1	--			60	1.9	13	8.9	--	11	12.5			
Cu	9	L	103	16.3	1.738	28	48	226	0.56	52	15	1.613	24	38.3			
Fe	10	L	26	20110	1.107	22262	24544	59	5000	26000	16180	1.419	22959	32127	2,3,5	14k-15k	< blk.
Pb	11	L	126	9	1.859	17	30	271	1	32	10.1	2.076	21	42.3			
Li	12	L	29	20.1	1.437	29	41	58	3.5	77	16.3	1.630	26.6	42.5			
Mg	13	N	0	--	--			10	895	49000	31844	16324	48168	64492	2,3,5	9.1k-11k	< blk.
Mn	14	L	29	343	1.508	517	767	90	84	730	288	1.515	436	650			
Hg	15	non	97	<0.1	--			159	<0.02	0.9	<0.1	--	0.19	0.63			
Mo	16	--	3	< 3	--			12	<3	<5	<5	--	<5	<5			
Ni	17	N	100	25.8	9.6	35	45	214	2.5	53	22.6	9.5	32.1	41.6			
Se	18	non	94	0.33	--			156	<0.05	2.4	<0.5	--	< 1	0.72	2,3,5	.98-1.1	≈ blk.
Ag	19	non	61	0.6	--			101	<0.2	3.3	< 1	--	1	3.1			
Na	20	N	0	--	--			10	110	220	169	34.9	204	239			
Sr	21	non	3	150	--			4	70	150	125	--	150	150	2,3	95-130	< blk.
Tl	22	non	8	0.6	--			17	<0.5	0.72	< 1	--	0.64	0.69			
Ti	23	N	0	--	--			8	42	210	123	67.3	190	258			
V	24	L	4	104	1.886	196	361	14	6	150	28.3	2.437	69	162			
Zn	25	N	126	52.6	15.25	68	83	232	8.4	140	44.6	17.4	62	79			

Dist. = Distribution of data (L~ Lognormal, non ~ nonparametric, N ~ Normal).
n = number of samples.
x = arithmetic or geometric mean, nonparametric median (mg/kg).
SD = arithmetic or geometric standard deviation, not applicable for nonparametric.
min = minimum value in data set (mg/kg).
max = maximum value in data set (mg/kg).

Data Range	Lognormal	Normal	Nonparametric
1 SD	(x)(SD)	x + (1)SD	84th quantile
2 SD	(x)(SD)1.96	x + (2)SD	97.5 quantile

Note: 1 and 2 standard deviation values (1 SD and 2 SD) in the lobe specific tables were calculated according to the algorithms shown above.

Comment SB 7C

TABLE 1
Statewide Data

METAL	Number of samples	Percent Non-detect	Assumed Distribution of Data	{a} Mean (mg/kg)	{b} Standard Deviation	Median (mg/kg)	{c} Typical Range of data (mg/kg)
Aluminum (Al)	295	0 %	Lognormal	3215	2.291	3420	2603 - 16,324
Antimony (Sb)	35	94 %	Nonparametric	--	--	< 5	< 0.04 – 2.5
Arsenic (As)	926	3 %	Lognormal	3.6	2.829	3.8	0.47 - 27.7
Barium (Ba)	463	1 %	Lognormal	31	2.707	38	4 - 220
Beryllium (Be)	128	77 %	Nonparametric	--	--	< 0.5	< 0.2 - 1.8
Cadmium (Cd)	535	72 %	Nonparametric	--	--	< 2	< 0.05 - 2.5
Chromium (Cr)	595	9 %	Lognormal	8.8	2.559	10	1.4 - 55
Cobalt (Co)	265	60 %	Nonparametric	--	--	< 5	< 3 - 12
Copper (Cu)	580	8 %	Lognormal	7.4	2.565	10	1 - 58
Iron (Fe)	266	0 %	Lognormal	5403	2.565	5645	852 - 34,233
Lead (Pb)	682	21 %	Censored-Log	7.1	2.562	7.73	1 - 45
Lithium (Li)	259	30 %	Censored-Log	3.8	3.373	3.5	0.35 - 41
Magnesium (Mg)	86	0 %	Lognormal	1360	4.837	824	62 - 29,875
Manganese (Mn)	326	0 %	Lognormal	139	3.235	190	14 - 1391
Mercury (Hg)	431	83 %	Nonparametric	--	--	< 0.1	< 0.025 - 0.6
Molybdenum (Mo)	100	100 %	--	--	--	< 5	< 5
Nickel (Ni)	492	23 %	Censored-Nor	12.3	13	11	2.4 - 39
Selenium (Se)	430	82 %	Nonparametric	--	--	< 0.5	< 0.05 - 1.2
Silver (Ag)	202	84 %	Nonparametric	--	--	< 0.5	< 0.2 - 2
Sodium (Na)	82	10 %	Normal	101.5	46.5	98	8.5 - 194.5
Strontium (Sr)	39	0 %	Nonparametric	--	--	100	30 - 150
Thallium (Tl)	90	86 %	Nonparametric	--	--	< 1	< 0.08 - 3.8
Titanium (Ti)	68	0 %	Normal	124	46.4	112	31 - 217
Vanadium (V)	122	1 %	Lognormal	12.5	2.729	10.9	2 - 89
Zinc (Zn)	582	3 %	Normal	33	21.1	32	2.5 - 75

