



Mr. Peter Quackenbush
Waste Management Division
525 Allegan St., Atrium-North
Lansing, MI 48933

Subject:

Transmittal of *Northend: Certification of Closure for Closure Response Activities at RCRA Waste Management Units for the Former General Motors Corporation North American Operations Facility (Otherwise known as Buick City)*

Dear Mr. Quackenbush:

On behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust, ARCADIS is submitting this *Northend: Certification of Closure for Closure Response Activities at RCRA Waste Management Units for the Former General Motors Corporation North American Operations Facility (Otherwise known as Buick City)* (Certification Report). This Closure Report was prepared to document and summarize closure activities associated with Waste Management Units (WMUs) #2, #4, #5, and #6 located at the Northend of the Buick City Site.

Based on an evaluation of the analytical data collected to date and discussions with the MDEQ the following requests for determination are made:

For WMU #2 - Division 25, East of Factory 10, Outside Waste Thinner Tank; WMU #4 - Factory 10, Salvage Yard Tank Storage Area; and WMU #5 - Factory 10, Salvage Yard Container Storage Area it is requested that these WMU be deferred to be addressed as part of the Site corrective action activities. In addition a restrictive covenant will be filed for each WMU documenting the potential for listed hazardous waste to be present beneath the WMU.

For WMU #6 - Factory 31, Building 32, Axle Plant North Dock, it is requested that this WMU be clean closed.

Please feel free to contact me with any question or concerns that you may have.

Sincerely,

ARCADIS G&M of Michigan, LLC

Micki M. Maki
Project Manger

ARCADIS G&M of Michigan, LLC
10559 Citation Drive
Suite 100
Brighton
Michigan 48116
Tel 810 229 8594
Fax 810 229 8837
www.arcadis-us.com

ENVIRONMENT

Date:
April 2, 2012

Contact:
Micki M. Maki

Phone:
248-994-2271

Email:
Micki.maki@Arcadis-us.com

Our ref:
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Imagine the result

Copies:

Grant Trigger (RACER Trust) – Via Email

Dave Favero (RACER Trust) – Via Email

Chris Black (USEPA) – Via Email

Chris Peters (ARCADIS) – Via Email

**Revitalizing Auto Communities
Environmental Response (RACER)
Trust**

**Northend: Certification of Closure
for Closure Response Activities at
RCRA Waste Management Units**

Former General Motors Corporation
North American Operations Facility
(Otherwise known as Buick City)

Flint, Michigan

April 2, 2012

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1. Introduction

1.1 Overview

This Certification of Closure (Certification) has been prepared on behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust by ARCADIS. This Certification is for the closure activities completed at the Resource Conservation and Recovery Act of 1976 (RCRA) Waste Management Units (WMUs) located at Division 25, Factory 10, and Factory 31 of the former General Motors Corporation (GMC) North American Operation (NAO) Flint Operations Site located at 902 East Leith Street in Flint, Michigan (the Site) (Figure 1 and Figure 2). On March 31, 2011, ownership of the site was transferred from Motors Liquidation Company (MLC) to RACER Properties LLC and responsibility for environmental remediation of the Site was transferred to RACER Trust.. The United States Environmental Protection Agency (USEPA) ID No. for the Site is MID 005356712.

Specifically, this Certification covers the following WMUs, all of which are located in the Northend (the portion of the RACER property north of Leith Street) of the Site (Figure 2):

- Division 25, East of Factory 10, Outside Waste Thinner Tank (WMU #2)
- Factory 10, Salvage Yard Tank Storage Area (WMU #4)
- Factory 10, Salvage Yard Container Storage Area (WMU #5)
- Factory 31, Building 32, Axle Plant North Dock (WMU #6)

1.2 Background

The Site is located at 902 East Leith Street in Flint, Michigan, and consists of approximately 450 acres of land. The portion of the Site located North of Leith Street is commonly referred to as the Northend of the Site, while the portion of the Site located South of Leith Street is referred to as the Southend. The Site is generally bounded to the north by Stewart Avenue and Pierson Road, to the south by Harriet Street, to the east by James P. Cole Boulevard, and CSX Railroad, and to the west by Industrial Avenue and North Street. The Site has been used since the early 1900s for automobile manufacturing, including various manufacturing processes including: ferrous and non-



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ferrous metal machining, plastic injection molding, metal forging and foundry, painting and finishing, vehicle assembly, and products testing.

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Manufacturing operations at the Site ceased on December 6, 2010. The buildings located in the Northend of the Site are either currently undergoing decommissioning/demolition or are slated for demolition. Building demolition has been completed in the portion of the property located south of Leith Street, which is referred to as the Southend.

In April 2007, a *RCRA Waste Management Unit Closure Status Report* (Closure Status Report) was submitted to the Michigan Department of Environmental Quality (MDEQ) – Waste and Hazardous Materials Division (WHMD) summarizing 10 WMU areas and the proposed activities / information required for closure (ARCADIS BBL, 2007). In July 2009, the MDEQ – WHMD issued a response to the Closure Status Report detailing guidance on the activities needed to obtain closure of the 10 WMU areas (MDEQ, 2009).

In January 2010, a conference call between the Michigan Department of Natural Resources and the Environment (MDNRE) – WHMD (MDEQ was referred to as MDNRE between January 17, 2010 and March 13, 2011) and ARCADIS was held to discuss and clarify the July 2009 MDEQ-WHMD letter. During this call it was decided that WMUs located in the Northend and Southend would be addressed under separate work plans. In April 2010, it was decided that because of the schedule for demolition of Factory 36, the closure of WMU #1 needed to be accelerated and a separate work plan would be prepared for this activity. Therefore, three separate work plans were planned to be submitted for the Site's WMU areas (Factory 36, Northend, and Southend). The Northend work plan was submitted to the MDEQ and was approved on August 4, 2011 with modifications (Appendix A).

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2. WMU Closure Activities

Closure field work activities discussed below were performed between October 3, 2011 and January 27, 2012. Prior to beginning field work at each WMU area, the location of the WMU was staked by BMJ Surveying (BMJ). All sample locations were also surveyed by BMJ and the locations are presented on Figures 3 through 6. Also, a ground penetrating radar (GPR) survey was completed on December 7, 2011 at each WMU area to provide subsurface information. A photo log documenting field activities is presented in Appendix B.

2.1 WMU #2 Closure Activities

Historically, the Division 25, East of Factory 10, Outside Waste Thinner Tank WMU (WMU #2) contained a 12,000-gallon steel aboveground storage tank (AST) used to collect and store waste paint thinner (F003 and F005). The tank was located between two railroad spurs and two interior roads, and was situated on a gravel surface. The tank was in operation for approximately five years. There was no documented associated piping leading to, or from the tank. GMC loaded and unloaded the tank through a two-foot diameter hatch on top of the tank. No containment structure was documented to exist for this unit.

2.1.1 WMU Area Inspection

The WMU #2 area currently consists of an overgrown grass area with a gravel and dirt road that runs north to south through the center of WMU #2. There is evidence of railroad ties and tracks still left in some areas with no obvious indication of where the former AST was located. As requested by the MDEQ, the approximate location of the former AST was surveyed based on the provided aerial photograph (Appendix A). In addition, the MDEQ requested that the surficial gravel be cleared from the area to potentially expose any tank mounting pads. On December 15, 2011, the surficial gravel was scraped to an approximate depth of 2 to 3 feet below ground surface (bgs) with a backhoe. The top 1 to 2 feet of surficial soil was observed to be compacted gravel with dark brown to black fill beneath the gravel to a depth of 2 to 3 feet bgs. Subsurface concrete was encountered at various locations beneath the fill material. A portion of the subsurface concrete (approximately 8 feet by 8 feet) was exposed during the scraping and no staining, cracking, or tank mounts were observed. At the request of the MDEQ additional delineation of the concrete pad was attempted prior to collecting the required soil samples. Eleven hand auger borings were completed in the WMU #2 area and the subsurface concrete pad appeared to be at least 22 feet by 26 feet. Due to the

uncertainty of the subsurface concrete pad's extent as well as the historical information indicating that the former AST was located on gravel, the MDEQ concurred with discontinuing delineation of the subsurface concrete pad.

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2.1.2 Soil Sampling and Analytical Results

Based on the area of WMU #2 (approximately 285 square feet) two soil samples were collected from soil boring locations agreed upon by the MDEQ as shown on Figure 3. The first soil sample (SB-1) was collected at the surveyed location representing the approximate center of the former AST location as provided by the MDEQ. This sample was collected from 3 to 3.5 feet bgs using a stainless steel hand auger. Repeated refusal was encountered at SB-2 due to the subsurface concrete pad. As discussed with the MDEQ, no sample was collected at the SB-2 location. Instead, a soil sample (SB-3) was collected approximately 25 feet south to southwest of the SB-1 location. SB-3 was collected from 2 to 2.2 feet bgs using a stainless steel hand auger.

The soil samples were described continuously during the boring activities and photoionization detector (PID) measurements were recorded. The soil boring logs along with PID measurements can be found in Appendix C. Soil samples were submitted to Merit Laboratories, Inc. (Merit) for analysis of the following F-listed waste analytical methods and constituents:

- **USEPA Method 8015:** Isobutanol, Methanol, and n-Butyl Alcohol
- **USEPA Method 8260:** 2-Ethoxyethanol, 2-Nitropropane, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Acetone, Benzene, Carbon Disulfide, Carbon Tetrachloride, Chlorobenzene, Chlorinated Fluorocarbons (dichlorodifluoromethane and trichlorofluoromethane), Cyclohexanone, Ethyl Acetate, Ethyl Benzene, Ethyl Ether, Methylene Chloride, Methyl Ethyl Ketone, Methyl Isobutyl Ketone, ortho-Dichlorobenzene, Tetrachloroethylene, Toluene, Trichloroethylene, and Xylenes
- **USEPA Method 8270:** Cresols, Cresylic Acid, Nitrobenzene, and Pyridine

The results of the soil samples are presented in Appendix D. The analytical data were compared to MDEQ Act 307 Type B (Act 307) criteria and the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as amended, Part 201 generic cleanup criteria (Part 201 criteria). A summary of the exceedances is provided below:

- WMU2_SB1 (3-3.5')

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- Benzene was detected at a concentration of 320 micrograms per kilogram ($\mu\text{g}/\text{kg}$) which exceeds the Act 307 20 x Drinking Water criterion of 24 $\mu\text{g}/\text{kg}$ and the Part 201 Residential Drinking Water Protection (RDWP) criterion of 100 $\mu\text{g}/\text{kg}$.
 - Ethylbenzene was detected at a concentration of 670 $\mu\text{g}/\text{kg}$ which exceeds the Act 307 20 x GSI criterion of 620 $\mu\text{g}/\text{kg}$ and the Part 201 GSI Protection (GSIP) criterion of 360 $\mu\text{g}/\text{kg}$.
 - Toluene was detected at a concentration of 6,160 $\mu\text{g}/\text{kg}$ which exceeds the Act 307 20 x GSI criterion of 2,200 $\mu\text{g}/\text{kg}$ and the Part 201 GSIP criterion of 5,400 $\mu\text{g}/\text{kg}$.
 - Xylenes was detected at a concentration of 2,550 $\mu\text{g}/\text{kg}$ which Exceeds the Act 307 20 x GSI criterion of 1,200 $\mu\text{g}/\text{kg}$ and the Part 201 GSIP criterion of 820 $\mu\text{g}/\text{kg}$.
- WMU2_SB3 (2-2.2')
 - No Exceedances.

There are no nearby groundwater/surface water interfaces; the Site will be restricted to non-residential use; and a groundwater use restriction is planned for the Site. During the January 26, 2012 MDEQ site visit, it was determined that no additional soil sampling was required to obtain RCRA closure.

2.2 WMU #4 Closure Activities

Historically, the Factory 10, Salvage Yard Tank Storage Area (WMU #4) contained three 15,000-gallon steel ASTs used to contain hazardous waste (F001 and F002). Each AST was located within a separate concrete secondary containment with the floor sloped toward an epoxy-sealed spill containment sump. Also, each AST was divided by a double-walled bulkhead into two compartments of 7,500-gallons for a total of six separate tank compartments.

Prior to completing the inspection and decontamination of the three ASTs and their secondary containment areas; the water and debris present in the AST secondary containment areas was characterized, removed from the containment areas, and properly disposed of on October 3, 2011. Water was observed in both the northern and southern secondary containments, but not in the middle containment area. The

analytical data for the liquid waste characterization are presented in Appendix D and the manifests are presented in Appendix E.

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2.2.1 Decontamination of WMU Area

Terra Contracting, LLC. (Terra) completed the decontamination of the WMU area (ASTs, secondary containments, sumps) between October 3 and October 10, 2011. After all waste was removed from the WMU area decontamination was completed using a soap (Alconox anionic detergent) solution followed by a triple rinsing with water using a heated pressure washer. Confined space entry procedures were followed by Terra during the decontamination of the ASTs and secondary containment areas. During decontamination activities, the southernmost AST was observed to be leaking, and piping was noted to be missing from the northernmost AST; therefore, due the observed leaking and the inability to completely seal the tank vents, pressure testing of the ASTs was not performed. The secondary containments were also decontaminated due to the presence of water and other debris; the absence of AST piping within the secondary containments; and/or observed leaking during AST decontamination.

Nine samples were collected of the decontamination final rinse water (one sample collected from each of the two compartments within each AST and one sample collected from each secondary containment) and submitted to Merit for the following F-listed waste and constituents using the following stated analytical methods:

- **USEPA Method 8015:** Isobutanol, Methanol, and n-Butyl Alcohol
- **USEPA Method 8260:** 2-Ethoxyethanol, 2-Nitropropane, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Acetone, Benzene, Carbon Disulfide, Carbon Tetrachloride, Chlorobenzene, Chlorinated Fluorocarbons (dichlorodifluoromethane and trichlorofluoromethane), Cyclohexanone, Ethyl Acetate, Ethyl Benzene, Ethyl Ether, Methylene Chloride, Methyl Ethyl Ketone, Methyl Isobutyl Ketone, ortho-Dichlorobenzene, Tetrachloroethylene, Toluene, Trichloroethylene, and Xylenes
- **USEPA Method 8270:** Cresols, Cresylic Acid, Nitrobenzene, and Pyridine

2.2.2 Final Decontamination Rinse Water Analytical Results

The analytical results of the final rinse samples are presented in Appendix D. Toluene was detected in all nine of the final rinse samples at concentrations ranging from 3 µg/L to 158 µg/L. Xylene was also detected in two samples at concentrations of 1 µg/l

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and 2 µg/L. The results from samples WMU #4-Tank Compartment 1 – Final Rinse and WMU #4- Tank Compartment 3 – Final Rinse detected toluene at concentrations that exceed the Act 307 Type B GSI criteria (110 µg/L); however, since the tanks were planned to be recycled/properly disposed of, the GSI pathway was not considered to be applicable. The MDEQ was contacted on October 20, 2011 to discuss the analytical results and concurred that the decontamination procedures satisfied the cleaning requirements of WMU #4 closure activities.

Following the completion of decontamination activities the demolition contractor properly disposed and/or recycled the ASTs along with other above grade structures (piping, roof, walls, etc) on November 7, 2011. Also, portions of the secondary containment walls were taken down to allow for the WMU area to be completely inspected and subsurface samples to be collected as outlined in the work plan.

2.2.3 WMU Area Inspection

On November 16, 2011, following the completion of the decontamination activities and the removal of the ASTs/other above ground structures, a visual inspection was completed at the WMU area to document any cracking, jointing, or staining. The northern containment area had no visible signs of cracking or jointing, but did have an area with possible staining. Soil sample SB1 was collected from this location. The middle and southern containment areas had no visible signs of cracking, jointing, or staining. Photographs of WMU #4 are located in the photo log in Appendix B.

2.2.4 Soil Sampling and Analytical Results

On December 15, 2011, four soil samples were collected based on the area of WMU #4 (approximately 1,500 square feet). The samples were collected below the concrete floor in the three secondary waste containment areas. One sample (SB1) was collected in the northernmost containment area (near possible observed staining); two samples (SB2 and SB3) were collected from the center containment area; and the last sample (SB4) was collected from the southernmost containment area.

Prior to beginning soil sampling, water that had accumulated in the secondary containment areas from melted snow and rain water was pumped out by the on-Site demolition contractor. Concrete in the secondary containment areas ranged from 9.5 to 12 inches in thickness. Upon removal of the concrete core, soil samples were collected using a stainless steel hand auger to an average depth of 3 feet bgs (approximately 2 feet bgs below the concrete pad). Soil was continuously logged and

PID measurements were recorded. Soil boring logs are presented in Appendix C. No elevated PID readings were measured. The soil sample locations were surveyed and are presented on Figure 4.

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The soil samples were submitted to Merit for F-listed waste analytical methods and constituents:

- **USEPA Method 8015:** Isobutanol, Methanol, and n-Butyl Alcohol
- **USEPA Method 8260:** 2-Ethoxyethanol, 2-Nitropropane, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Acetone, Benzene, Carbon Disulfide, Carbon Tetrachloride, Chlorobenzene, Chlorinated Fluorocarbons (dichlorodifluoromethane and trichlorofluoromethane), Cyclohexanone, Ethyl Acetate, Ethyl Benzene, Ethyl Ether, Methylene Chloride, Methyl Ethyl Ketone, Methyl Isobutyl Ketone, ortho-Dichlorobenzene, Tetrachloroethylene, Toluene, Trichloroethylene, Trichlorofluoromethane, and Xylenes
- **USEPA Method 8270:** Cresols, Cresylic Acid, Nitrobenzene, and Pyridine

The results of the soil samples are presented in Appendix D. The analytical data were compared to MDEQ Act 307 Type B criteria and Part 201 criteria. A summary of the exceedances is provided below:

- WMU4_SB2 (1.5-2')
 - Methanol was detected at a concentration of 150,000 µg/kg which exceeds Act 307 20 X Drinking Water criterion of 70,000 µg/kg and Part 201 RDWP criterion of 74,000 µg/kg.

Methanol was not detected above criteria in the remaining WMU #4 samples. Based on historical information methanol was not known to be stored in the former ASTs and the decontamination and rinse samples collected in October 2011 did not detect methanol. Please note that the Site will be restricted to non-residential use and a groundwater use restriction will be implemented at the Site.

During a January 24, 2012 MDEQ site visit, it was determined that no additional soil sampling was required to obtain RCRA closure. Upon completion of the closure activities and concurrence from the MDEQ that additional soil sampling would not be

required, the on-site demolition contractor backfilled all the WMU area subsurface features.

2.3 WMU #5 Closure Activities

Historically, Factory 10, Salvage Yard Container Storage Area (WMU #5) was used to store paint thinner waste and other F-listed hazardous wastes (F002, F003, and F005). The WMU area consisted of a 40-foot by 50-foot elevated concrete platform with the floor sloped toward a spill containment trench and sump. Also, three empty 330-gallon steel tote containers reported to previously contain paint thinner and 1,1,1-trichloroethane were also located at the WMU.

2.3.1 Historic Waste Inventory and Disposal

On October 3, 2011 decontamination activities began at WMU #5. Three empty steel totes (which formerly contained paint thinner and 1,1,1-trichloroethane) were observed at WMU #5. The totes were decontaminated (see Section 2.3.3) and properly disposed of along with other miscellaneous debris present at the WMU.

2.3.2 WMU Area Inspection

Prior to completing the inspection and decontamination on the WMU area, water present in the secondary containment was characterized, removed from the containment area, and properly disposed of. Water was primarily observed in the trench and sump located on the western portion of the WMU. The analytical data for the liquid waste characterization is presented in Appendix D and the manifests are presented in Appendix E.

WMU #5 consists of a container storage area with a trench and sump located on the west side of the WMU area. During the completion of the decontamination activities and after the removal of debris, a visual inspection was completed at the WMU area to document any cracking, jointing, or staining. Cracking and minor staining was observed at four locations within the WMU. These areas were marked as soil boring locations. Photographs of WMU #5 are located in the photo log in Appendix B.