in range?
yes
yes
no
no
no
6.4 - 15
19 - 27
7 - 15
13K - 37K
470 - 1900

{a} For lognormal distributions, this represents the geometric mean. For normal distributions this represents the arithmetic mean. The mean was not estimated for data with non-parametric distributions (greater than 50% non-detect).
{b} For lognormal distributions, this represents the geometric standard deviation. The standard deviation is not estimated for data with non-parametric distributions.
{c} Typical range given is the central 95% of the data, or two standard deviations, calculated using the appropriate normal or lognormal formulas. The non-parametric range is based on the 2.5 and 97.5 quantiles of the data set.

TABLE 3
SAND

Chem	order	Dist.	Glacial Lobe Area HURON - ERIE n	x	SD	1 SD	2 SD	Statewide SAND - Combined Statewide Data n	min	max	x	SD	1 SD	2 SD	# initial exceedances	Maximum concentration	Comments related to MBSS
Al	1	L	2	1699	1.171	1990	2315	93	260	16400	2373	1.891	4487	8272			
Sb	2	non	1	6.45	--			7	< 1	6.45	< 1	--	2.7	5.9			
As	3	L	34	3.42	2.437	8.3	20	208	< 0.4	40	2.2	3.139	6.9	20.7			
Ba	4	L	22	75.2	2.914	219	612	147	2.6	200	17.7	2.693	47.7	123			
Be	5	non	3	< 0.2	--			60	< 0.2	0.645	< 0.2	--	< 1	0.37			
Cd	6	non	22	< 2	--			131	<0.01	2.1	< 2	--	< 2	1.8			
Cr	7	L	22	4.0	2.29	9.2	20	182	1	50	4.6	2.125	9.8	20.2			
Co	8	non	2	< 5	--			82	< 3	8.7	< 5	--	< 5	7			
Cu	9	L	22	6.3	2.204	14	30	182	0.4	28	3.6	2.523	9.1	22.1			
Fe	10	L	2	4247	1.051	4464	4682	77	99.5	20400	3559	2.063	7342	14715			
Pb	11	L	25	4.7	2.358	11	25	175	1.0	30	3.5	2.906	10.2	28.3			
Li	12	L	2	< 2	--			78	< 2	20	2.14	2.402	5.1	11.9			
Mg	13	L	2	840	1.017	854	868	59	35	28000	821	3.471	2850	9411			
Mn	14	L	2	41	1.071	44	47	91	1	1500	60.5	3.773	228	817			
Hg	15	non	17	< 0.04	--			108	<0.018	0.62	<0.05	--	< 0.1	0.08			
Mo	16	--	2	< 5	--			59	< 5	< 5	< 5	--	< 5	< 5			
Ni	17	L	8	9.3	1.875	17	32	129	1.2	34	4.6	2.243	10.3	22.4			
Se	18	non	18	< 0.4	--			103	<0.05	1.5	< 0.5	--	<0.5	0.56			
Ag	19	non	8	<1	--			69	<0.01	0.71	<0.25	--	<0.5	0.66			
Na	20	N	2	140	14.1	154	168	58	25	210	92	42.9	135	178			
Sr	21	non	0	--	--			13	30	150	70	--	104	150			
Tl	22	non	3	<0.5	--			58	<0.5	6.13	< 1	--	< 1	5			
Ti	23	N	2	186	10.6	197	207	46	13	227	124	44.4	168	213			
V	24	L	2	9	1	9.0	9.0	72	0.05	98	9	2.519	22.7	55			
Zn	25	N	22	27	19.4	46	66	169	1.3	95	19	16.9	36	53			

Dist. = Distribution of data (L~ Lognormal, non ~ nonparametric, N ~ Normal).
n = number of samples.
x = arithmetic or geometric mean, nonparametric median (mg/kg).
SD = arithmetic or geometric standard deviation, not applicable for nonparametric.
min = minimum value in data set (mg/kg).
max = maximum value in data set (mg/kg).