2.3.3 Decontamination of WMU Area

Terra completed the decontamination of the WMU area including the concrete slab, trench, sump, and steel totes between October 3 and October 10, 2011. The WMU

area was decontaminated using a soap (Alconox anionic detergent) solution followed by a triple rinsing with water using a heated pressure washer.

A total of three samples were collected of the final rinse water; one from the concrete pad floor, one from the totes, and one from the sump. The final rinse water was collected using the vacuum truck, with the contents of the vacuum truck transferred into 55-gallon drums to allow for discrete sampling of the final rinse water. The samples were submitted to Merit for the following F-listed waste and constituents using the following stated analytical methods:

- **USEPA Method 8015:** Isobutanol, Methanol, and n-Butyl Alcohol
- **USEPA Method 8260:** 2-Ethoxyethanol, 2-Nitropropane, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Acetone, Benzene, Carbon Disulfide, Carbon Tetrachloride, Chlorobenzene, Chlorinated Fluorocarbons (dichlorodifluoromethane and trichlorofluoromethane), Cyclohexanone, Ethyl Acetate, Ethyl Benzene, Ethyl Ether, Methylene Chloride, Methyl Ethyl Ketone, Methyl Isobutyl Ketone, ortho-Dichlorobenzene, Tetrachloroethylene, Toluene, Trichloroethylene, and Xylenes
- **USEPA Method 8270:** Cresols, Cresylic Acid, Nitrobenzene, and Pyridine

2.3.4 Final Decontamination Analytical Results

The analytical results of the final rinse samples are presented in Appendix D. Toluene was detected in two of the three samples at concentrations of 2 µg/L and 59 µg/L. The MDEQ was contacted on October 20, 2011 to discuss the analytical results and concurred that the decontamination procedures satisfied the cleaning requirements of WMU #5 closure activities. The demolition contractor properly disposed and/or recycled the steel totes in November 2011.

2.3.5 Soil Sampling and Analytical Results

On December 15, 2011, five soil samples were collected based on the area of WMU #5 (approximately 1,800 square feet). Four samples (SB1, SB2, SB3, and SB5) were located within areas of observed cracking or staining, and one sample (SB4) was located near the sump. Prior to beginning of soil sampling, water that had accumulated in the secondary containment areas from melted snow and rain water; was pumped out. Concrete in the secondary containment areas ranged from 8 to 11 inches in thickness. Upon removal of the concrete core, soil samples were completed using a

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stainless steel hand auger to an average depth of 3 feet bgs (approximately 2 feet bgs below the concrete pad). Soil was continuously logged and PID measurements were recorded. Soil boring logs are presented in Appendix C. No elevated PID readings were measured. The soil sample locations were surveyed and are presented on Figure 5.

The soil samples were submitted to Merit for F-listed waste analytical methods and constituents:

- **USEPA Method 8015:** Isobutanol, Methanol, and n-Butyl Alcohol

- **USEPA Method 8260:** 2-Ethoxyethanol, 2-Nitropropane, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Acetone, Benzene, Carbon Disulfide, Carbon Tetrachloride, Chlorobenzene, Chlorinated Fluorocarbons (dichlorodifluoromethane and trichlorofluoromethane), Cyclohexanone, Ethyl Acetate, Ethyl Benzene, Ethyl Ether, Methylene Chloride, Methyl Ethyl Ketone, Methyl Isobutyl Ketone, ortho-Dichlorobenzene, Tetrachloroethylene, Toluene, Trichloroethylene, Trichlorofluoromethane, and Xylenes

- **USEPA Method 8270:** Cresols, Cresylic Acid, Nitrobenzene, and Pyridine

The results of the soil samples are presented in Appendix D. The analytical data were compared to MDEQ Act 307 Type B criteria and Part 201 criteria. A summary of the exceedances is provided below:

- WMU5_SB1 (1.5-2')
 - Tetrachloroethene was detected at a concentration of 80 µg/kg, which exceeds Act 307 20 X Drinking Water criterion of 14 µg/kg.
- WMU5_SB2 (1.5-2')
 - Trichloroethene was detected at a concentration of 100 µg/kg which exceeds Act 307 20 X Drinking Water criterion of 44 µg/kg.

Tetrachloroethene and Trichloroethene were not detected in the remaining WMU#5 collected samples. Based on historical information, tetrachloroethene was not known to be stored in the WMU and the decontamination/rinse samples collected in October 2011 did not detect tetrachloroethene. Please note that the Site will be restricted to non-residential use and a groundwater use restriction will be implemented at the Site. .

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During a January 24, 2012 MDEQ site visit, it was determined that no additional soil sampling was required to obtain RCRA closure. Upon completion of the closure activities and concurrence from the MDEQ that additional soil sampling would not be required the on-Site demolition contractor backfilled all the WMU area subsurface features.

2.4 WMU #6 Closure Activities

Historically, Factory 31, Building 32 Axle Plant North Dock (WMU #6) was intended to support waste storage for greater than 90 days; however, GMC decided that the waste generated would not require storage greater than 90 days. The WMU was located on an elevated concrete pad in a room approximately 10 feet by 20 feet with a sump located in the northeast corner of the room

2.4.1 WMU Area Inspection

Building demolition activities have recently been completed at Factory 31. Prior to demolition, the location of WMU #6 and the sump was noted, photos were taken, and spray paint markings were made on the building foundation so that the WMU could be relocated for sampling. At the time of the sampling the sump had been backfilled with gravel and was located in the west to southwest area of the former WMU.

The WMU was visually inspected for evidence of historical spills (e.g. staining) prior to beginning closure activities. Photographs of WMU #6 are located in the photo log in Appendix B.

2.4.2 Soil Sampling and Analytical Results

On December 15, 2011 one soil sample (SB1) was collected approximately one foot north of the former sump location. This sample was collected from 3.5 to 4 feet bgs (which was below the approximate sump depth) using a stainless steel hand auger. Soil was continuously logged and PID measurements were recorded. The soil boring log is presented in Appendix C. No elevated PID readings were measured. The soil sample location and sump location was surveyed and presented on Figure 6.

The soil sample was submitted to Merit for the Project Analyte List (PAL) Volatile Organic Compound and Semi-Volatile Organic Compound analytical methods and constituents (Appendix F).

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Flint, Michigan

The results of the soil samples are presented in Appendix C. The analytical data were compared to MDEQ Act 307 Type B criteria and Part 201 criteria. A summary of the exceedances is provided below:

- WMU6_SB1 (3.5-4')
 - 1,2-Dichlorobenzene was detected at a concentration of 180 µg/kg, which exceeds Act 307 GSI criterion of 140 µg/kg.

Based on historical information 1,2-Dichlorobenzene was not known to be stored at this WMU.

During a January 24, 2012 MDEQ site visit, it was determined that no additional soil sampling was required to obtain RCRA closure.

2.5 Additional Waste Management Procedures

Investigation-derived waste (e.g. decontamination water, waste materials, etc.) were containerized in vacuum tanker trucks, or segregated labeled 55-gallon Department of Transportation (DOT) -approved drums. All wastes were properly containerized, characterized and disposed of off-site or are awaiting off-site disposal. The laboratory analytical results for all waste characterization samples are presented in Appendix D. Copies of the shipping manifests are presented in Appendix E.

2.6 Request Determination

Based on an evaluation of the analytical data collected to date and discussions with the MDEQ the following requests for determination are made:

For WMU #2 - Division 25, East of Factory 10, Outside Waste Thinner Tank; WMU #4 - Factory 10, Salvage Yard Tank Storage Area; and WMU #5 - Factory 10, Salvage Yard Container Storage Area it is requested that these WMU be deferred to be addressed as part of the Site corrective action activities. In addition a restrictive covenant will be filed for each WMU documenting the potential for listed hazardous waste to be present beneath the WMU.

For WMU #6 - Factory 31, Building 32, Axle Plant North Dock, it is requested that this WMU be clean closed.



**Northend: Certification of
Closure for Closure
Response Activities at
RCRA WMUs**

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American Operations
Facility (Otherwise known
as Buick City)

Flint, Michigan

3. Certification Of Closure

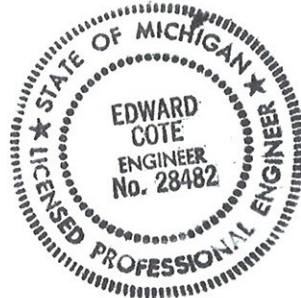
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Grant Trigger

RACER Trust

Edward Cote, PE

Principal Environmental Engineer



RACER Trust
Former General Motors
Corporation North
American Operations
Facility (Otherwise known
as Buick City)
Flint, Michigan

4. References

ARCADIS, 2011. Northend: Work Plan for Closure Response Activities at RCRA Waste Management Units – Former General Motors Corporation, NAO Flint Operations Facility (Otherwise known as Buick City), Flint Michigan. June 2011.

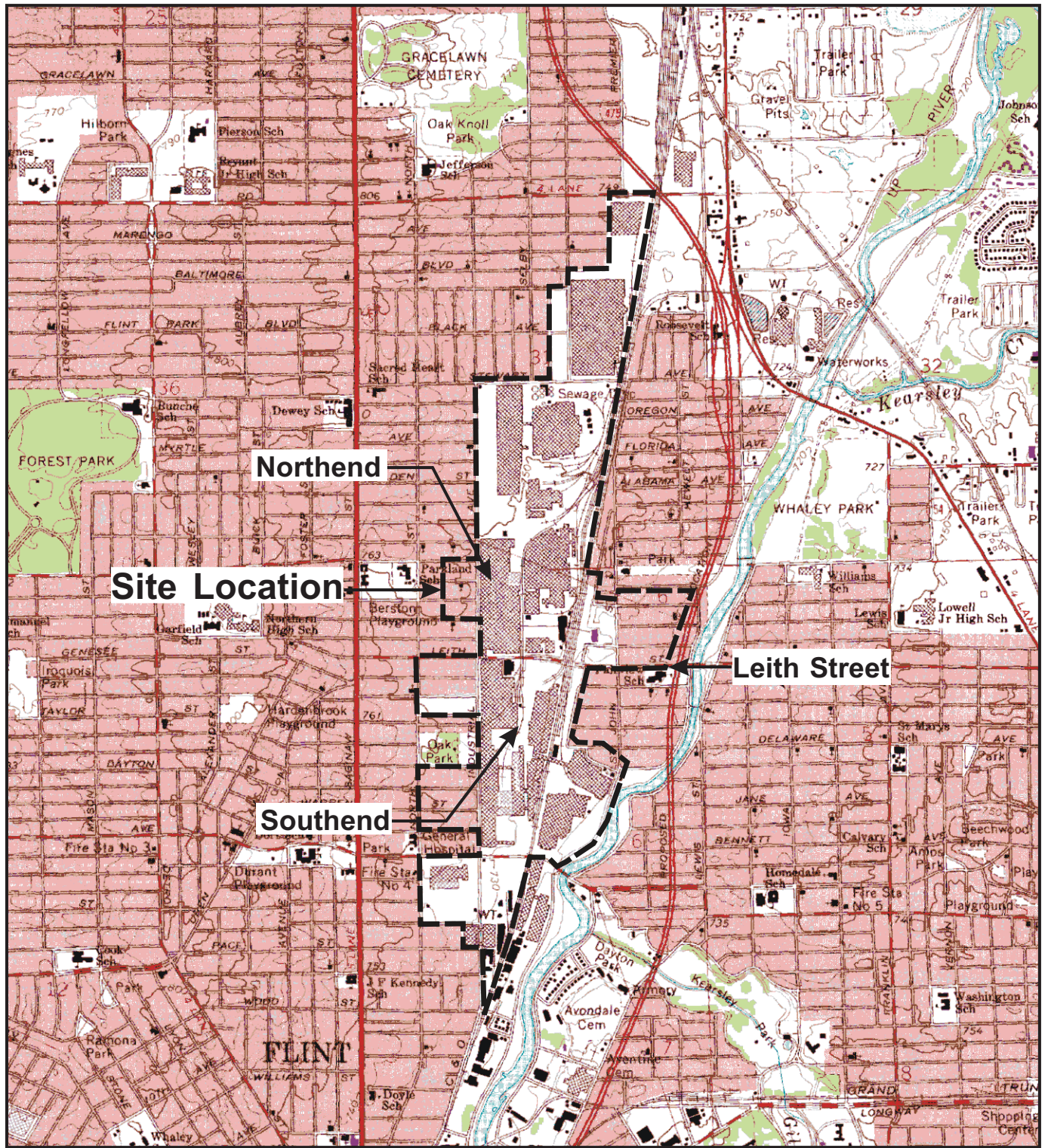
ARCADIS BBL, 2007. RCRA Waste Management Unit Closure Status Report. (April 30, 2007).

MDEQ. 2011. Northend Work Plan Approval (with Modifications) for the RCRA Waste Management Unit Areas at the General Motors Corporation, NAO Flint Operations; MID 005 356 712. August 4, 2011

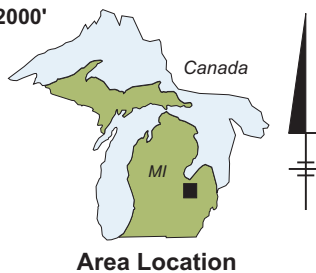
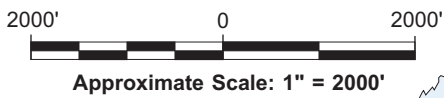
MDEQ. 2009. Closure Status Report Review Letter for the RCRA Waste Management Unit Areas at the General Motors Corporation, NAO Flint Operations; MID 005 356 712. July 27, 2009



Figures



REFERENCE: Base Map Source: USGS 7.5 Min. Topo. Quad., Flint North, Mich. (1969, Photorevised 1975).



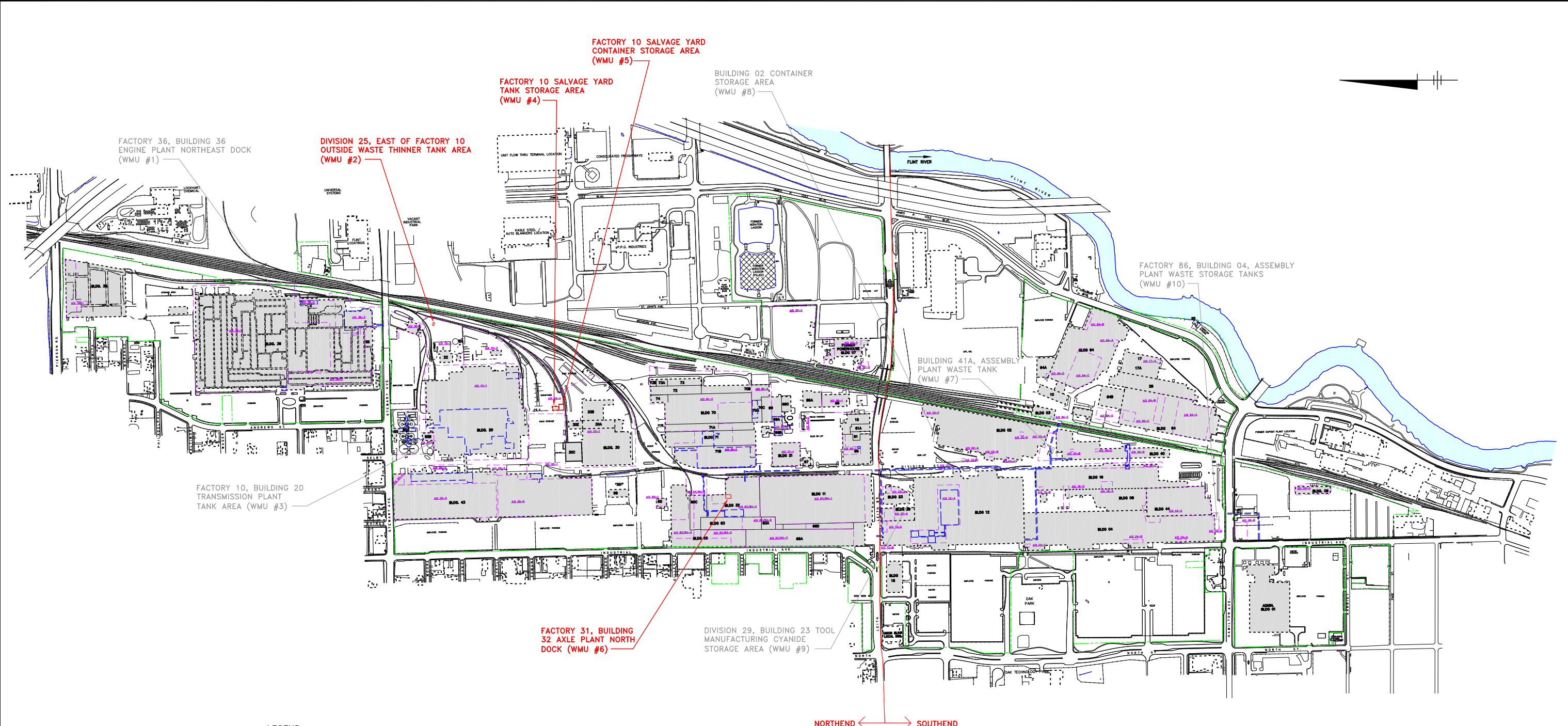
RACER TRUST
 FORMER GENERAL MOTORS CORPORATION
 NORTH AMERICAN OPERATIONS FACILITY FLINT OPERATIONS SITE -
 FLINT, MICHIGAN
NORTHEND CERTIFICATION OF CLOSURE

SITE LOCATION MAP



FIGURE
1

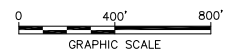
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- LEGEND:**
- PROPERTY BOUNDARY
 - APPROXIMATE AOI BOUNDARY
 - BASEMENT/TUNNEL AREA
 - DEMOLISHED BUILDING
 - BUILDING CURRENTLY IDLED
 - APPROXIMATE WMU AREA ADDRESSED IN THIS CERTIFICATION OF CLOSURE
 - APPROXIMATE WMU AREA ADDRESSED IN SEPARATE CERTIFICATION OF CLOSURE

- NOTES:**
1. IN ADDITION TO THE EXISTING HISTORICAL SITE DATA, THE WASTE MANAGEMENT UNIT LOCATIONS ARE ALSO BASED ON GIS DATA PROVIDED BY THE MDNR IN JANUARY 2010.
 2. BASE MAP INFORMATION FROM A SURVEY BY BMJ INC., DATED APRIL 2001, AT A SCALE OF 1:100.