Data Range	Lognormal	Normal	Nonparametric
1 SD	(x)(SD)	x + (1)SD	84th quantile
2 SD	(x)(SD)1.96	x + (2)SD	97.5 quantile

Note: 1 and 2 standard deviation values (1 SD and 2 SD) in the lobe specific tables were calculated according to the algorithms shown above.

Conner

TABLE 4
CLAY

sample loc. where > bkd. / range

Chem	order	Dist.	Glacial Lobe Area HURON - ERIE n	x	SD	1 SD	2 SD	Statewide CLAY - Combined Statewide Data n	min	max	x	SD	1 SD	2 SD	# initial exceedances	Maximum concentration	Comments related to MBSS
Al	1	L	23	8182	1.248	10211	12631	83	1720	15570	7416	1.40	10382	14341			
Sb	2	non	8	6	--			20	<0.04	7.2	<0.4	--	6.2	6.9			
As	3	L	126	9	2.047	18	37	370	0.2	88	5.6	2.201	12.3	26.3		6.4-15	< bkd.
Ba	4	L	104	74.2	1.959	145	277	161	6.8	291	63.2	1.906	120	224			
Be	5	non	11	0.65	--			32	<0.2	1.82	0.275	--	0.7	1.6			
Cd	6	non	128	< 2	--			255	<0.12	4.7	< 2	--	1.5	2.9			
Cr	7	L	107	22	1.708	38	63	238	< 5	70	17.1	1.753	30	51.4		19-27	< bkd.
Co	8	non	29	9.1	--			60	1.9	13	8.9	--	11	12.5	4,5,10,12	7-15	> bkd. (4)
Cu	9	L	103	16.3	1.738	28	48	226	0.56	52	15	1.613	24	38.3			
Fe	10	L	26	20110	1.107	22262	24544	59	5000	26000	16180	1.419	22959	32127	1,4-7,10-12	13k-37k	> bkd. (8)
Pb	11	L	126	9	1.859	17	30	271	1	32	10.1	2.076	21	42.3			
Li	12	L	29	20.1	1.437	29	41	58	3.5	77	16.3	1.630	26.6	42.5			
Mg	13	N	0	--	--			10	895	49000	31844	16324	48168	64492			
Mn	14	L	29	343	1.508	517	767	90	84	730	288	1.515	436	650	6,10	470-1900	> bkd. (2)
Hg	15	non	97	<0.1	--			159	<0.02	0.9	<0.1	--	0.19	0.63			
Mo	16	--	3	< 3	--			12	<3	<5	<5	--	<5	<5		2-3	< bkd.
Ni	17	N	100	25.8	9.6	35	45	214	2.5	53	22.6	9.5	32.1	41.6			
Se	18	non	94	0.33	--			156	<0.05	2.4	<0.5	--	< 1	0.72			
Ag	19	non	61	0.6	--			101	<0.2	3.3	< 1	--	1	3.1			
Na	20	N	0	--	--			10	110	220	169	34.9	204	239			
Sr	21	non	3	150	--			4	70	150	125	--	150	150			
Tl	22	non	8	0.6	--			17	<0.5	0.72	< 1	--	0.64	0.69			
Ti	23	N	0	--	--			8	42	210	123	67.3	190	258			
V	24	L	4	104	1.886	196	361	14	6	150	28.3	2.437	69	162			
Zn	25	N	126	52.6	15.25	68	83	232	8.4	140	44.6	17.4	62	79			

Dist. = Distribution of data (L~ Lognormal, non ~ nonparametric, N ~ Normal).
n = number of samples.
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Data Range	Lognormal	Normal	Nonparametric
1 SD	(x)(SD)	x + (1)SD	84th quantile
2 SD	(x)(SD)1.96	x + (2)SD	97.5 quantile

Note: 1 and 2 standard deviation values (1 SD and 2 SD) in the lobe specific tables were calculated according to the algorithms shown above.

Conner SB clay