NORTHEND ← → SOUTHEND

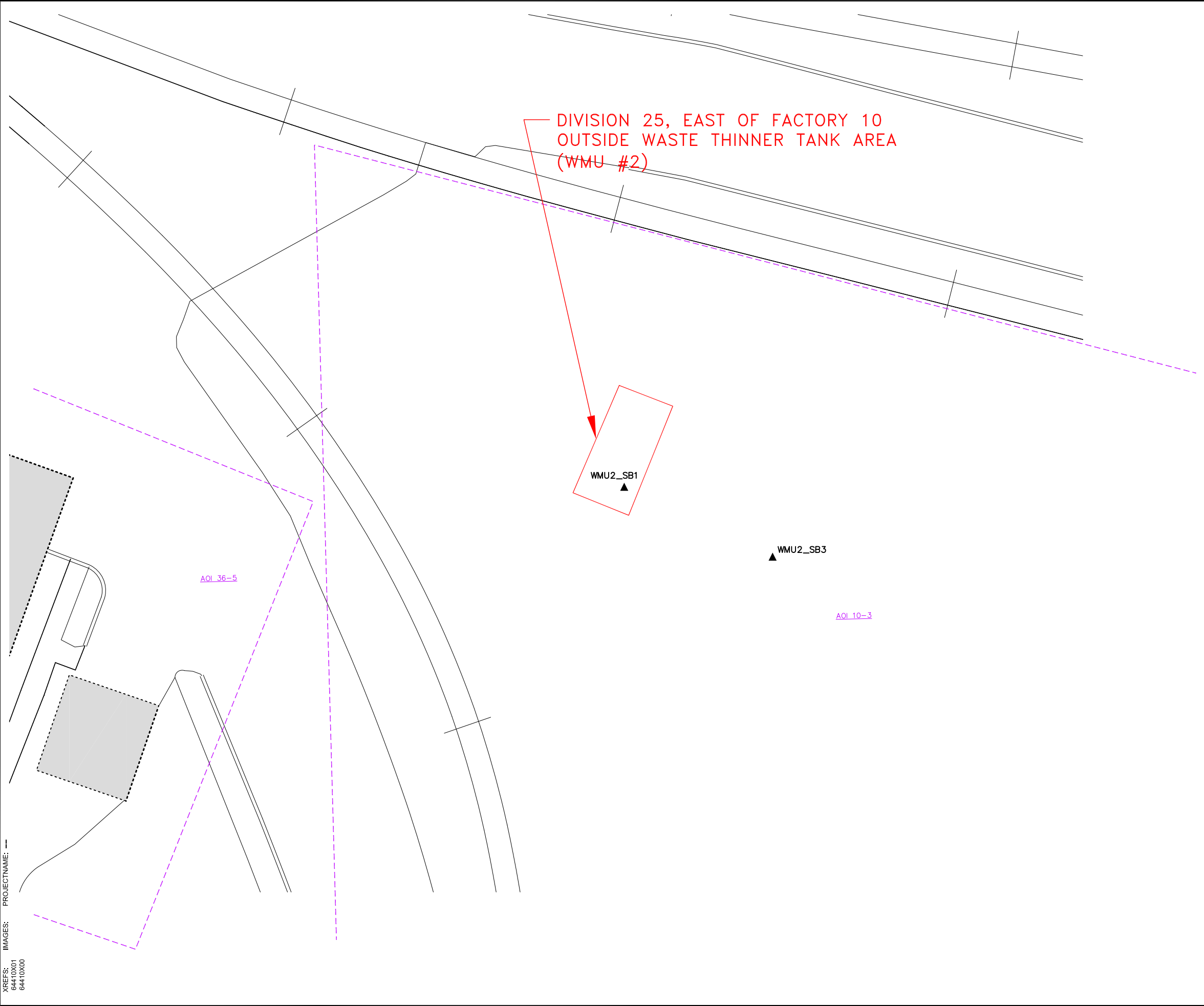





RACER TRUST
 FORMER GENERAL MOTORS CORPORATION
 NORTH AMERICAN OPERATIONS FACILITY - FLINT OPERATIONS SITE -
 FLINT, MICHIGAN
NORTHEND CERTIFICATION OF CLOSURE

SITE PLAN

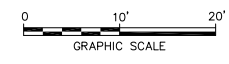


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- LEGEND:**
-  APPROXIMATE AOI BOUNDARY
 -  APPROXIMATE WMU AREA ADDRESSED IN THIS CERTIFICATION OF CLOSURE
 -  SOIL SAMPLING LOCATION

- NOTES:**
1. IN ADDITION TO THE EXISTING HISTORICAL SITE DATA, THE WASTE MANAGEMENT UNIT LOCATIONS ARE ALSO BASED ON GIS DATA PROVIDED BY THE MDNRE IN JANUARY 2010.
 2. BASE MAP INFORMATION FROM A SURVEY DATED APRIL 2001 (AT A SCALE OF 1:100) AND SOIL SAMPLING LOCATIONS FROM A SURVEY DATED DECEMBER 2011. BOTH SURVEYS WERE COMPLETED BY BMJ INC.



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 FORMER GENERAL MOTORS CORPORATION
 NORTH AMERICAN OPERATIONS FACILITY FLINT OPERATIONS SITE -
 FLINT, MICHIGAN
NORTHEND CERTIFICATION OF CLOSURE

WMU # 2 SOIL SAMPLING LOCATIONS



CITY: SYRACUSE DIV/GROUP: ENV/CAD DB: G. STOWELL L.FORAKER LD: G. STOWELL PIC: C. PETERS PIM: M. MAKI TWE: M. MAKI LXR: ONE* OFF#REF*
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FACTORY 31, BUILDING 32 AXLE
PLANT NORTH DOCK
(WMU #6)

WMU6_SB1▲SUMP

BLDG 32

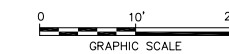



LEGEND:

-  APPROXIMATE WMU AREA ADDRESSED IN THIS CERTIFICATION REPORT (MODIFIED FROM AREA PRESENTED IN THE WORK PLAN BASED ON SITE MEETING WITH MDEQ ON 1/24/12)
-  SOIL SAMPLING LOCATION
-  SUMP LOCATION

NOTES:

1. IN ADDITION TO THE EXISTING HISTORICAL SITE DATA, THE WASTE MANAGEMENT UNIT LOCATIONS ARE ALSO BASED ON GIS DATA PROVIDED BY THE MDNRE IN JANUARY 2010.
2. BASE MAP INFORMATION FROM A SURVEY DATED APRIL 2001 (AT A SCALE OF 1:100) AND SOIL SAMPLING/SURVEY LOCATIONS FROM A SURVEY DATED DECEMBER 2011. BOTH SURVEYS WERE COMPLETED BY BMJ INC.



RACER TRUST FORMER GENERAL MOTORS CORPORATION NORTH AMERICAN OPERATIONS FACILITY FLINT OPERATIONS SITE - FLINT, MICHIGAN NORTHEAST CERTIFICATION OF CLOSURE	
WMU # 6 SOIL SAMPLING LOCATIONS	
	FIGURE 6



Appendix A

MDEQ Approval of Northend Work
Plan



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



DAN WYANT
DIRECTOR

August 4, 2011

Mr. Grant Trigger
Cleanup Manager
RACER Trust
401 South Old Woodward Avenue Suite 370
Birmingham, Michigan 48009

Dear Mr. Trigger:

SUBJECT: Approval with Modifications of Northend: Work Plan for Closure Response Activities at RCRA Waste Management Units (Work Plan); RACER Trust, Former General Motors Corporation North American Operations Facility; MID 005 356 712

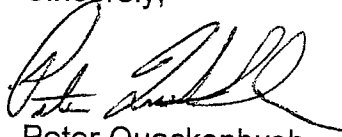
The Michigan Department of Environmental Quality (MDEQ), Resource Management Division (RMD), has reviewed the June 7, 2011, Work Plan for the remaining hazardous waste management units on the north end of the site. Based on our review pursuant to Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and the administrative rules promulgated thereto, the RMD has determined that Work Plan is approved with the following modifications:

1. In the discussion of sampling throughout the document, it mentions the interval of the boring, implying that the closure sample will be comprised of the entire interval. The sampling for these units is biased; therefore, the sample sent in for analysis should not comprise more than a continuous six-inch interval of the entire boring, and it should represent the worst case within the boring. If there is more than one interval of interest, then additional samples will be submitted to the laboratory for analysis.
2. Hazardous Waste Management Unit (WMU) #2 (Division 25, East of Factory 10, Outside Waste Thinner Tank Area): This WMU's location was approximated earlier based upon a map in the January 1988 Closure Plan for the "East of Factory 10 Tank Storage Area." The approximated location has been subsequently refined by accessing 1988 aerial photographs from the DNR's aerial imagery archive. The enclosed aerial photo shows an item in the general vicinity identified in the January 1988 Closure Plan. While this location is not precise, artifacts of the tank's mounting may be still present. The area is currently covered with gravel. Prior to attempting to determine any sample locations, the surficial gravel must be cleared from a circular area to potentially expose any tank mounting pads, etc., starting approximately at a location centered at 83.680418°W 43.052951°N (dec deg WGS84) with radius of 15 feet. If mounting pads are located, then the two samples must be biased to any

stained areas within the area. Since this is a biased sampling, soil will be collected from the zero- to two-foot range. The depth range of the greatest staining or PID readings should be the interval that is submitted to the laboratory, not to exceed a six-inch interval within the two-foot boring

Should you require further information, please contact me at 517-373-7397; quackenbushp@michigan.gov; or MDEQ, P.O. Box 30241, Lansing, Michigan 48909-7741.

Sincerely,



Peter Quackenbush
Hazardous Waste Section
Resource Management Division
517-373-7397

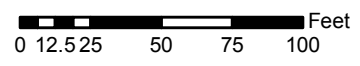
Enclosure

cc: Mr. Chris Peters, ARCADIS
Mr. Dave Favero, RACER Trust
Mr. Chris Black, U.S. Environmental Protection Agency, Region 5
Mr. Dale Bridgford/Mr. Peter Quackenbush, MDEQ
HWS-C&E File

GM NAO Flint MID 005 356 712 Hazardous Waste Unit #2



A circular area with radius of 15 feet centered on 83.680418°W 43.052951°N (dec deg WGS84) should be cleared of gravel of the loose to find evidence of the tank mounting foundations.



Map Drawn 07/27/2011 by DRB

Aerial photo extracted from the June 24, 1988 MDNR flight. Roll/Photo MDNR 436-370-30
Map Linework from EDI Engineering & Science Closure Plan dated January 1988.



Appendix B


Photo Summary Log

Project: Buick City		Location: Flint, Michigan	Project No. B0064410.2012.00900
Photo No. 1	Date: 12-7-2011		
Direction Photo Taken: Facing south.			
Description: View of WMU 2 with center location staked and marked with paint during GPRS investigation.			


Project: Buick City		Location: Flint, Michigan	Project No. B0064410.2012.00900
Photo No. 2	Date: 12-15-2011		
Direction Photo Taken: Facing northeast.			
Description: View of WMU 2 during excavation to determine location of concrete pad. Center pin flag can be seen in center of photo where SB-1 was collected.			



Project: Buick City		Location: Flint, Michigan	Project No. B0064410.2012.00900
Photo No. 3	Date: 9-20-2011		
Direction Photo Taken: Facing southeast.			
Description: View of WMU #4 area with the ASTs and secondary containments shown prior to closure activities.			

Project: Buick City		Location: Flint, Michigan	Project No. B0064410.2012.00900
Photo No. 4	Date: 12-15-2011		
Direction Photo Taken: Facing east.			
Description: View of middle containment area at WMU 4, after containment walls were partially removed and ASTs were removed. Sample locations visible in far left corner and near right corner.			



Project: Buick City		Location: Flint, Michigan	Project No. B0064410.2012.00900
Photo No. 5	Date: 12-15-2011		
Direction Photo Taken: Facing east.			
Description: View of south containment area at WMU 4, after containment walls were partially removed and ASTs were removed. Sample location visible in center of photo.			

Project: Buick City		Location: Flint, Michigan	Project No. B0064410.2012.00900
Photo No. 6	Date: 10-3-2011		
Direction Photo Taken: Facing southwest			
Description: View of WMU 5 prior to decontamination with steel totes shown to the right.			


Project: Buick City		Location: Flint, Michigan	Project No. B0064410.2011.00900
Photo No. 7	Date: 10-3-2011		
Direction Photo Taken: Facing west.			
Description: View of WMU 5 during decontamination.			

 ARCADIS <i>Infrastructure · Water · Environment · Buildings</i>		PHOTOGRAPHIC LOG	
Project: Buick City		Location: Flint, Michigan	Project No. B0064410.2012.00900
Photo No. 8	Date: 12-15-2011		
Direction Photo Taken: Facing east.			
Description: View of north side of WMU 5 showing 2 sample locations.			

Project: Buick City		Location: Flint, Michigan	Project No. B0064410.2012.00900
Photo No. 9	Date: 2-7-2012		
Direction Photo Taken: Facing northeast.			
Description: View of WMU #4 (background) and #5 (foreground) areas after ASTs, totes, and above-ground features have been removed.			

 ARCADIS <i>Infrastructure · Water · Environment · Buildings</i>		PHOTOGRAPHIC LOG	
Project: Buick City		Location: Flint, Michigan	Project No. B0064410.2012.00900
Photo No. 10	Date: 12-7-2011		
Direction Photo Taken: Facing northeast.			
Description: View of WMU #4 (background) and #5 (foreground) areas after backfill has been completed.			

Project: Buick City		Location: Flint, Michigan	Project No. B0064410.2012.00900
Photo No. 11	Date: 11-16-2011		
Direction Photo Taken: Facing west.			
Description: View of WMU 6 area.			

Project: Buick City		Location: Flint, Michigan	Project No. B0064410.2012.00900
Photo No. 12	Date: 12-7-2011		
Direction Photo Taken: Facing northwest.			
Description: View of WMU 6 sump location. Sample collected just north of sump.			



Appendix C

Soil Boring Logs

Date Start/Finish: 1/23/2012 Drilling Company: ARCADIS Driller's Name: M. Meckley/J. Kotwicki Drilling Method: Hand Auger/Vac Truck Sampling Method: Hand Auger Rig Type: NA	Northing: NA Easting: NA Casing Elevation: NA Borehole Depth: 3.5' bgs Surface Elevation: NA Descriptions By: Megan Meckley	Well/Boring ID: WMU2_SB1 Client: RACER Trust Location: RACER Buick City Flint, Michigan
---	--	---

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
		1	0-3.5	3.5	1.3			(0-1) GRAVEL; medium to large pebble, subrounded to subangular, little sand, fine to medium, poorly sorted; moist, dark brown (10YR 3/2).	 Borehole backfilled with bentonite.
					0.8			(1-2) GRAVEL; medium to large cobble, trace sand, fine to medium, poorly sorted, moist, dark brown (10YR 3/2).	
					2.1			(2-3.5) SAND; fine to medium, trace medium to large pebble, poorly sorted; moist, dark brown (10YR 3/1)	
						X		End of boring at 3.5' bgs.	
-5	-5								
-10	-10								
-15	-15								

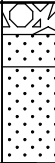

 <i>Infrastructure · Water · Environment · Buildings</i>	Remarks: bgs = below ground surface Hand auger from 0-3.5' bgs Groundwater not encountered No odor or staining observed
---	---


Date Start/Finish: 1/23/2012 Drilling Company: ARCADIS Driller's Name: M. Meckley/J. Kotwicki Drilling Method: Hand Auger/Vac Truck Sampling Method: Hand Auger Rig Type: NA	Northing: NA Easting: NA Casing Elevation: NA Borehole Depth: 2.5' bgs Surface Elevation: NA Descriptions By: Megan Meckley	Well/Boring ID: WMU2_SB2A Client: RACER Trust Location: RACER Buick City Flint, Michigan
---	--	--

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
		1	0-2.5	2.5	0.2			(0-1) GRAVEL; medium to large pebble, subangular, some silt, some sand, poorly sorted, brown (10YR 3/4).	 Borehole backfilled with bentonite.
		2			0.4			(1-2.5) SAND; trace silt, trace small granule, subangular, poorly sorted; dry, dark brown (10YR 3/2).	
								NOTE: subsurface concrete pad at 2.5' bgs.	
								End of boring at 2.5' bgs.	
-5	-5								
-10	-10								
-15	-15								

 <i>Infrastructure · Water · Environment · Buildings</i>	Remarks: bgs = below ground surface Hand auger from 0-2.5' bgs Groundwater not encountered Soil sample not collected for laboratory analysis No odor or staining observed Boring located ~4' west of WMU 2_SB1
---	--

Date Start/Finish: 1/23/2012 Drilling Company: ARCADIS Driller's Name: M. Meckley/J. Kotwicki Drilling Method: Hand Auger/Vac Truck Sampling Method: Hand Auger Rig Type: NA	Northing: NA Easting: NA Casing Elevation: NA Borehole Depth: 2.5' bgs Surface Elevation: NA Descriptions By: Megan Meckley	Well/Boring ID: WMU2_SB2B Client: RACER Trust Location: RACER Buick City Flint, Michigan
---	--	--

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0	1	0-2.5	2.0	0.2 0.3			(0-0.5) GRAVEL; small to large pebble, subangular, some sand, poorly sorted. (0.5-1) SAND; fine to medium, trace pebble, small, well sorted; dry, dark brown (10 YR 2/1). (1-2.5) SAND; fine to medium, trace small to medium pebble, well sorted; dry, dark brown (10YR 2/1). NOTE: subsurface concrete pad at 2.5' bgs. End of boring at 2.5' bgs.	 Borehole backfilled with bentonite.
-5	-5								
-10	-10								
-15	-15								


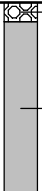


 <i>Infrastructure · Water · Environment · Buildings</i>	Remarks: bgs = below ground surface Hand auger from 0-2.5 bgs Groundwater not encountered Soil sample not collected for laboratory analysis No odor or staining observed Boring located on the west side of WMU 2_SB1
--	---


Date Start/Finish: 1/26/2012 Drilling Company: ARCADIS Driller's Name: M. Meckley/J. Kotwicki Drilling Method: Hand Auger/Vac Truck Sampling Method: Hand Auger Rig Type: NA	Northing: NA Easting: NA Casing Elevation: NA Borehole Depth: 2.2' bgs Surface Elevation: NA Descriptions By: Megan Meckley	Well/Boring ID: WMU2_SB3 Client: RACER Trust Location: RACER Buick City Flint, Michigan
---	--	---

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
		1	0-2.2	2.2	0.6			(0-0.4) GRAVEL	Borehole backfilled with bentonite.
					1.0			(0.4-1) SAND; medium to coarse, little granule, small, subrounded, trace silt, poorly sorted, black to brown (10YR 2/1).	
								(1-2) SAND; medium to coarse, trace silt, little large pebble, subrounded, poorly sorted; dry, dark brown (10YR 2/2).	
								(2-2.2) SAND; medium, well sorted; dry, dark brown (10YR 2/1) to brown (7.5YR 5/6).	
								End of boring at 2.2' bgs.	
-5	-5								
-10	-10								
-15	-15								


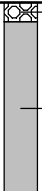
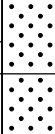

	Remarks: bgs = below ground surface Hand auger from 0-2.2' bgs Groundwater not encountered No odor or staining observed Boring located ~25' south of WMU2_SB1
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Date Start/Finish: 12/15/2011 Drilling Company: ARCADIS Driller's Name: M. Meckley/J. Kotwicki Drilling Method: Hand Auger Sampling Method: Hand Auger Rig Type: NA	Northing: NA Easting: NA Casing Elevation: NA Borehole Depth: 3' bgs Surface Elevation: NA Descriptions By: M. Meckley	Well/Boring ID: WMU4_SB1 Client: RACER Trust Location: RACER Buick City Flint, MI
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
		1	0-3	2.0	5.1		 (0-0.8) CONCRETE		 <p>Borehole capped with concrete.</p> <p>Borehole backfilled with bentonite.</p>
					2.4		(0.8-2) SAND; fine to medium, trace small to large granule, subrounded, well sorted; dry, brown (10YR 4/3).		
							(2-3) SAND; very fine to medium, little silt, trace small to medium granule, subangular, poorly sorted; dry, light yellow brown (10YR 5/6).		
-5	-5							End of boring 3' bgs	
-10	-10								
-15	-15								






 <i>Infrastructure · Water · Environment · Buildings</i>	Remarks: bgs = below ground surface Hand auger from 0-3' bgs Groundwater not encountered No order or staining observed
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Date Start/Finish: 12/15/2011 Drilling Company: ARCADIS Driller's Name: ARCADIS Drilling Method: Hand Auger Sampling Method: Hand Auger Rig Type:	Northing: NA Easting: NA Casing Elevation: NS Borehole Depth: 3' bgs Surface Elevation: NA Descriptions By: M. Meckley	Well/Boring ID: WMU4_SB2 Client: RACER Trust Location: RACER Buick City Flint, MI
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
		1	0-3	2.0	0.3	X	 (0-0.8) CONCRETE	 Borehole capped with concrete. Borehole backfilled with bentonite.	
				0.2		 (0.8-2) SAND; fine to medium, trace silt, trace clay, trace medium to large granule, subangular, poorly sorted; dry, brown (7.5YR 4/4).			
						 (2-3) SAND; fine to coarse, trace small to large granule, subangular to subrounded, poorly sorted, brown (7.5YR 4/4).			
-5	-5							End of boring 3' bgs.	
-10	-10								
-15	-15								







 ARCADIS <i>Infrastructure · Water · Environment · Buildings</i>	Remarks: bgs = below ground surface Hand auger from 0-3' bgs Groundwater not encountered No order or staining observed
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Date Start/Finish: 12/15/2011 Drilling Company: ARCADIS Driller's Name: ARCADIS Drilling Method: Hand Auger Sampling Method: Hand Auger Rig Type:	Northing: NA Easting: NA Casing Elevation: NA Borehole Depth: 3' bgs Surface Elevation: NA Descriptions By: M. Meckley	Well/Boring ID: WMU4_SB3 Client: RACER Trust Location: RACER Buick City Flint, MI
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
		1	0-3	3.0	0.4	X	 (0-0.8) CONCRETE  (0.8-2) SAND; very fine to medium, trace small granule, subrounded, well sorted; dry, brown (10YR 4/6).  (2-3) SAND; very fine to medium, trace silt, trace small granule, subrounded, poorly sorted; dry, light brown (10YR 4/6).	 Borehole capped with concrete.  Borehole backfilled with bentonite.	
-5	-5							End of boring 3' bgs.	
-10	-10								
-15	-15								





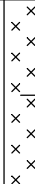
 ARCADIS <i>Infrastructure · Water · Environment · Buildings</i>	Remarks: bgs = below ground surface Hand Auger from 0-3' bgs. Groundwater not encountered No order or staining observed
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Date Start/Finish: 12/15/2011 Drilling Company: ARCADIS Driller's Name: ARCADIS Drilling Method: Hand Auger Sampling Method: Hand Auger Rig Type: NA	Northing: NA Easting: NA Casing Elevation: NA Borehole Depth: 3' bgs Surface Elevation: NA Descriptions By: M. Meckley	Well/Boring ID: WMU4_SB4 Client: RACER Trust Location: RACER Buick City Flint, MI
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
		1	0-3	3.0	1.0			(0-1) CONCRETE	 Borehole capped with concrete.
					0.2			(1-2) SAND; fine to medium, little silt, trace small granule, subangular, poorly sorted, light brown (10YR 4/6).	 Borehole backfilled with bentonite.
								(2-3) SAND; fine to coarse, trace small to medium granule, subangular to subrounded, trace silt, poorly sorted; dry, brown (10YR 4/6).	
-5	-5							End of boring 3' bgs	
-10	-10								
-15	-15								

 <i>Infrastructure · Water · Environment · Buildings</i>	Remarks: bgs = below ground surface Hand auger from 0-3' bgs Groundwater not encountered No order or staining observed
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Date Start/Finish: 12/15/2011 Drilling Company: ARCADIS Driller's Name: M. Meckley/J. Kotwicki Drilling Method: Hand Auger Sampling Method: Hand Auger Rig Type: NA	Northing: NA Easting: NA Casing Elevation: NA Borehole Depth: 3' bgs Surface Elevation: NA Descriptions By: M. Meckley	Well/Boring ID: WMU5_SB1 Client: RACER Trust Location: RACER Buick City Flint, MI
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
		1	0-3	3.0	0.3		 (0-0.8) CONCRETE  (0.8-1.3) GRAVEL; large pebbles, subangular; dry. NOTE: fill.  (1.3-1.8) SAND; very fine to fine, trace coarse, little silt, trace granule, small, subangular, poorly sorted; moist, dark brown (7.5YR 2/5).  (1.8-3) SAND; fine, little silt, well sorted; dry, dark brown (10YR 2/1).	 Borehole backfilled with soil cuttings.	
-5	-5				0.2			End of boring 3' bgs	
-10	-10								
-15	-15								




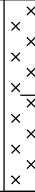
	Remarks: bgs = below ground surface Hand auger from 0-3' bgs Groundwater not encountered No order or staining observed
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Date Start/Finish: 12/15/2011 Drilling Company: ARCADIS Driller's Name: M. Meckley/J. Kotwicki Drilling Method: Hand Auger Sampling Method: Hand Auger Rig Type: NA	Northing: NA Easting: NA Casing Elevation: NA Borehole Depth: 3' bgs Surface Elevation: NA Descriptions By: M. Meckley	Well/Boring ID: WMU5_SB2 Client: RACER Trust Location: RACER Buick City Flint, MI
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
		1	0-3	3.0	0.1 0.2	X		(0-0.9) CONCRETE (0.9-3) GRAVEL; medium to large pebble, little coarse sand, little small to large granule, subangular, poorly sorted; dry, dark brown (7.5YR 3/2). NOTE: removed large pebbles in order to collect sample.	 Borehole backfilled with soil cuttings.
-5	-5							End of boring 3' bgs	
-10	-10								
-15	-15								




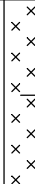
	Remarks: bgs = below ground surface Hand auger 0-3' bgs Groundwater not encountered No order or staining observed
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Date Start/Finish: 12/15/2011 Drilling Company: ARCADIS Driller's Name: M. Meckley/J. Kotwicki Drilling Method: Hand Auger Sampling Method: Hand Auger Rig Type: NA	Northing: NA Easting: NA Casing Elevation: NA Borehole Depth: 3' bgs Surface Elevation: NA Descriptions By: M. Meckley	Well/Boring ID: WMU5_SB3 Client: RACER Trust Location: RACER Buick City Flint, MI
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
		1	0-3	3.0	0.4 1.5	X	  	(0-0.8) CONCRETE (0.8-2.3) SAND; fine to medium, trace coarse, trace silt, trace small to large granule, trace small to large pebble, subrounded, poorly sorted; moist, dark brown (7.5YR 2.5/1). (2.3-3) GRAVEL; large pebble, small cobble, subangular, little sand, medium to coarse; dry, dark brown (10YR 4/6).	 Borehole backfilled with soil cuttings.
-5	-5							End of boring 3' bgs	
-10	-10								
-15	-15								




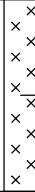
 <i>Infrastructure · Water · Environment · Buildings</i>	Remarks: bgs = below ground surface Hand auger 0-3' bgs Groundwater not encountered No order or staining observed
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Date Start/Finish: 12/15/2011 Drilling Company: ARCADIS Driller's Name: M. Meckley/J. Kotwicki Drilling Method: Hand Auger Sampling Method: Hand Auger Rig Type: NA	Northing: NA Easting: NA Casing Elevation: NA Borehole Depth: 3' bgs Surface Elevation: NA Descriptions By: M. Meckley	Well/Boring ID: WMU5_SB4 Client: RACER Trust Location: RACER Buick City Flint, MI
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
		1	0-3	3.0	0.1 0.2	X	 (0-0.7) CONCRETE  (0.7-1.7) SAND; fine to coarse, trace silt, trace granule, medium, subangular, poorly sorted; moist, dark brown (10YR 2/1).  (1.7-3) SAND; fine, trace pebble, small, subrounded, well sorted; dry, dark brown (10YR 2/2) with dark tan (7YR 5/8) mottled.	 Borehole backfilled with soil cuttings.	
-5	-5							End of boring 3' bgs	
-10	-10								
-15	-15								


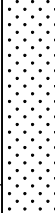

	Remarks: bgs = below ground surface Hand auger 0-3' bgs Groundwater not encountered No order or staining observed
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Date Start/Finish: 12/15/2011 Drilling Company: ARCADIS Driller's Name: M. Meckley/J. Kotwicki Drilling Method: Hand Auger Sampling Method: Hand Auger Rig Type: NA	Northing: NA Easting: NA Casing Elevation: NA Borehole Depth: 3' bgs Surface Elevation: NA Descriptions By: M. Meckley	Well/Boring ID: WMU5_SB5 Client: RACER Trust Location: RACER Buick City Flint, MI
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
		1	0-3	3.0	0.2 0.3	X	  	(0-0.8) CONCRETE (0.8-2.3) SAND; fine to medium, little silt, trace granule, small to large, subrounded, trace pebble, medium, poorly sorted; dry, dark brown (7.5YR 2.5/1). (2.3-3) GRAVEL; medium to large pebble, small cobble, subangular to subrounded, little sand, coarse, poorly sorted; dry, dark brown (10YR 3/2).	 Borehole backfilled with soil cuttings.
-5	-5							End of boring 3' bgs	
-10	-10								
-15	-15								

 Infrastructure · Water · Environment · Buildings	Remarks: bgs = below ground surface Hand auger 0-3' bgs Groundwater not encountered No order or staining observed
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Date Start/Finish: 12/15/2011 Drilling Company: ARCADIS Driller's Name: M. Meckley/J. Kotwicki Drilling Method: Hand Auger Sampling Method: Hand Auger Rig Type: NA	Northing: NA Easting: NA Casing Elevation: NA Borehole Depth: 4' bgs Surface Elevation: NA Descriptions By: M. Meckley	Well/Boring ID: WMU6_SB1 Client: RACER Trust Location: RACER Buick City Flint, MI
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DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0								
		1	0-4	4.0	0.3		 (0-0.3) CONCRETE  (0.3-4) SAND; fine to medium, trace silt, well sorted; dry, black to dark brown (10YR 3/2). NOTE: strong odor.	 Borehole backfilled with bentonite.	
					5.1	X		End of boring 4' bgs	
-5	-5								
-10	-10								
-15	-15								

 <i>Infrastructure · Water · Environment · Buildings</i>	Remarks: bgs = below ground surface Hand auger 0-4' bgs Groundwater not encountered No staining observed
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Appendix D

Laboratory Data



Analytical Laboratory Report

Report ID: S51410.01(01)
Generated on 02/01/2012

Report to

Attention: Mike Brennan
Arcadis
10559 Citation Drive
Suite 100
Brighton, MI 48116

Phone: 810-229-8594 FAX: 810-229-8837
Email: Michael.Brennan@arcadis-us.com

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S51410.01-S51410.23
Project: B0064410.2012.00900 / Buick City / Flint MI
Collected Date: 01/23/2012 - 01/25/2012
Submitted Date/Time: 01/25/2012 14:00
Sampled by: Megan Meckley
P.O. #: MLT1295

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
Samples are held by the lab for 30 days from the sample submittal date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories.

Laboratory Certifications:

Michigan DNRE (#9956), Ohio EPA (#CL0002), NELAC NY (#11814), NELAC FL (#E871045), WBENC (#2005110032)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Sample Summary (23 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S51410.01	WMU2_SB1_01232012 (3'-3.5')	Soil	01/23/2012 11:10
S51410.02	WMU7_SB1_01232012 (15.5-16')	Soil	01/23/2012 13:40
S51410.03	WMU7_SB2_01232012 (14.5-15')	Soil	01/23/2012 16:25
S51410.04	WMU7_SB3_01242012 (15.5-16')	Soil	01/24/2012 09:55
S51410.05	WMU8_SB1_01242012 (2-2.8')	Soil	01/24/2012 10:40
S51410.06	WMU8_SB2_01242012 (1.5-2')	Soil	01/24/2012 10:55
S51410.07	WMU8_SB3_01242012 (3.5-4')	Soil	01/24/2012 11:20
S51410.08	WMU8_SB4_01242012 (1.2-1.7')	Soil	01/24/2012 11:10
S51410.09	WMU8_SB5_01242012 (4.2-5')	Soil	01/24/2012 11:50
S51410.10	WMU10_SB1_01242012 (17.2-17.7')	Soil	01/24/2012 14:30
S51410.11	WMU10_SB2_01242012 (16-16.5')	Soil	01/24/2012 15:45
S51410.12	WMU10_SB3_01242012 (15.5-16')	Soil	01/24/2012 16:40
S51410.13	WMU10_SB4_01242012 (20-20.5')	Soil	01/25/2012 10:20
S51410.14	WMU10_SB5_01242012 (18.5-19')	Soil	01/25/2012 12:00
S51410.15	WMU10_SB5A_01242012 (17.5-18')	Soil	01/25/2012 11:55
S51410.16	WMU10_SB1A_01242012 (16-16.5')	Soil	01/24/2012 14:45
S51410.17	WMU10_SB2C_01242012 (13-13.5')	Soil	01/24/2012 15:35
S51410.18	WMU10_SB3C_01242012 (12.5-13')	Soil	01/24/2012 16:30
S51410.19	WMU10_SB4C_01242012 (14.5-15')	Soil	01/25/2012 09:55
S51410.20	WMU10_SB5C_01242012 (16.5-17')	Soil	01/25/2012 11:50
S51410.21	WMU10_SB5B_01252012 (14.5-15')	Soil	01/25/2012 12:05
S51410.22	TB1_01232011	Methanol	01/23/2012 09:00
S51410.23	WMU10_SB4A_01252012 (17-17.5')	Soil	01/25/2012 10:30



Analytical Laboratory Report

Lab Sample ID: S51410.01
 Sample Tag: WMU2_SB1_01232012 (3'-3.5')
 Collected Date/Time: 01/23/2012 11:10
 Matrix: Soil
 COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	01/27/12 17:41	EMR		
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Inorganics

Total Solids	82	%	1	Std M 2540 B	01/26/12 11:00	SLR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	01/30/12 15:10	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	01/30/12 15:10	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	01/30/12 15:10	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	01/30/12 15:10	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	01/30/12 15:10	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/26/12 15:42	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	70,000	8260M	01/30/12 16:03	JGH		
Cyclohexanone	Not detected	ug/kg	7,000	8260M	01/30/12 16:03	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	7,000	8260M	01/30/12 16:03	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	70,000	8260M	01/30/12 16:03	JGH		
2-Nitropropane	Not detected	ug/kg	7,000	8260M	01/30/12 16:03	JGH	79-46-9	

F Scan

Benzene	320	ug/kg	70	8260M	01/30/12 16:03	JGH	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	70	8260M	01/30/12 16:03	JGH	56-23-5	
Chlorobenzene	Not detected	ug/kg	70	8260M	01/30/12 16:03	JGH	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	70	8260M	01/30/12 16:03	JGH	95-50-1	
Ethylbenzene	670	ug/kg	70	8260M	01/30/12 16:03	JGH	100-41-4	
Methylene chloride	Not detected	ug/kg	70	8260M	01/30/12 16:03	JGH	75-09-2	
Tetrachloroethene	Not detected	ug/kg	70	8260M	01/30/12 16:03	JGH	127-18-4	
Toluene	6,160	ug/kg	70	8260M	01/30/12 16:03	JGH	108-88-3	
1,1,1-Trichloroethane	100	ug/kg	70	8260M	01/30/12 16:03	JGH	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	8260M	01/30/12 16:03	JGH	79-00-5	
Trichloroethene	Not detected	ug/kg	70	8260M	01/30/12 16:03	JGH	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	70	8260M	01/30/12 16:03	JGH	75-69-4	
p,m-Xylene	1,870	ug/kg	70	8260M	01/30/12 16:03	JGH		
o-Xylene	680	ug/kg	70	8260M	01/30/12 16:03	JGH	95-47-6	
Acetone	Not detected	ug/kg	7,000	8260M	01/30/12 16:03	JGH	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	7,000	8260M	01/30/12 16:03	JGH	78-93-3	
Carbon disulfide	Not detected	ug/kg	7,000	8260M	01/30/12 16:03	JGH	75-15-0	
Diethyl ether	Not detected	ug/kg	7,000	8260M	01/30/12 16:03	JGH	60-29-7	



Analytical Laboratory Report

Lab Sample ID: S51410.01 (continued)

Sample Tag: WMU2_SB1_01232012 (3'-3.5')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	7,000	8260M	01/30/12 16:03	JGH	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	70	8260B	01/30/12 16:03	JGH	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	70	8260B	01/30/12 16:03	JGH	76-13-1	
Other / Misc.								
Methanol	30,000	ug/kg	4,400	8015M	01/30/12 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S51410.02
 Sample Tag: WMU7_SB1_01232012 (15.5-16')
 Collected Date/Time: 01/23/2012 13:40
 Matrix: Soil
 COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	01/27/12 17:41	EMR		
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Inorganics

Total Solids	85	%	1	Std M 2540 B	01/26/12 11:00	SLR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	01/30/12 15:29	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	01/30/12 15:29	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	01/30/12 15:29	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	01/30/12 15:29	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	01/30/12 15:29	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/26/12 15:58	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	70,000	8260M	01/30/12 16:22	JGH		
Cyclohexanone	Not detected	ug/kg	7,000	8260M	01/30/12 16:22	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	7,000	8260M	01/30/12 16:22	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	70,000	8260M	01/30/12 16:22	JGH		
2-Nitropropane	Not detected	ug/kg	7,000	8260M	01/30/12 16:22	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	70	8260M	01/30/12 16:22	JGH	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	70	8260M	01/30/12 16:22	JGH	56-23-5	
Chlorobenzene	Not detected	ug/kg	70	8260M	01/30/12 16:22	JGH	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	70	8260M	01/30/12 16:22	JGH	95-50-1	
Ethylbenzene	Not detected	ug/kg	70	8260M	01/30/12 16:22	JGH	100-41-4	
Methylene chloride	Not detected	ug/kg	70	8260M	01/30/12 16:22	JGH	75-09-2	
Tetrachloroethene	Not detected	ug/kg	70	8260M	01/30/12 16:22	JGH	127-18-4	
Toluene	Not detected	ug/kg	70	8260M	01/30/12 16:22	JGH	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/kg	70	8260M	01/30/12 16:22	JGH	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	8260M	01/30/12 16:22	JGH	79-00-5	
Trichloroethene	Not detected	ug/kg	70	8260M	01/30/12 16:22	JGH	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	70	8260M	01/30/12 16:22	JGH	75-69-4	
p,m-Xylene	Not detected	ug/kg	70	8260M	01/30/12 16:22	JGH		
o-Xylene	Not detected	ug/kg	70	8260M	01/30/12 16:22	JGH	95-47-6	
Acetone	Not detected	ug/kg	7,000	8260M	01/30/12 16:22	JGH	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	7,000	8260M	01/30/12 16:22	JGH	78-93-3	
Carbon disulfide	Not detected	ug/kg	7,000	8260M	01/30/12 16:22	JGH	75-15-0	
Diethyl ether	Not detected	ug/kg	7,000	8260M	01/30/12 16:22	JGH	60-29-7	



Analytical Laboratory Report

Lab Sample ID: S51410.02 (continued)

Sample Tag: WMU7_SB1_01232012 (15.5-16')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	7,000	8260M	01/30/12 16:22	JGH	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	70	8260B	01/30/12 16:22	JGH	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	70	8260B	01/30/12 16:22	JGH	76-13-1	
Other / Misc.								
Methanol	13,000	ug/kg	4,400	8015M	01/26/12 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S51410.03
 Sample Tag: WMU7_SB2_01232012 (14.5-15')
 Collected Date/Time: 01/23/2012 16:25
 Matrix: Soil
 COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	01/27/12 17:41	EMR		
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Inorganics

Total Solids	84	%	1	Std M 2540 B	01/26/12 11:00	SLR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	01/30/12 15:48	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	01/30/12 15:48	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	01/30/12 15:48	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	01/30/12 15:48	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	01/30/12 15:48	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/26/12 16:15	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	70,000	8260M	01/30/12 16:40	JGH		
Cyclohexanone	Not detected	ug/kg	7,000	8260M	01/30/12 16:40	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	7,000	8260M	01/30/12 16:40	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	70,000	8260M	01/30/12 16:40	JGH		
2-Nitropropane	Not detected	ug/kg	7,000	8260M	01/30/12 16:40	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	70	8260M	01/30/12 16:40	JGH	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	70	8260M	01/30/12 16:40	JGH	56-23-5	
Chlorobenzene	Not detected	ug/kg	70	8260M	01/30/12 16:40	JGH	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	70	8260M	01/30/12 16:40	JGH	95-50-1	
Ethylbenzene	Not detected	ug/kg	70	8260M	01/30/12 16:40	JGH	100-41-4	
Methylene chloride	Not detected	ug/kg	70	8260M	01/30/12 16:40	JGH	75-09-2	
Tetrachloroethene	Not detected	ug/kg	70	8260M	01/30/12 16:40	JGH	127-18-4	
Toluene	Not detected	ug/kg	70	8260M	01/30/12 16:40	JGH	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/kg	70	8260M	01/30/12 16:40	JGH	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	8260M	01/30/12 16:40	JGH	79-00-5	
Trichloroethene	Not detected	ug/kg	70	8260M	01/30/12 16:40	JGH	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	70	8260M	01/30/12 16:40	JGH	75-69-4	
p,m-Xylene	Not detected	ug/kg	70	8260M	01/30/12 16:40	JGH		
o-Xylene	Not detected	ug/kg	70	8260M	01/30/12 16:40	JGH	95-47-6	
Acetone	Not detected	ug/kg	7,000	8260M	01/30/12 16:40	JGH	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	7,000	8260M	01/30/12 16:40	JGH	78-93-3	
Carbon disulfide	Not detected	ug/kg	7,000	8260M	01/30/12 16:40	JGH	75-15-0	
Diethyl ether	Not detected	ug/kg	7,000	8260M	01/30/12 16:40	JGH	60-29-7	



Analytical Laboratory Report

Lab Sample ID: S51410.03 (continued)

Sample Tag: WMU7_SB2_01232012 (14.5-15')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	7,000	8260M	01/30/12 16:40	JGH	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	70	8260B	01/30/12 16:40	JGH	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	70	8260B	01/30/12 16:40	JGH	76-13-1	
Other / Misc.								
Methanol	10,000	ug/kg	4,400	8015M	01/26/12 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S51410.04
 Sample Tag: WMU7_SB3_01242012 (15.5-16')
 Collected Date/Time: 01/24/2012 09:55
 Matrix: Soil
 COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	01/27/12 17:41	EMR		
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Inorganics

Total Solids	81	%	1	Std M 2540 B	01/26/12 11:00	SLR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	01/30/12 16:07	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	01/30/12 16:07	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	01/30/12 16:07	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	01/30/12 16:07	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	01/30/12 16:07	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/26/12 16:31	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	70,000	8260M	01/30/12 16:59	JGH		
Cyclohexanone	Not detected	ug/kg	7,000	8260M	01/30/12 16:59	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	7,000	8260M	01/30/12 16:59	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	70,000	8260M	01/30/12 16:59	JGH		
2-Nitropropane	Not detected	ug/kg	7,000	8260M	01/30/12 16:59	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	70	8260M	01/30/12 16:59	JGH	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	70	8260M	01/30/12 16:59	JGH	56-23-5	
Chlorobenzene	Not detected	ug/kg	70	8260M	01/30/12 16:59	JGH	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	70	8260M	01/30/12 16:59	JGH	95-50-1	
Ethylbenzene	Not detected	ug/kg	70	8260M	01/30/12 16:59	JGH	100-41-4	
Methylene chloride	Not detected	ug/kg	70	8260M	01/30/12 16:59	JGH	75-09-2	
Tetrachloroethene	Not detected	ug/kg	70	8260M	01/30/12 16:59	JGH	127-18-4	
Toluene	Not detected	ug/kg	70	8260M	01/30/12 16:59	JGH	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/kg	70	8260M	01/30/12 16:59	JGH	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	8260M	01/30/12 16:59	JGH	79-00-5	
Trichloroethene	Not detected	ug/kg	70	8260M	01/30/12 16:59	JGH	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	70	8260M	01/30/12 16:59	JGH	75-69-4	
p,m-Xylene	Not detected	ug/kg	70	8260M	01/30/12 16:59	JGH		
o-Xylene	Not detected	ug/kg	70	8260M	01/30/12 16:59	JGH	95-47-6	
Acetone	Not detected	ug/kg	7,000	8260M	01/30/12 16:59	JGH	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	7,000	8260M	01/30/12 16:59	JGH	78-93-3	
Carbon disulfide	Not detected	ug/kg	7,000	8260M	01/30/12 16:59	JGH	75-15-0	
Diethyl ether	Not detected	ug/kg	7,000	8260M	01/30/12 16:59	JGH	60-29-7	



Analytical Laboratory Report

Lab Sample ID: S51410.04 (continued)

Sample Tag: WMU7_SB3_01242012 (15.5-16')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	7,000	8260M	01/30/12 16:59	JGH	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	70	8260B	01/30/12 16:59	JGH	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	70	8260B	01/30/12 16:59	JGH	76-13-1	
Other / Misc.								
Methanol	10,000	ug/kg	4,400	8015M	01/26/12 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S51410.05
 Sample Tag: WMU8_SB1_01242012 (2-2.8')
 Collected Date/Time: 01/24/2012 10:40
 Matrix: Soil
 COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	01/27/12 17:41	EMR		
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Inorganics

Total Solids	83	%	1	Std M 2540 B	01/26/12 11:00	SLR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	01/30/12 16:26	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	01/30/12 16:26	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	01/30/12 16:26	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	01/30/12 16:26	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	01/30/12 16:26	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/26/12 16:47	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	70,000	8260M	01/30/12 17:17	JGH		
Cyclohexanone	Not detected	ug/kg	7,000	8260M	01/30/12 17:17	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	7,000	8260M	01/30/12 17:17	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	70,000	8260M	01/30/12 17:17	JGH		
2-Nitropropane	Not detected	ug/kg	7,000	8260M	01/30/12 17:17	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	70	8260M	01/30/12 17:17	JGH	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	70	8260M	01/30/12 17:17	JGH	56-23-5	
Chlorobenzene	Not detected	ug/kg	70	8260M	01/30/12 17:17	JGH	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	70	8260M	01/30/12 17:17	JGH	95-50-1	
Ethylbenzene	Not detected	ug/kg	70	8260M	01/30/12 17:17	JGH	100-41-4	
Methylene chloride	Not detected	ug/kg	70	8260M	01/30/12 17:17	JGH	75-09-2	
Tetrachloroethene	Not detected	ug/kg	70	8260M	01/30/12 17:17	JGH	127-18-4	
Toluene	Not detected	ug/kg	70	8260M	01/30/12 17:17	JGH	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/kg	70	8260M	01/30/12 17:17	JGH	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	8260M	01/30/12 17:17	JGH	79-00-5	
Trichloroethene	Not detected	ug/kg	70	8260M	01/30/12 17:17	JGH	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	70	8260M	01/30/12 17:17	JGH	75-69-4	
p,m-Xylene	Not detected	ug/kg	70	8260M	01/30/12 17:17	JGH		
o-Xylene	Not detected	ug/kg	70	8260M	01/30/12 17:17	JGH	95-47-6	
Acetone	Not detected	ug/kg	7,000	8260M	01/30/12 17:17	JGH	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	7,000	8260M	01/30/12 17:17	JGH	78-93-3	
Carbon disulfide	Not detected	ug/kg	7,000	8260M	01/30/12 17:17	JGH	75-15-0	
Diethyl ether	Not detected	ug/kg	7,000	8260M	01/30/12 17:17	JGH	60-29-7	



Analytical Laboratory Report

Lab Sample ID: S51410.05 (continued)

Sample Tag: WMU8_SB1_01242012 (2-2.8')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	7,000	8260M	01/30/12 17:17	JGH	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	70	8260B	01/30/12 17:17	JGH	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	70	8260B	01/30/12 17:17	JGH	76-13-1	
Other / Misc.								
Methanol	29,000	ug/kg	4,400	8015M	01/26/12 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S51410.06
 Sample Tag: WMU8_SB2_01242012 (1.5-2')
 Collected Date/Time: 01/24/2012 10:55
 Matrix: Soil
 COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	01/27/12 17:41	EMR		
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Inorganics

Total Solids	87	%	1	Std M 2540 B	01/26/12 11:00	SLR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	01/30/12 19:56	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	01/30/12 19:56	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	01/30/12 19:56	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	01/30/12 19:56	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	01/30/12 19:56	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/26/12 17:03	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	60,000	8260M	01/30/12 17:35	JGH		
Cyclohexanone	Not detected	ug/kg	6,000	8260M	01/30/12 17:35	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	6,000	8260M	01/30/12 17:35	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	60,000	8260M	01/30/12 17:35	JGH		
2-Nitropropane	Not detected	ug/kg	6,000	8260M	01/30/12 17:35	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	60	8260M	01/30/12 17:35	JGH	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	60	8260M	01/30/12 17:35	JGH	56-23-5	
Chlorobenzene	Not detected	ug/kg	60	8260M	01/30/12 17:35	JGH	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	60	8260M	01/30/12 17:35	JGH	95-50-1	
Ethylbenzene	80	ug/kg	60	8260M	01/30/12 17:35	JGH	100-41-4	
Methylene chloride	Not detected	ug/kg	60	8260M	01/30/12 17:35	JGH	75-09-2	
Tetrachloroethene	Not detected	ug/kg	60	8260M	01/30/12 17:35	JGH	127-18-4	
Toluene	220	ug/kg	60	8260M	01/30/12 17:35	JGH	108-88-3	
1,1,1-Trichloroethane	70	ug/kg	60	8260M	01/30/12 17:35	JGH	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	8260M	01/30/12 17:35	JGH	79-00-5	
Trichloroethene	Not detected	ug/kg	60	8260M	01/30/12 17:35	JGH	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	60	8260M	01/30/12 17:35	JGH	75-69-4	
p,m-Xylene	290	ug/kg	60	8260M	01/30/12 17:35	JGH		
o-Xylene	210	ug/kg	60	8260M	01/30/12 17:35	JGH	95-47-6	
Acetone	Not detected	ug/kg	6,000	8260M	01/30/12 17:35	JGH	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	6,000	8260M	01/30/12 17:35	JGH	78-93-3	
Carbon disulfide	Not detected	ug/kg	6,000	8260M	01/30/12 17:35	JGH	75-15-0	
Diethyl ether	Not detected	ug/kg	6,000	8260M	01/30/12 17:35	JGH	60-29-7	



Analytical Laboratory Report

Lab Sample ID: S51410.06 (continued)

Sample Tag: WMU8_SB2_01242012 (1.5-2')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	6,000	8260M	01/30/12 17:35	JGH	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	60	8260B	01/30/12 17:35	JGH	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	60	8260B	01/30/12 17:35	JGH	76-13-1	
Other / Misc.								
Methanol	Not detected	ug/kg	4,400	8015M	01/26/12 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S51410.07
 Sample Tag: WMU8_SB3_01242012 (3.5-4')
 Collected Date/Time: 01/24/2012 11:20
 Matrix: Soil
 COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	01/27/12 17:41	EMR		
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Inorganics

Total Solids	84	%	1	Std M 2540 B	01/26/12 11:00	SLR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	01/30/12 16:45	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	01/30/12 16:45	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	01/30/12 16:45	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	01/30/12 16:45	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	01/30/12 16:45	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/26/12 17:19	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	70,000	8260M	01/30/12 17:54	JGH		
Cyclohexanone	Not detected	ug/kg	7,000	8260M	01/30/12 17:54	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	7,000	8260M	01/30/12 17:54	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	70,000	8260M	01/30/12 17:54	JGH		
2-Nitropropane	Not detected	ug/kg	7,000	8260M	01/30/12 17:54	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	70	8260M	01/30/12 17:54	JGH	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	70	8260M	01/30/12 17:54	JGH	56-23-5	
Chlorobenzene	Not detected	ug/kg	70	8260M	01/30/12 17:54	JGH	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	70	8260M	01/30/12 17:54	JGH	95-50-1	
Ethylbenzene	Not detected	ug/kg	70	8260M	01/30/12 17:54	JGH	100-41-4	
Methylene chloride	Not detected	ug/kg	70	8260M	01/30/12 17:54	JGH	75-09-2	
Tetrachloroethene	Not detected	ug/kg	70	8260M	01/30/12 17:54	JGH	127-18-4	
Toluene	Not detected	ug/kg	70	8260M	01/30/12 17:54	JGH	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/kg	70	8260M	01/30/12 17:54	JGH	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	8260M	01/30/12 17:54	JGH	79-00-5	
Trichloroethene	Not detected	ug/kg	70	8260M	01/30/12 17:54	JGH	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	70	8260M	01/30/12 17:54	JGH	75-69-4	
p,m-Xylene	Not detected	ug/kg	70	8260M	01/30/12 17:54	JGH		
o-Xylene	Not detected	ug/kg	70	8260M	01/30/12 17:54	JGH	95-47-6	
Acetone	Not detected	ug/kg	7,000	8260M	01/30/12 17:54	JGH	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	7,000	8260M	01/30/12 17:54	JGH	78-93-3	
Carbon disulfide	Not detected	ug/kg	7,000	8260M	01/30/12 17:54	JGH	75-15-0	
Diethyl ether	Not detected	ug/kg	7,000	8260M	01/30/12 17:54	JGH	60-29-7	



Analytical Laboratory Report

Lab Sample ID: S51410.07 (continued)

Sample Tag: WMU8_SB3_01242012 (3.5-4')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	7,000	8260M	01/30/12 17:54	JGH	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	70	8260B	01/30/12 17:54	JGH	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	70	8260B	01/30/12 17:54	JGH	76-13-1	
Other / Misc.								
Methanol	26,000	ug/kg	4,400	8015M	01/26/12 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S51410.08
 Sample Tag: WMU8_SB4_01242012 (1.2-1.7)
 Collected Date/Time: 01/24/2012 11:10
 Matrix: Soil
 COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	01/27/12 17:41	EMR		
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Inorganics

Total Solids	92	%	1	Std M 2540 B	01/26/12 11:00	SLR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	01/30/12 17:04	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	01/30/12 17:04	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	01/30/12 17:04	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	01/30/12 17:04	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	01/30/12 17:04	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/26/12 17:35	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	60,000	8260M	01/30/12 18:12	JGH		
Cyclohexanone	Not detected	ug/kg	6,000	8260M	01/30/12 18:12	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	6,000	8260M	01/30/12 18:12	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	60,000	8260M	01/30/12 18:12	JGH		
2-Nitropropane	Not detected	ug/kg	6,000	8260M	01/30/12 18:12	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	60	8260M	01/30/12 18:12	JGH	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	60	8260M	01/30/12 18:12	JGH	56-23-5	
Chlorobenzene	Not detected	ug/kg	60	8260M	01/30/12 18:12	JGH	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	60	8260M	01/30/12 18:12	JGH	95-50-1	
Ethylbenzene	Not detected	ug/kg	60	8260M	01/30/12 18:12	JGH	100-41-4	
Methylene chloride	Not detected	ug/kg	60	8260M	01/30/12 18:12	JGH	75-09-2	
Tetrachloroethene	Not detected	ug/kg	60	8260M	01/30/12 18:12	JGH	127-18-4	
Toluene	Not detected	ug/kg	60	8260M	01/30/12 18:12	JGH	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/kg	60	8260M	01/30/12 18:12	JGH	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	8260M	01/30/12 18:12	JGH	79-00-5	
Trichloroethene	Not detected	ug/kg	60	8260M	01/30/12 18:12	JGH	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	60	8260M	01/30/12 18:12	JGH	75-69-4	
p,m-Xylene	Not detected	ug/kg	60	8260M	01/30/12 18:12	JGH		
o-Xylene	Not detected	ug/kg	60	8260M	01/30/12 18:12	JGH	95-47-6	
Acetone	Not detected	ug/kg	6,000	8260M	01/30/12 18:12	JGH	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	6,000	8260M	01/30/12 18:12	JGH	78-93-3	
Carbon disulfide	Not detected	ug/kg	6,000	8260M	01/30/12 18:12	JGH	75-15-0	
Diethyl ether	Not detected	ug/kg	6,000	8260M	01/30/12 18:12	JGH	60-29-7	



Analytical Laboratory Report

Lab Sample ID: S51410.08 (continued)

Sample Tag: WMU8_SB4_01242012 (1.2-1.7')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	6,000	8260M	01/30/12 18:12	JGH	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	60	8260B	01/30/12 18:12	JGH	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	60	8260B	01/30/12 18:12	JGH	76-13-1	
Other / Misc.								
Methanol	Not detected	ug/kg	4,400	8015M	01/26/12 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S51410.09
 Sample Tag: WMU8_SB5_01242012 (4.2-5)
 Collected Date/Time: 01/24/2012 11:50
 Matrix: Soil
 COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	01/27/12 17:41	EMR		
FScan Extraction (Replicate 01)	Completed			3550B	01/31/12 12:52	PL		

Inorganics

Total Solids	91	%	1	Std M 2540 B	01/26/12 11:00	SLR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	01/30/12 17:23	PL	95-48-7	S
p,m-Cresol	Not detected	ug/kg	300	8270C	01/30/12 17:23	PL	3/4-Cresol	S
o-Cresol	Not detected	ug/kg	300	8270C	01/30/12 17:23	PL	95-48-7	S
Nitrobenzene	Not detected	ug/kg	300	8270C	01/30/12 17:23	PL	98-95-3	S
Pyridine	Not detected	ug/kg	300	8270C	01/30/12 17:23	PL	110-86-1	S

F-Scan (Replicate 01)

Cresylic Acid	Not detected	ug/kg	300	8270C	01/31/12 15:15	PL	95-48-7	S
p,m-Cresol	Not detected	ug/kg	300	8270C	01/31/12 15:15	PL	3/4-Cresol	S
o-Cresol	Not detected	ug/kg	300	8270C	01/31/12 15:15	PL	95-48-7	S
Nitrobenzene	Not detected	ug/kg	300	8270C	01/31/12 15:15	PL	98-95-3	S
Pyridine	Not detected	ug/kg	300	8270C	01/31/12 15:15	PL	110-86-1	S

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/26/12 17:51	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	60,000	8260M	01/30/12 18:30	JGH		
Cyclohexanone	Not detected	ug/kg	6,000	8260M	01/30/12 18:30	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	6,000	8260M	01/30/12 18:30	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	60,000	8260M	01/30/12 18:30	JGH		
2-Nitropropane	Not detected	ug/kg	6,000	8260M	01/30/12 18:30	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	60	8260M	01/30/12 18:30	JGH	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	60	8260M	01/30/12 18:30	JGH	56-23-5	
Chlorobenzene	Not detected	ug/kg	60	8260M	01/30/12 18:30	JGH	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	60	8260M	01/30/12 18:30	JGH	95-50-1	
Ethylbenzene	Not detected	ug/kg	60	8260M	01/30/12 18:30	JGH	100-41-4	
Methylene chloride	Not detected	ug/kg	60	8260M	01/30/12 18:30	JGH	75-09-2	
Tetrachloroethene	Not detected	ug/kg	60	8260M	01/30/12 18:30	JGH	127-18-4	
Toluene	Not detected	ug/kg	60	8260M	01/30/12 18:30	JGH	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/kg	60	8260M	01/30/12 18:30	JGH	71-55-6	

S-Surrogate recovery outside of control limits



Analytical Laboratory Report

Lab Sample ID: S51410.09 (continued)

Sample Tag: WMU8_SB5_01242012 (4.2-5')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
1,1,2-Trichloroethane	Not detected	ug/kg	60	8260M	01/30/12 18:30	JGH	79-00-5	
Trichloroethene	Not detected	ug/kg	60	8260M	01/30/12 18:30	JGH	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	60	8260M	01/30/12 18:30	JGH	75-69-4	
p,m-Xylene	Not detected	ug/kg	60	8260M	01/30/12 18:30	JGH		
o-Xylene	Not detected	ug/kg	60	8260M	01/30/12 18:30	JGH	95-47-6	
Acetone	Not detected	ug/kg	6,000	8260M	01/30/12 18:30	JGH	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	6,000	8260M	01/30/12 18:30	JGH	78-93-3	
Carbon disulfide	Not detected	ug/kg	6,000	8260M	01/30/12 18:30	JGH	75-15-0	
Diethyl ether	Not detected	ug/kg	6,000	8260M	01/30/12 18:30	JGH	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	6,000	8260M	01/30/12 18:30	JGH	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	60	8260B	01/30/12 18:30	JGH	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	60	8260B	01/30/12 18:30	JGH	76-13-1	
Other / Misc.								
Methanol	50,000	ug/kg	4,400	8015M	01/26/12 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S51410.10
 Sample Tag: WMU10_SB1_01242012 (17.2-17.7)
 Collected Date/Time: 01/24/2012 14:30
 Matrix: Soil
 COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	01/27/12 17:41	EMR		
Metal Digestion	Completed			3050B	01/30/12 10:00	PER		

Inorganics

Flashpoint for Solids	Not detected	mm/sec	2.2	1030	01/27/12 14:18	PL		
Total Solids	90	%	1	Std M 2540 B	01/26/12 11:00	SLR		

Metals

Lead	2.98	mg/kg	0.30	6020	01/30/12 12:42	PER	7439-92-1	
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	01/30/12 17:42	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	01/30/12 17:42	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	01/30/12 17:42	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	01/30/12 17:42	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	01/30/12 17:42	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/26/12 18:07	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	60,000	8260M	01/30/12 18:48	JGH		
Cyclohexanone	Not detected	ug/kg	6,000	8260M	01/30/12 18:48	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	6,000	8260M	01/30/12 18:48	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	60,000	8260M	01/30/12 18:48	JGH		
2-Nitropropane	Not detected	ug/kg	6,000	8260M	01/30/12 18:48	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	60	8260M	01/30/12 18:48	JGH	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	60	8260M	01/30/12 18:48	JGH	56-23-5	
Chlorobenzene	Not detected	ug/kg	60	8260M	01/30/12 18:48	JGH	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	60	8260M	01/30/12 18:48	JGH	95-50-1	
Ethylbenzene	Not detected	ug/kg	60	8260M	01/30/12 18:48	JGH	100-41-4	
Methylene chloride	Not detected	ug/kg	60	8260M	01/30/12 18:48	JGH	75-09-2	
Tetrachloroethene	Not detected	ug/kg	60	8260M	01/30/12 18:48	JGH	127-18-4	
Toluene	Not detected	ug/kg	60	8260M	01/30/12 18:48	JGH	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/kg	60	8260M	01/30/12 18:48	JGH	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	8260M	01/30/12 18:48	JGH	79-00-5	
Trichloroethene	Not detected	ug/kg	60	8260M	01/30/12 18:48	JGH	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	60	8260M	01/30/12 18:48	JGH	75-69-4	
p,m-Xylene	Not detected	ug/kg	60	8260M	01/30/12 18:48	JGH		



Analytical Laboratory Report

Lab Sample ID: S51410.10 (continued)

Sample Tag: WMU10_SB1_01242012 (17.2-17.7)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
o-Xylene	Not detected	ug/kg	60	8260M	01/30/12 18:48	JGH	95-47-6	
Acetone	Not detected	ug/kg	6,000	8260M	01/30/12 18:48	JGH	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	6,000	8260M	01/30/12 18:48	JGH	78-93-3	
Carbon disulfide	Not detected	ug/kg	6,000	8260M	01/30/12 18:48	JGH	75-15-0	
Diethyl ether	Not detected	ug/kg	6,000	8260M	01/30/12 18:48	JGH	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	6,000	8260M	01/30/12 18:48	JGH	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	60	8260B	01/30/12 18:48	JGH	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	60	8260B	01/30/12 18:48	JGH	76-13-1	
Other / Misc.								
Methanol	Not detected	ug/kg	4,400	8015M	01/26/12 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S51410.11
 Sample Tag: WMU10_SB2_01242012 (16-16.5)
 Collected Date/Time: 01/24/2012 15:45
 Matrix: Soil
 COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	01/27/12 17:41	EMR		
Metal Digestion	Completed			3050B	01/30/12 10:00	PER		

Inorganics

Flashpoint for Solids	Not detected	mm/sec	2.2	1030	01/27/12 14:18	PL		
Total Solids	91	%	1	Std M 2540 B	01/26/12 11:00	SLR		

Metals

Lead	3.03	mg/kg	0.30	6020	01/30/12 12:44	PER	7439-92-1	
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	01/30/12 18:01	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	01/30/12 18:01	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	01/30/12 18:01	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	01/30/12 18:01	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	01/30/12 18:01	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/26/12 18:23	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	60,000	8260M	01/30/12 19:06	JGH		
Cyclohexanone	Not detected	ug/kg	6,000	8260M	01/30/12 19:06	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	6,000	8260M	01/30/12 19:06	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	60,000	8260M	01/30/12 19:06	JGH		
2-Nitropropane	Not detected	ug/kg	6,000	8260M	01/30/12 19:06	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	60	8260M	01/30/12 19:06	JGH	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	60	8260M	01/30/12 19:06	JGH	56-23-5	
Chlorobenzene	Not detected	ug/kg	60	8260M	01/30/12 19:06	JGH	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	60	8260M	01/30/12 19:06	JGH	95-50-1	
Ethylbenzene	Not detected	ug/kg	60	8260M	01/30/12 19:06	JGH	100-41-4	
Methylene chloride	Not detected	ug/kg	60	8260M	01/30/12 19:06	JGH	75-09-2	
Tetrachloroethene	Not detected	ug/kg	60	8260M	01/30/12 19:06	JGH	127-18-4	
Toluene	Not detected	ug/kg	60	8260M	01/30/12 19:06	JGH	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/kg	60	8260M	01/30/12 19:06	JGH	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	8260M	01/30/12 19:06	JGH	79-00-5	
Trichloroethene	Not detected	ug/kg	60	8260M	01/30/12 19:06	JGH	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	60	8260M	01/30/12 19:06	JGH	75-69-4	
p,m-Xylene	Not detected	ug/kg	60	8260M	01/30/12 19:06	JGH		



Analytical Laboratory Report

Lab Sample ID: S51410.11 (continued)

Sample Tag: WMU10_SB2_01242012 (16-16.5)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
o-Xylene	Not detected	ug/kg	60	8260M	01/30/12 19:06	JGH	95-47-6	
Acetone	Not detected	ug/kg	6,000	8260M	01/30/12 19:06	JGH	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	6,000	8260M	01/30/12 19:06	JGH	78-93-3	
Carbon disulfide	Not detected	ug/kg	6,000	8260M	01/30/12 19:06	JGH	75-15-0	
Diethyl ether	Not detected	ug/kg	6,000	8260M	01/30/12 19:06	JGH	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	6,000	8260M	01/30/12 19:06	JGH	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	60	8260B	01/30/12 19:06	JGH	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	60	8260B	01/30/12 19:06	JGH	76-13-1	
Other / Misc.								
Methanol	19,000	ug/kg	4,400	8015M	01/26/12 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S51410.12
 Sample Tag: WMU10_SB3_01242012 (15.5-16)
 Collected Date/Time: 01/24/2012 16:40
 Matrix: Soil
 COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	01/27/12 17:41	EMR		
Metal Digestion	Completed			3050B	01/30/12 10:00	PER		

Inorganics

Flashpoint for Solids	Not detected	mm/sec	2.2	1030	01/27/12 14:18	PL		
Total Solids	91	%	1	Std M 2540 B	01/26/12 11:00	SLR		

Metals

Lead	2.50	mg/kg	0.30	6020	01/30/12 12:45	PER	7439-92-1	
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	01/30/12 18:20	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	01/30/12 18:20	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	01/30/12 18:20	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	01/30/12 18:20	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	01/30/12 18:20	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/26/12 18:39	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	60,000	8260M	01/30/12 19:24	JGH		
Cyclohexanone	Not detected	ug/kg	6,000	8260M	01/30/12 19:24	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	6,000	8260M	01/30/12 19:24	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	60,000	8260M	01/30/12 19:24	JGH		
2-Nitropropane	Not detected	ug/kg	6,000	8260M	01/30/12 19:24	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	60	8260M	01/30/12 19:24	JGH	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	60	8260M	01/30/12 19:24	JGH	56-23-5	
Chlorobenzene	Not detected	ug/kg	60	8260M	01/30/12 19:24	JGH	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	60	8260M	01/30/12 19:24	JGH	95-50-1	
Ethylbenzene	Not detected	ug/kg	60	8260M	01/30/12 19:24	JGH	100-41-4	
Methylene chloride	Not detected	ug/kg	60	8260M	01/30/12 19:24	JGH	75-09-2	
Tetrachloroethene	Not detected	ug/kg	60	8260M	01/30/12 19:24	JGH	127-18-4	
Toluene	Not detected	ug/kg	60	8260M	01/30/12 19:24	JGH	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/kg	60	8260M	01/30/12 19:24	JGH	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	8260M	01/30/12 19:24	JGH	79-00-5	
Trichloroethene	Not detected	ug/kg	60	8260M	01/30/12 19:24	JGH	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	60	8260M	01/30/12 19:24	JGH	75-69-4	
p,m-Xylene	Not detected	ug/kg	60	8260M	01/30/12 19:24	JGH		



Analytical Laboratory Report

Lab Sample ID: S51410.12 (continued)

Sample Tag: WMU10_SB3_01242012 (15.5-16)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
o-Xylene	Not detected	ug/kg	60	8260M	01/30/12 19:24	JGH	95-47-6	
Acetone	Not detected	ug/kg	6,000	8260M	01/30/12 19:24	JGH	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	6,000	8260M	01/30/12 19:24	JGH	78-93-3	
Carbon disulfide	Not detected	ug/kg	6,000	8260M	01/30/12 19:24	JGH	75-15-0	
Diethyl ether	Not detected	ug/kg	6,000	8260M	01/30/12 19:24	JGH	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	6,000	8260M	01/30/12 19:24	JGH	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	60	8260B	01/30/12 19:24	JGH	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	60	8260B	01/30/12 19:24	JGH	76-13-1	
Other / Misc.								
Methanol	9,400	ug/kg	4,400	8015M	01/26/12 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S51410.13
Sample Tag: WMU10_SB4_01242012 (20-20.5)
Collected Date/Time: 01/25/2012 10:20
Matrix: Soil
COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Other / Misc.								
Hold until notified	Completed				01/25/12 17:00	PCS		



Analytical Laboratory Report

Lab Sample ID: S51410.14
 Sample Tag: WMU10_SB5_01242012 (18.5-19)
 Collected Date/Time: 01/25/2012 12:00
 Matrix: Soil
 COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

DRO Extraction	Completed			3510C	01/27/12 17:44	EMR		
FScan Extraction	Completed			3550B	01/27/12 17:41	EMR		
Metal Digestion	Completed			3050B	01/30/12 10:00	PER		

Inorganics

Flashpoint for Solids	Not detected	mm/sec	2.2	1030	01/27/12 14:18	PL		
Total Solids	89	%	1	Std M 2540 B	01/26/12 11:00	SLR		

Metals

Lead	13.2	mg/kg	0.30	6020	01/30/12 12:53	PER	7439-92-1	
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Organics - Semi-Volatiles

TPH DRO (C10-C28)	11,710,000	ug/kg	562,000	8015M	01/31/12 14:39	PL		XY
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F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	01/30/12 20:15	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	01/30/12 20:15	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	01/30/12 20:15	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	01/30/12 20:15	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	01/30/12 20:15	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/26/12 20:48	JGH	110-80-5	
TPH GRO (C6-C10)	550,000	ug/kg	60,000	8015M	01/31/12 17:53	JGH		Y

F Scan

1-Butanol	Not detected	ug/kg	1,000,000	8260M	01/30/12 21:51	JGH		X
Cyclohexanone	Not detected	ug/kg	100,000	8260M	01/30/12 21:51	JGH	108-94-1	X
Ethyl Acetate	Not detected	ug/kg	100,000	8260M	01/30/12 21:51	JGH	141-78-6	X
Isobutanol	Not detected	ug/kg	1,000,000	8260M	01/30/12 21:51	JGH		X
2-Nitropropane	Not detected	ug/kg	100,000	8260M	01/30/12 21:51	JGH	79-46-9	X

F Scan

Benzene	Not detected	ug/kg	1,000	8260M	01/30/12 21:51	JGH	71-43-2	Y
Carbon tetrachloride	Not detected	ug/kg	1,000	8260M	01/30/12 21:51	JGH	56-23-5	Y
Chlorobenzene	Not detected	ug/kg	1,000	8260M	01/30/12 21:51	JGH	108-90-7	Y
1,2-Dichlorobenzene	Not detected	ug/kg	1,000	8260M	01/30/12 21:51	JGH	95-50-1	Y
Ethylbenzene	11,000	ug/kg	1,000	8260M	01/30/12 21:51	JGH	100-41-4	Y
Methylene chloride	Not detected	ug/kg	1,000	8260M	01/30/12 21:51	JGH	75-09-2	Y
Tetrachloroethene	Not detected	ug/kg	1,000	8260M	01/30/12 21:51	JGH	127-18-4	Y
Toluene	118,000	ug/kg	1,000	8260M	01/30/12 21:51	JGH	108-88-3	Y

X-Elevated reporting limit due to matrix interference Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S51410.14 (continued)

Sample Tag: WMU10_SB5_01242012 (18.5-19)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
1,1,1-Trichloroethane	Not detected	ug/kg	1,000	8260M	01/30/12 21:51	JGH	71-55-6	Y
1,1,2-Trichloroethane	Not detected	ug/kg	1,000	8260M	01/30/12 21:51	JGH	79-00-5	Y
Trichloroethene	Not detected	ug/kg	1,000	8260M	01/30/12 21:51	JGH	79-01-6	Y
Trichlorofluoromethane	Not detected	ug/kg	1,000	8260M	01/30/12 21:51	JGH	75-69-4	Y
p,m-Xylene	46,000	ug/kg	1,000	8260M	01/30/12 21:51	JGH		Y
o-Xylene	16,000	ug/kg	1,000	8260M	01/30/12 21:51	JGH	95-47-6	Y
Acetone	Not detected	ug/kg	100,000	8260M	01/30/12 21:51	JGH	67-64-1	Y
2-Butanone (MEK)	Not detected	ug/kg	100,000	8260M	01/30/12 21:51	JGH	78-93-3	Y
Carbon disulfide	Not detected	ug/kg	100,000	8260M	01/30/12 21:51	JGH	75-15-0	Y
Diethyl ether	Not detected	ug/kg	100,000	8260M	01/30/12 21:51	JGH	60-29-7	Y
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	100,000	8260M	01/30/12 21:51	JGH	108-10-1	Y
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	1,000	8260B	01/30/12 21:51	JGH	75-71-8	Y
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	1,000	8260B	01/30/12 21:51	JGH	76-13-1	Y
Other / Misc.								
Methanol	Not detected	ug/kg	4,400	8015M	01/26/12 12:00	Fiber		O

Y-Elevated reporting limit due to high target concentration

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S51410.15
Sample Tag: WMU10_SB5A_01242012 (17.5-18')
Collected Date/Time: 01/25/2012 11:55
Matrix: Soil
COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst CAS #	Flags
Other / Misc.							
Hold until notified	Completed				01/25/12 17:00	PCS	



Analytical Laboratory Report

Lab Sample ID: S51410.16
 Sample Tag: WMU10_SB1A_01242012 (16-16.5)
 Collected Date/Time: 01/24/2012 14:45
 Matrix: Soil
 COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	01/27/12 17:41	EMR		
Metal Digestion	Completed			3050B	01/30/12 10:00	PER		

Inorganics

Flashpoint for Solids	Not detected	mm/sec	2.2	1030	01/27/12 14:18	PL		
Total Solids	83	%	1	Std M 2540 B	01/26/12 11:00	SLR		

Metals

Lead	5.83	mg/kg	0.30	6020	01/30/12 12:55	PER	7439-92-1	
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	01/30/12 18:39	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	01/30/12 18:39	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	01/30/12 18:39	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	01/30/12 18:39	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	01/30/12 18:39	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/26/12 18:55	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	70,000	8260M	01/30/12 19:42	JGH		
Cyclohexanone	Not detected	ug/kg	7,000	8260M	01/30/12 19:42	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	7,000	8260M	01/30/12 19:42	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	70,000	8260M	01/30/12 19:42	JGH		
2-Nitropropane	Not detected	ug/kg	7,000	8260M	01/30/12 19:42	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	70	8260M	01/30/12 19:42	JGH	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	70	8260M	01/30/12 19:42	JGH	56-23-5	
Chlorobenzene	Not detected	ug/kg	70	8260M	01/30/12 19:42	JGH	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	70	8260M	01/30/12 19:42	JGH	95-50-1	
Ethylbenzene	Not detected	ug/kg	70	8260M	01/30/12 19:42	JGH	100-41-4	
Methylene chloride	Not detected	ug/kg	70	8260M	01/30/12 19:42	JGH	75-09-2	
Tetrachloroethene	Not detected	ug/kg	70	8260M	01/30/12 19:42	JGH	127-18-4	
Toluene	Not detected	ug/kg	70	8260M	01/30/12 19:42	JGH	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/kg	70	8260M	01/30/12 19:42	JGH	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	8260M	01/30/12 19:42	JGH	79-00-5	
Trichloroethene	Not detected	ug/kg	70	8260M	01/30/12 19:42	JGH	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	70	8260M	01/30/12 19:42	JGH	75-69-4	
p,m-Xylene	Not detected	ug/kg	70	8260M	01/30/12 19:42	JGH		



Analytical Laboratory Report

Lab Sample ID: S51410.16 (continued)

Sample Tag: WMU10_SB1A_01242012 (16-16.5')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
o-Xylene	Not detected	ug/kg	70	8260M	01/30/12 19:42	JGH	95-47-6	
Acetone	Not detected	ug/kg	7,000	8260M	01/30/12 19:42	JGH	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	7,000	8260M	01/30/12 19:42	JGH	78-93-3	
Carbon disulfide	Not detected	ug/kg	7,000	8260M	01/30/12 19:42	JGH	75-15-0	
Diethyl ether	Not detected	ug/kg	7,000	8260M	01/30/12 19:42	JGH	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	7,000	8260M	01/30/12 19:42	JGH	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	70	8260B	01/30/12 19:42	JGH	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	70	8260B	01/30/12 19:42	JGH	76-13-1	
Other / Misc.								
Methanol	Not detected	ug/kg	4,400	8015M	01/26/12 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S51410.17
 Sample Tag: WMU10_SB2C_01242012 (13-13.5)
 Collected Date/Time: 01/24/2012 15:35
 Matrix: Soil
 COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	01/27/12 17:41	EMR		
FScan Extraction (Replicate 01)	Completed			3550B	01/31/12 12:52	PL		
Metal Digestion	Completed			3050B	01/30/12 10:00	PER		

Inorganics

Flashpoint for Solids	Not detected	mm/sec	2.2	1030	01/27/12 14:18	PL		
Total Solids	92	%	1	Std M 2540 B	01/26/12 11:00	SLR		

Metals

Lead	3.13	mg/kg	0.30	6020	01/30/12 12:56	PER	7439-92-1	
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	01/30/12 18:58	PL	95-48-7	S
p,m-Cresol	Not detected	ug/kg	300	8270C	01/30/12 18:58	PL	3/4-Cresol	S
o-Cresol	Not detected	ug/kg	300	8270C	01/30/12 18:58	PL	95-48-7	S
Nitrobenzene	Not detected	ug/kg	300	8270C	01/30/12 18:58	PL	98-95-3	S
Pyridine	Not detected	ug/kg	300	8270C	01/30/12 18:58	PL	110-86-1	S

F-Scan (Replicate 01)

Cresylic Acid	Not detected	ug/kg	300	8270C	01/31/12 15:34	PL	95-48-7	S
p,m-Cresol	Not detected	ug/kg	300	8270C	01/31/12 15:34	PL	3/4-Cresol	S
o-Cresol	Not detected	ug/kg	300	8270C	01/31/12 15:34	PL	95-48-7	S
Nitrobenzene	Not detected	ug/kg	300	8270C	01/31/12 15:34	PL	98-95-3	S
Pyridine	Not detected	ug/kg	300	8270C	01/31/12 15:34	PL	110-86-1	S

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/26/12 19:11	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	60,000	8260M	01/30/12 20:00	JGH		
Cyclohexanone	Not detected	ug/kg	6,000	8260M	01/30/12 20:00	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	6,000	8260M	01/30/12 20:00	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	60,000	8260M	01/30/12 20:00	JGH		
2-Nitropropane	Not detected	ug/kg	6,000	8260M	01/30/12 20:00	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	60	8260M	01/30/12 20:00	JGH	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	60	8260M	01/30/12 20:00	JGH	56-23-5	
Chlorobenzene	Not detected	ug/kg	60	8260M	01/30/12 20:00	JGH	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	60	8260M	01/30/12 20:00	JGH	95-50-1	

S-Surrogate recovery outside of control limits



Analytical Laboratory Report

Lab Sample ID: S51410.17 (continued)

Sample Tag: WMU10_SB2C_01242012 (13-13.5)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
Ethylbenzene	Not detected	ug/kg	60	8260M	01/30/12 20:00	JGH	100-41-4	
Methylene chloride	Not detected	ug/kg	60	8260M	01/30/12 20:00	JGH	75-09-2	
Tetrachloroethene	Not detected	ug/kg	60	8260M	01/30/12 20:00	JGH	127-18-4	
Toluene	Not detected	ug/kg	60	8260M	01/30/12 20:00	JGH	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/kg	60	8260M	01/30/12 20:00	JGH	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	8260M	01/30/12 20:00	JGH	79-00-5	
Trichloroethene	Not detected	ug/kg	60	8260M	01/30/12 20:00	JGH	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	60	8260M	01/30/12 20:00	JGH	75-69-4	
p,m-Xylene	60	ug/kg	60	8260M	01/30/12 20:00	JGH		
o-Xylene	Not detected	ug/kg	60	8260M	01/30/12 20:00	JGH	95-47-6	
Acetone	Not detected	ug/kg	6,000	8260M	01/30/12 20:00	JGH	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	6,000	8260M	01/30/12 20:00	JGH	78-93-3	
Carbon disulfide	Not detected	ug/kg	6,000	8260M	01/30/12 20:00	JGH	75-15-0	
Diethyl ether	Not detected	ug/kg	6,000	8260M	01/30/12 20:00	JGH	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	6,000	8260M	01/30/12 20:00	JGH	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	60	8260B	01/30/12 20:00	JGH	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	60	8260B	01/30/12 20:00	JGH	76-13-1	
Other / Misc.								
Methanol	6,100	ug/kg	4,400	8015M	01/26/12 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S51410.18
 Sample Tag: WMU10_SB3C_01242012 (12.5-13')
 Collected Date/Time: 01/24/2012 16:30
 Matrix: Soil
 COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	01/27/12 17:41	EMR		
FScan Extraction (Replicate 01)	Completed			3550B	01/31/12 12:52	PL		
Metal Digestion	Completed			3050B	01/30/12 10:00	PER		

Inorganics

Flashpoint for Solids	Not detected	mm/sec	2.2	1030	01/27/12 14:18	PL		
Total Solids	93	%	1	Std M 2540 B	01/26/12 11:00	SLR		

Metals

Lead	4.83	mg/kg	0.30	6020	01/30/12 12:57	PER	7439-92-1	
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	01/30/12 19:17	PL	95-48-7	S
p,m-Cresol	Not detected	ug/kg	300	8270C	01/30/12 19:17	PL	3/4-Cresol	S
o-Cresol	Not detected	ug/kg	300	8270C	01/30/12 19:17	PL	95-48-7	S
Nitrobenzene	Not detected	ug/kg	300	8270C	01/30/12 19:17	PL	98-95-3	S
Pyridine	Not detected	ug/kg	300	8270C	01/30/12 19:17	PL	110-86-1	S

F-Scan (Replicate 01)

Cresylic Acid	Not detected	ug/kg	300	8270C	01/31/12 15:53	PL	95-48-7	S
p,m-Cresol	Not detected	ug/kg	300	8270C	01/31/12 15:53	PL	3/4-Cresol	S
o-Cresol	Not detected	ug/kg	300	8270C	01/31/12 15:53	PL	95-48-7	S
Nitrobenzene	Not detected	ug/kg	300	8270C	01/31/12 15:53	PL	98-95-3	S
Pyridine	Not detected	ug/kg	300	8270C	01/31/12 15:53	PL	110-86-1	S

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/26/12 19:28	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	60,000	8260M	01/30/12 20:18	JGH		
Cyclohexanone	Not detected	ug/kg	6,000	8260M	01/30/12 20:18	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	6,000	8260M	01/30/12 20:18	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	60,000	8260M	01/30/12 20:18	JGH		
2-Nitropropane	Not detected	ug/kg	6,000	8260M	01/30/12 20:18	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	60	8260M	01/30/12 20:18	JGH	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	60	8260M	01/30/12 20:18	JGH	56-23-5	
Chlorobenzene	Not detected	ug/kg	60	8260M	01/30/12 20:18	JGH	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	60	8260M	01/30/12 20:18	JGH	95-50-1	

S-Surrogate recovery outside of control limits



Analytical Laboratory Report

Lab Sample ID: S51410.18 (continued)

Sample Tag: WMU10_SB3C_01242012 (12.5-13')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
Ethylbenzene	Not detected	ug/kg	60	8260M	01/30/12 20:18	JGH	100-41-4	
Methylene chloride	Not detected	ug/kg	60	8260M	01/30/12 20:18	JGH	75-09-2	
Tetrachloroethene	Not detected	ug/kg	60	8260M	01/30/12 20:18	JGH	127-18-4	
Toluene	Not detected	ug/kg	60	8260M	01/30/12 20:18	JGH	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/kg	60	8260M	01/30/12 20:18	JGH	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	8260M	01/30/12 20:18	JGH	79-00-5	
Trichloroethene	Not detected	ug/kg	60	8260M	01/30/12 20:18	JGH	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	60	8260M	01/30/12 20:18	JGH	75-69-4	
p,m-Xylene	Not detected	ug/kg	60	8260M	01/30/12 20:18	JGH		
o-Xylene	Not detected	ug/kg	60	8260M	01/30/12 20:18	JGH	95-47-6	
Acetone	Not detected	ug/kg	6,000	8260M	01/30/12 20:18	JGH	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	6,000	8260M	01/30/12 20:18	JGH	78-93-3	
Carbon disulfide	Not detected	ug/kg	6,000	8260M	01/30/12 20:18	JGH	75-15-0	
Diethyl ether	Not detected	ug/kg	6,000	8260M	01/30/12 20:18	JGH	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	6,000	8260M	01/30/12 20:18	JGH	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	60	8260B	01/30/12 20:18	JGH	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	60	8260B	01/30/12 20:18	JGH	76-13-1	
Other / Misc.								
Methanol	19,000	ug/kg	4,400	8015M	01/26/12 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S51410.19
 Sample Tag: WMU10_SB4C_01242012 (14.5-15')
 Collected Date/Time: 01/25/2012 09:55
 Matrix: Soil
 COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	01/27/12 17:41	EMR		
FScan Extraction (Replicate 01)	Completed			3550B	01/31/12 12:52	PL		
Metal Digestion	Completed			3050B	01/30/12 10:00	PER		

Inorganics

Flashpoint for Solids	Not detected	mm/sec	2.2	1030	01/27/12 14:18	PL		
Total Solids	91	%	1	Std M 2540 B	01/26/12 11:00	SLR		

Metals

Lead	8.46	mg/kg	0.30	6020	01/30/12 12:59	PER	7439-92-1	
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	01/30/12 19:37	PL	95-48-7	S
p,m-Cresol	Not detected	ug/kg	300	8270C	01/30/12 19:37	PL	3/4-Cresol	S
o-Cresol	Not detected	ug/kg	300	8270C	01/30/12 19:37	PL	95-48-7	S
Nitrobenzene	Not detected	ug/kg	300	8270C	01/30/12 19:37	PL	98-95-3	S
Pyridine	Not detected	ug/kg	300	8270C	01/30/12 19:37	PL	110-86-1	S

F-Scan (Replicate 01)

Cresylic Acid	Not detected	ug/kg	300	8270C	01/31/12 16:12	PL	95-48-7	S
p,m-Cresol	Not detected	ug/kg	300	8270C	01/31/12 16:12	PL	3/4-Cresol	S
o-Cresol	Not detected	ug/kg	300	8270C	01/31/12 16:12	PL	95-48-7	S
Nitrobenzene	Not detected	ug/kg	300	8270C	01/31/12 16:12	PL	98-95-3	S
Pyridine	Not detected	ug/kg	300	8270C	01/31/12 16:12	PL	110-86-1	S

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/26/12 20:16	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	600,000	8260M	01/30/12 21:14	JGH		X
Cyclohexanone	Not detected	ug/kg	60,000	8260M	01/30/12 21:14	JGH	108-94-1	X
Ethyl Acetate	Not detected	ug/kg	60,000	8260M	01/30/12 21:14	JGH	141-78-6	X
Isobutanol	Not detected	ug/kg	600,000	8260M	01/30/12 21:14	JGH		X
2-Nitropropane	Not detected	ug/kg	60,000	8260M	01/30/12 21:14	JGH	79-46-9	X

F Scan

Benzene	Not detected	ug/kg	600	8260M	01/30/12 21:14	JGH	71-43-2	X
Carbon tetrachloride	Not detected	ug/kg	600	8260M	01/30/12 21:14	JGH	56-23-5	X
Chlorobenzene	Not detected	ug/kg	600	8260M	01/30/12 21:14	JGH	108-90-7	X

S-Surrogate recovery outside of control limits

X-Elevated reporting limit due to matrix interference



Analytical Laboratory Report

Lab Sample ID: S51410.19 (continued)

Sample Tag: WMU10_SB4C_01242012 (14.5-15')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
1,2-Dichlorobenzene	Not detected	ug/kg	600	8260M	01/30/12 21:14	JGH	95-50-1	X
Ethylbenzene	Not detected	ug/kg	600	8260M	01/30/12 21:14	JGH	100-41-4	X
Methylene chloride	Not detected	ug/kg	600	8260M	01/30/12 21:14	JGH	75-09-2	X
Tetrachloroethene	Not detected	ug/kg	600	8260M	01/30/12 21:14	JGH	127-18-4	X
Toluene	900	ug/kg	600	8260M	01/30/12 21:14	JGH	108-88-3	X
1,1,1-Trichloroethane	Not detected	ug/kg	600	8260M	01/30/12 21:14	JGH	71-55-6	X
1,1,2-Trichloroethane	Not detected	ug/kg	600	8260M	01/30/12 21:14	JGH	79-00-5	X
Trichloroethene	Not detected	ug/kg	600	8260M	01/30/12 21:14	JGH	79-01-6	X
Trichlorofluoromethane	Not detected	ug/kg	600	8260M	01/30/12 21:14	JGH	75-69-4	X
p,m-Xylene	Not detected	ug/kg	600	8260M	01/30/12 21:14	JGH		X
o-Xylene	Not detected	ug/kg	600	8260M	01/30/12 21:14	JGH	95-47-6	X
Acetone	Not detected	ug/kg	60,000	8260M	01/30/12 21:14	JGH	67-64-1	X
2-Butanone (MEK)	Not detected	ug/kg	60,000	8260M	01/30/12 21:14	JGH	78-93-3	X
Carbon disulfide	Not detected	ug/kg	60,000	8260M	01/30/12 21:14	JGH	75-15-0	X
Diethyl ether	Not detected	ug/kg	60,000	8260M	01/30/12 21:14	JGH	60-29-7	X
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	60,000	8260M	01/30/12 21:14	JGH	108-10-1	X
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	600	8260B	01/30/12 21:14	JGH	75-71-8	X
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	600	8260B	01/30/12 21:14	JGH	76-13-1	X
Other / Misc.								
Methanol	Not detected	ug/kg	4,400	8015M	01/26/12 12:00	Fiber		O

X-Elevated reporting limit due to matrix interference

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S51410.20
 Sample Tag: WMU10_SB5C_01242012 (16.5-17')
 Collected Date/Time: 01/25/2012 11:50
 Matrix: Soil
 COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	01/30/12 22:33	EMR		
Metal Digestion	Completed			3050B	01/30/12 10:00	PER		

Inorganics

Flashpoint for Solids	Not detected	mm/sec	2.2	1030	01/27/12 14:18	PL		
Total Solids	92	%	1	Std M 2540 B	01/26/12 11:00	SLR		

Metals

Lead	8.64	mg/kg	0.30	6020	01/30/12 13:00	PER	7439-92-1	
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	700	8270C	01/31/12 17:47	PL	95-48-7	X
p,m-Cresol	Not detected	ug/kg	700	8270C	01/31/12 17:47	PL	3/4-Cresol	X
o-Cresol	Not detected	ug/kg	400	8270C	01/31/12 17:47	PL	95-48-7	X
Nitrobenzene	Not detected	ug/kg	400	8270C	01/31/12 17:47	PL	98-95-3	X
Pyridine	Not detected	ug/kg	400	8270C	01/31/12 17:47	PL	110-86-1	X

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/26/12 20:32	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	600,000	8260M	01/30/12 21:33	JGH		X
Cyclohexanone	Not detected	ug/kg	60,000	8260M	01/30/12 21:33	JGH	108-94-1	X
Ethyl Acetate	Not detected	ug/kg	60,000	8260M	01/30/12 21:33	JGH	141-78-6	X
Isobutanol	Not detected	ug/kg	600,000	8260M	01/30/12 21:33	JGH		X
2-Nitropropane	Not detected	ug/kg	60,000	8260M	01/30/12 21:33	JGH	79-46-9	X

F Scan

Benzene	Not detected	ug/kg	600	8260M	01/30/12 21:33	JGH	71-43-2	X
Carbon tetrachloride	Not detected	ug/kg	600	8260M	01/30/12 21:33	JGH	56-23-5	X
Chlorobenzene	Not detected	ug/kg	600	8260M	01/30/12 21:33	JGH	108-90-7	X
1,2-Dichlorobenzene	Not detected	ug/kg	600	8260M	01/30/12 21:33	JGH	95-50-1	X
Ethylbenzene	Not detected	ug/kg	600	8260M	01/30/12 21:33	JGH	100-41-4	X
Methylene chloride	Not detected	ug/kg	600	8260M	01/30/12 21:33	JGH	75-09-2	X
Tetrachloroethene	Not detected	ug/kg	600	8260M	01/30/12 21:33	JGH	127-18-4	X
Toluene	2,400	ug/kg	600	8260M	01/30/12 21:33	JGH	108-88-3	X
1,1,1-Trichloroethane	Not detected	ug/kg	600	8260M	01/30/12 21:33	JGH	71-55-6	X
1,1,2-Trichloroethane	Not detected	ug/kg	600	8260M	01/30/12 21:33	JGH	79-00-5	X
Trichloroethene	Not detected	ug/kg	600	8260M	01/30/12 21:33	JGH	79-01-6	X
Trichlorofluoromethane	Not detected	ug/kg	600	8260M	01/30/12 21:33	JGH	75-69-4	X

X-Elevated reporting limit due to matrix interference



Analytical Laboratory Report

Lab Sample ID: S51410.20 (continued)

Sample Tag: WMU10_SB5C_01242012 (16.5-17')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
p,m-Xylene	1,300	ug/kg	600	8260M	01/30/12 21:33	JGH		X
o-Xylene	600	ug/kg	600	8260M	01/30/12 21:33	JGH	95-47-6	X
Acetone	Not detected	ug/kg	60,000	8260M	01/30/12 21:33	JGH	67-64-1	X
2-Butanone (MEK)	Not detected	ug/kg	60,000	8260M	01/30/12 21:33	JGH	78-93-3	X
Carbon disulfide	Not detected	ug/kg	60,000	8260M	01/30/12 21:33	JGH	75-15-0	X
Diethyl ether	Not detected	ug/kg	60,000	8260M	01/30/12 21:33	JGH	60-29-7	X
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	60,000	8260M	01/30/12 21:33	JGH	108-10-1	X
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	600	8260B	01/30/12 21:33	JGH	75-71-8	X
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	600	8260B	01/30/12 21:33	JGH	76-13-1	X
Other / Misc.								
Methanol	Not detected	ug/kg	4,400	8015M	01/26/12 12:00	Fiber		O

X-Elevated reporting limit due to matrix interference

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S51410.21
Sample Tag: WMU10_SB5B_01252012 (14.5-15')
Collected Date/Time: 01/25/2012 12:05
Matrix: Soil
COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Other / Misc.								
Hold until notified	Completed				01/25/12 17:00	PCS		



Analytical Laboratory Report

Lab Sample ID: S51410.22
 Sample Tag: TB1_01232011
 Collected Date/Time: 01/23/2012 09:00
 Matrix: Methanol
 COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/26/12 19:44	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	50,000	8260M	01/31/12 16:39	JGH		
Cyclohexanone	Not detected	ug/kg	5,000	8260M	01/31/12 16:39	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	5,000	8260M	01/31/12 16:39	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	50,000	8260M	01/31/12 16:39	JGH		
2-Nitropropane	Not detected	ug/kg	5,000	8260M	01/31/12 16:39	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	50	8260M	01/31/12 16:39	JGH	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	50	8260M	01/31/12 16:39	JGH	56-23-5	
Chlorobenzene	Not detected	ug/kg	50	8260M	01/31/12 16:39	JGH	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	50	8260M	01/31/12 16:39	JGH	95-50-1	
Ethylbenzene	Not detected	ug/kg	50	8260M	01/31/12 16:39	JGH	100-41-4	
Methylene chloride	Not detected	ug/kg	50	8260M	01/31/12 16:39	JGH	75-09-2	
Tetrachloroethene	Not detected	ug/kg	50	8260M	01/31/12 16:39	JGH	127-18-4	
Toluene	Not detected	ug/kg	50	8260M	01/31/12 16:39	JGH	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/kg	50	8260M	01/31/12 16:39	JGH	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	50	8260M	01/31/12 16:39	JGH	79-00-5	
Trichloroethene	Not detected	ug/kg	50	8260M	01/31/12 16:39	JGH	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	50	8260M	01/31/12 16:39	JGH	75-69-4	
p,m-Xylene	Not detected	ug/kg	50	8260M	01/31/12 16:39	JGH		
o-Xylene	Not detected	ug/kg	50	8260M	01/31/12 16:39	JGH	95-47-6	
Acetone	Not detected	ug/kg	5,000	8260M	01/31/12 16:39	JGH	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	5,000	8260M	01/31/12 16:39	JGH	78-93-3	
Carbon disulfide	Not detected	ug/kg	5,000	8260M	01/31/12 16:39	JGH	75-15-0	
Diethyl ether	Not detected	ug/kg	5,000	8260M	01/31/12 16:39	JGH	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	5,000	8260M	01/31/12 16:39	JGH	108-10-1	

Volatile Halocarbons

Dichlorodifluoromethane	Not detected	ug/kg	50	8260B	01/31/12 16:39	JGH	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	50	8260B	01/31/12 16:39	JGH	76-13-1	



Analytical Laboratory Report

Lab Sample ID: S51410.23
 Sample Tag: WMU10_SB4A_01252012 (17-17.5)
 Collected Date/Time: 01/25/2012 10:30
 Matrix: Soil
 COC Reference: BC012512.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.7	IR
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	01/30/12 22:33	EMR		
Metal Digestion	Completed			3050B	01/30/12 10:00	PER		

Inorganics

Flashpoint for Solids	Not detected	mm/sec	2.2	1030	01/27/12 14:18	PL		
Total Solids	89	%	1	Std M 2540 B	01/26/12 11:00	SLR		

Metals

Lead	9.63	mg/kg	0.30	6020	01/30/12 13:02	PER	7439-92-1	
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	01/31/12 16:31	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	01/31/12 16:31	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	01/31/12 16:31	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	01/31/12 16:31	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	01/31/12 16:31	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/26/12 20:00	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	600,000	8260M	01/31/12 18:10	JGH		X
Cyclohexanone	Not detected	ug/kg	60,000	8260M	01/31/12 18:10	JGH	108-94-1	X
Ethyl Acetate	Not detected	ug/kg	60,000	8260M	01/31/12 18:10	JGH	141-78-6	X
Isobutanol	Not detected	ug/kg	600,000	8260M	01/31/12 18:10	JGH		X
2-Nitropropane	Not detected	ug/kg	60,000	8260M	01/31/12 18:10	JGH	79-46-9	X

F Scan

Benzene	Not detected	ug/kg	600	8260M	01/31/12 18:10	JGH	71-43-2	X
Carbon tetrachloride	Not detected	ug/kg	600	8260M	01/31/12 18:10	JGH	56-23-5	X
Chlorobenzene	Not detected	ug/kg	600	8260M	01/31/12 18:10	JGH	108-90-7	X
1,2-Dichlorobenzene	Not detected	ug/kg	600	8260M	01/31/12 18:10	JGH	95-50-1	X
Ethylbenzene	Not detected	ug/kg	600	8260M	01/31/12 18:10	JGH	100-41-4	X
Methylene chloride	Not detected	ug/kg	600	8260M	01/31/12 18:10	JGH	75-09-2	X
Tetrachloroethene	Not detected	ug/kg	600	8260M	01/31/12 18:10	JGH	127-18-4	X
Toluene	Not detected	ug/kg	600	8260M	01/31/12 18:10	JGH	108-88-3	X
1,1,1-Trichloroethane	Not detected	ug/kg	600	8260M	01/31/12 18:10	JGH	71-55-6	X
1,1,2-Trichloroethane	Not detected	ug/kg	600	8260M	01/31/12 18:10	JGH	79-00-5	X
Trichloroethene	Not detected	ug/kg	600	8260M	01/31/12 18:10	JGH	79-01-6	X
Trichlorofluoromethane	Not detected	ug/kg	600	8260M	01/31/12 18:10	JGH	75-69-4	X

X-Elevated reporting limit due to matrix interference



Analytical Laboratory Report

Lab Sample ID: S51410.23 (continued)

Sample Tag: WMU10_SB4A_01252012 (17-17.5')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
p,m-Xylene	Not detected	ug/kg	600	8260M	01/31/12 18:10	JGH		X
o-Xylene	Not detected	ug/kg	600	8260M	01/31/12 18:10	JGH	95-47-6	X
Acetone	Not detected	ug/kg	60,000	8260M	01/31/12 18:10	JGH	67-64-1	X
2-Butanone (MEK)	Not detected	ug/kg	60,000	8260M	01/31/12 18:10	JGH	78-93-3	X
Carbon disulfide	Not detected	ug/kg	60,000	8260M	01/31/12 18:10	JGH	75-15-0	X
Diethyl ether	Not detected	ug/kg	60,000	8260M	01/31/12 18:10	JGH	60-29-7	X
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	60,000	8260M	01/31/12 18:10	JGH	108-10-1	X
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	600	8260B	01/31/12 18:10	JGH	75-71-8	X
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	600	8260B	01/31/12 18:10	JGH	76-13-1	X
Other / Misc.								
Methanol	Not detected	ug/kg	4,400	8015M	01/26/12 12:00	Fiber		O

X-Elevated reporting limit due to matrix interference

O-Analysis performed by outside laboratory. See attached report.



CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

eCOC ID: **BC012512.1**

Send Results To:	Contact & Company Name: Mike Brennan ARCADIS		Telephone: 248-984-2276		Preserved/Filtered (✓)	E	F	E	E								KEYS Preservation Key: A. H ₂ O ₂ B. HCl C. NaOH D. HNO ₃ E. None F. MeOH G. H. Container Information Key: 1. 40 mL VOA 2. 1 L Amber 3. 125 mL Plastic 4. 250 mL Plastic 5. 500 mL Plastic 6. 1 L Plastic 7. 2 oz. Glass 8. 32 oz. Glass 9. 8 oz. Glass 10. Other Matrix Key: SE = Sediment SO = Soil Wipe W = Water A = Air NL = NAPL / Oil T = Tissue SL = Sludge SW = Surface
	Address: 10559 Citation Dr, Suite 100		Fax: 810-229-8837		# of Containers	1	1	1	1								
	City State Zip Brighton, MI 48116		E-mail Address: michael.brennan@arcadis-us.com		Container Information	10	1	10	10								
	Project Name/Location (City, State): Buick City/ Flint, MI		Project #: B0064410.2012.00900		PARAMETER ANALYSIS & METHOD												
Sampler's Printed Name: Megan Meckley		Sampler's Signature: <i>Megan Meckley</i>			Fecan SVOCs, Total Solids	Fecan VOCs plus 1,1,2-Trichloro-1,2,2-Trifluoroethane and dichlorodifluoromethane	Methanol	Fecan SVOCs, Total Solids, Ignitability, Lead									
Sample ID		Collection		Type		Matrix											
	Date	Time	Comp	Grab													
WMU2_SB1_01232012 (3-3.5')	1/23/12	1110		X	SO	1	1	1									
WMU7_SB1_01232012 (15.5-16')	1/23/12	1340		X	SO	1	1	1									
WMU7_SB2_01232012 (14.5-15')	1/23/12	1625		X	SO	1	1	1									
WMU7_SB3_01242012 (15.5-16')	1/24/12	955		x	SO	1	1	1									
WMU8_SB1_01242012 (2-2.8')	1/24/12	1040		x	SO	1	1	1									
WMU8_SB2_01242012 (1.5-2')	1/24/12	1055		x	SO	1	1	1									
WMU8_SB3_01242012 (3.5-4')	1/24/12	1120		x	SO	1	1	1									
WMU8_SB4_01242012 (1.2-1.7')	1/24/12	1110		x	SO	1	1	1									
WMU8_SB5_01242012 (4.5-5')	1/24/12	1150		x	SO	1	1	1									
WMU10_SB1_01242012 (17.2-17.7')	1/24/12	1430		x	SO	1	1	1	1								
WMU10_SB2_01242012 (16-16.5')	1/24/12	1545		x	SO	1	1	1	1								
WMU10_SB3_01242012 (15.5-16')	1/24/12	1640		x	SO	1	1	1	1								
WMU10_SB4_01242012 (20-20.5')	1/25/12	1020		x	SO	1	1	1	1								
WMU10_SB5_01242012 (18.5-19')	1/25/12	1200		x	SO	1	1	1	1								
WMU10_SB5A_01242012 (17.5-18')	1/25/12	1155		x	SO	1	1	1	1								
WMU10_SB1A_01242012 (16-16.5')	1/24/12	1445		x	SO	1	1	1	1								
WMU10_SB2C_01242012 (13-13.5')	1/24/12	1535		x	SO	1	1	1	1								concrete
WMU10_SB3C_01242012 (12.5-13')	1/24/12	1630		x	SO	1	1	1	1								concrete
WMU10_SB4C_01242012 (14.5-15')	1/25/12	955		x	SO	1	1	1	1								concrete
WMU10_SB5C_01242012 (16.5-17')	1/25/12	1150		x	SO	1	1	1	1								concrete
Special Instructions/Comments: Invoice to: Ms. Monica Wallingford, Racer Trust, 2930 Ecorse Road, Ypsilanti, MI 48198, (313) 486 2928, P.O.No: MT1295A - Please also send copy of Invoicing to Micki Maki (ARCADIS).										Special QA/QC Instructions: Standard deliverable with EDD Requested.							
Laboratory Information and Receipt				Relinquished By				Received By				Laboratory Received By					
Lab Name: Merit		Cooler Custody Seal: <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not Intact		Printed Name: <i>Megan Meckley</i>				Printed Name: <i>Chris Gardner</i>				Printed Name: <i>Paula Shaw</i>					
<input checked="" type="checkbox"/> Cooler packed with ice (✓)				Signature: <i>Megan Meckley</i>				Signature: <i>Chris Gardner</i>				Signature: <i>Paula Shaw</i>					
Specify Turnaround Requirements: 5-day TAT		Sample Receipt:		ARCADIS				Firm: Merit				Firm: Merit					
Fed-Ex Tracking #: Not Applicable		Condition/Cooler Temp: 47°		Date/Time: 1-25-12 1235				Date/Time: 1-25-12 1255				Date/Time: 1-25-12 1400					

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CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

#COC ID: **BC012512.1**

Send Results To:	Contact & Company Name: Mike Brennan ARCADIS		Telephones: 248-994-2276		Preservative	E	F	E	E							KEYS Preservation Key: A. H ₂ O ₂ B. HCL C. NaOH D. HNO ₃ E. None F. MeOH G. H. Matrix Key: SE = Sediment SO = Soil Wipe W = Water Container information Key: 1. 40 mL VOA 2. 1 L Amber 3. 125 mL Plastic 4. 250 mL Plastic 5. 500 mL Plastic 6. 1 L Plastic 7. 2 oz. Glass 8. 32 oz. Glass 9. 8 oz. Glass 10. Other A = Air NL = NAPL / Oil T = Tissue SL = Sludge SW = Surface
	Address: 10559 Citation Dr, Suite 100		Fax: 810-229-8837		Filtered (✓)	NA	NA	NA	NA							
	City State Zip Brighton, MI 48116		E-mail Address: michael.brennan@arcadis-us.com		# of Containers	1	1	1	1							
	Project Name/Location (City, State): Buick City/ Flint, MI		Project #: B0064410.2012.00900		Container Information	10	1	10	10							
Sampler's Printed Name: Megan Meckley		Sampler's Signature: <i>Megan Meckley</i>		PARAMETER ANALYSIS & METHOD												
Sample ID		Collection		Type		Matrix		Fecan SVOCs, Total Solids		Fecan VOCs plus 1,1,2-Trichloro-1,2,2-Tetrafluoroethane and dichlorodifluoromethane		Methanol		Fecan SVOCs, Total Solids, Ignitability, Lead		REMARKS
		Date Time		Comp Grab												
WMU10_SB5B_01252012 (14-5-15)		1/25/12 1205		x SO				1		1		1				
FB1_01232011		1/23/12 900		x w				1								
WMU10_SB4A_01252012 (17-17-5)		1/25/12 1030		x SO				1		1		1				
Special Instructions/Comments: Invoice to: Ms. Monica Wallingford, Racer Trust, 2930 Ecorse Road, Ypsilanti, MI 48198, (313) 486-2928, P.O.No: MT1295a - Please also send copy of Invoicing to Micki Maki (ARCADIS).																
Special QA/QC Instructions: Standard deliverable with EDD Requested.																
Laboratory Information and Receipt				Relinquished By				Received By				Laboratory Received By				
Lab Name: Merit		Cooler Custody Seal: <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not Intact		Printed Name: Megan Meckley		Signature: <i>Megan Meckley</i>		Printed Name: Chris Gardner		Signature: <i>Chris Gardner</i>		Printed Name: Paula Strawn		Signature: <i>Paula Strawn</i>		
<input checked="" type="checkbox"/> Cooler packed with ice (✓)				ARCADIS				Firm: Merit				Firm: Merit				
Specify Turnaround Requirements: 5-day TAT		Sample Receipt:		Date/Time: 1/25/12-1235				Date/Time: 1-25-12		Date/Time: 1255		Date/Time: 1-25-12 1400				
Fed-Ex Tracking #: Not Applicable		Condition/Cooler Temp: 47°														

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Tuesday, January 31, 2012

Fibertec Project Number: 48342
Project Identification: 51410 /
Submittal Date: 01/25/2012

Ms. Paula Shaw
Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Dear Ms. Shaw,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note samples will be disposed of 30 days after reporting date.

Samples were received at 17 degrees Celsius.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

A handwritten signature in black ink, appearing to read "Daryl Strandbergh", written in a cursive style.

Daryl P. Strandbergh
Laboratory Director

DPS/kc

Enclosures

1914 Holloway Drive
11766 E. Grand River
8660 S. Mackinaw Trail

Holt, MI 48842
Brighton, MI 48116
Cadillac, MI 49601

T: (517) 699-0345
T: (810) 220-3300
T: (231) 775-8368

F: (517) 699-0388
F: (810) 220-3311
F: (231) 775-8584



Analytical Laboratory Report
Laboratory Project Number: 48342
Laboratory Sample Number: 48342-001

Order: 48342
Page: 2 of 21
Date: 01/31/12

Client Identification: **Merit Laboratories, Inc.** Sample Description: **51410.01** Chain of Custody: **64412**
Client Project Name: **51410** Sample No: **1** Collect Date: **01/23/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **11:10**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48342-001		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	13		%	0.1	1.0	01/27/12	MC120127	01/30/12	MC120127

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48342-001		Matrix: Soil/Solid		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	30000		µg/kg	4400	1.0	01/26/12	PS12A26B	01/30/12	SD12A30A

1914 Holloway Drive
11766 E. Grand River
8660 S. Mackinaw Trail

Holt, MI 48842
Brighton, MI 48116
Cadillac, MI 49601

T: (517) 699-0345
T: (810) 220-3300
T: (231) 775-8368

F: (517) 699-0388
F: (810) 220-3311
F: (231) 775-8584



Analytical Laboratory Report
Laboratory Project Number: 48342
Laboratory Sample Number: 48342-002

Order: 48342
Page: 3 of 21
Date: 01/31/12

Client Identification: **Merit Laboratories, Inc.** Sample Description: **51410.02** Chain of Custody: **64412**
Client Project Name: **51410** Sample No: **2** Collect Date: **01/23/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **13:40**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48342-002			Matrix: Soil/Solid		Analyst: BMG
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	15		%	0.1	1.0	01/27/12	MC120127	01/30/12	MC120127

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48342-002			Matrix: Soil/Solid		Analyst: TMC
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	13000		µg/kg	4400	1.0	01/26/12	PS12A26B	01/26/12	S812A26A

1914 Holloway Drive
11766 E. Grand River
8660 S. Mackinaw Trail

Holt, MI 48842
Brighton, MI 48116
Cadillac, MI 49601

T: (517) 699-0345
T: (810) 220-3300
T: (231) 775-8368

F: (517) 699-0388
F: (810) 220-3311
F: (231) 775-8584



Analytical Laboratory Report
Laboratory Project Number: 48342
Laboratory Sample Number: 48342-003

Order: 48342
Page: 4 of 21
Date: 01/31/12

Client Identification: **Merit Laboratories, Inc.** Sample Description: **51410.03** Chain of Custody: **64412**
Client Project Name: **51410** Sample No: **3** Collect Date: **01/23/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **16:25**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48342-003			Matrix: Soil/Solid		Analyst: BMG
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	15		%	0.1	1.0	01/27/12	MC120127	01/30/12	MC120127

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48342-003			Matrix: Soil/Solid		Analyst: TMC
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	10000		µg/kg	4400	1.0	01/26/12	PS12A26B	01/26/12	S812A26A

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Analytical Laboratory Report
Laboratory Project Number: 48342
Laboratory Sample Number: 48342-004

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Client Identification: **Merit Laboratories, Inc.** Sample Description: **51410.04** Chain of Custody: **64412**
Client Project Name: **51410** Sample No: **4** Collect Date: **01/24/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **09:55**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48342-004		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	17		%	0.1	1.0	01/27/12	MC120127	01/30/12	MC120127

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48342-004		Matrix: Soil/Solid		Analyst: TMC	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	10000		µg/kg	4400	1.0	01/26/12	PS12A26B	01/26/12	S812A26A

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Analytical Laboratory Report
Laboratory Project Number: 48342
Laboratory Sample Number: 48342-005

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Client Identification: Merit Laboratories, Inc.	Sample Description: 51410.05	Chain of Custody: 64412
Client Project Name: 51410	Sample No: 5	Collect Date: 01/24/12
Client Project No: NA	Sample Matrix: Soil/Solid	Collect Time: 10:40

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48342-005		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	15		%	0.1	1.0	01/27/12	MC120127	01/30/12	MC120127

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48342-005		Matrix: Soil/Solid		Analyst: TMC	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	29000		µg/kg	4400	1.0	01/26/12	PS12A26B	01/26/12	S812A26A

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Analytical Laboratory Report
Laboratory Project Number: 48342
Laboratory Sample Number: 48342-006

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Client Identification: **Merit Laboratories, Inc.** Sample Description: **51410.06** Chain of Custody: **64412**
Client Project Name: **51410** Sample No: **6** Collect Date: **01/24/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **10:55**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48342-006		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	10		%	0.1	1.0	01/27/12	MC120127	01/30/12	MC120127

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48342-006		Matrix: Soil/Solid		Analyst: TMC	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/kg	4400	1.0	01/26/12	PS12A26B	01/26/12	S812A26A

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Analytical Laboratory Report
Laboratory Project Number: 48342
Laboratory Sample Number: 48342-007

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Client Identification: **Merit Laboratories, Inc.** Sample Description: **51410.07** Chain of Custody: **64412**
Client Project Name: **51410** Sample No: **7** Collect Date: **01/24/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **11:20**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48342-007		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	17		%	0.1	1.0	01/27/12	MC120127	01/30/12	MC120127

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48342-007		Matrix: Soil/Solid		Analyst: TMC	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	26000		µg/kg	4400	1.0	01/26/12	PS12A26B	01/26/12	S812A26A

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Analytical Laboratory Report
Laboratory Project Number: 48342
Laboratory Sample Number: 48342-008

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Client Identification: Merit Laboratories, Inc.	Sample Description: 51410.08	Chain of Custody: 64412
Client Project Name: 51410	Sample No: 8	Collect Date: 01/24/12
Client Project No: NA	Sample Matrix: Soil/Solid	Collect Time: 11:10

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48342-008		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	6.8		%	0.1	1.0	01/27/12	MC120127	01/30/12	MC120127

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48342-008		Matrix: Soil/Solid		Analyst: TMC	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/kg	4400	1.0	01/26/12	PS12A26B	01/26/12	S812A26A

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Analytical Laboratory Report
Laboratory Project Number: 48342
Laboratory Sample Number: 48342-009

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Client Identification: **Merit Laboratories, Inc.** Sample Description: **51410.09** Chain of Custody: **64412**
Client Project Name: **51410** Sample No: **9** Collect Date: **01/24/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **11:50**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48342-009		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	8.7		%	0.1	1.0	01/27/12	MC120127	01/30/12	MC120127

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48342-009		Matrix: Soil/Solid		Analyst: TMC	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	50000		µg/kg	4400	1.0	01/26/12	PS12A26B	01/26/12	S812A26A

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Analytical Laboratory Report
Laboratory Project Number: 48342
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Client Identification: **Merit Laboratories, Inc.** Sample Description: **51410.10** Chain of Custody: **64412**
Client Project Name: **51410** Sample No: **10** Collect Date: **01/24/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **14:30**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48342-010		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	9.6		%	0.1	1.0	01/27/12	MC120127	01/30/12	MC120127

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48342-010		Matrix: Soil/Solid		Analyst: TMC	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/kg	4400	1.0	01/26/12	PS12A26B	01/26/12	S812A26A

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Analytical Laboratory Report
Laboratory Project Number: 48342
Laboratory Sample Number: 48342-011

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Client Identification: **Merit Laboratories, Inc.** Sample Description: **51410.11** Chain of Custody: **64412**
Client Project Name: **51410** Sample No: **11** Collect Date: **01/24/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **15:45**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48342-011			Matrix: Soil/Solid		Analyst: BMG
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	8.0		%	0.1	1.0	01/27/12	MC120127	01/30/12	MC120127

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48342-011			Matrix: Soil/Solid		Analyst: TMC
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	19000		µg/kg	4400	1.0	01/26/12	PS12A26B	01/26/12	S812A26A

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Analytical Laboratory Report
Laboratory Project Number: 48342
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Client Identification: **Merit Laboratories, Inc.** Sample Description: **51410.12** Chain of Custody: **64412**
Client Project Name: **51410** Sample No: **12** Collect Date: **01/24/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **16:40**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48342-012		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	7.1		%	0.1	1.0	01/27/12	MC120127	01/30/12	MC120127

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48342-012		Matrix: Soil/Solid		Analyst: TMC	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	9400		µg/kg	4400	1.0	01/26/12	PS12A26B	01/26/12	S812A26A

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Analytical Laboratory Report
Laboratory Project Number: 48342
Laboratory Sample Number: 48342-013

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Client Identification: Merit Laboratories, Inc.	Sample Description: 51410.14	Chain of Custody: 64413
Client Project Name: 51410	Sample No: 13	Collect Date: 01/25/12
Client Project No: NA	Sample Matrix: Soil/Solid	Collect Time: 12:00

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48342-013		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	11		%	0.1	1.0	01/27/12	MC120127	01/30/12	MC120127

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48342-013		Matrix: Soil/Solid		Analyst: TMC	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/kg	4400	1.0	01/26/12	PS12A26B	01/26/12	S812A26A

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Client Identification: Merit Laboratories, Inc.	Sample Description: 51410.16	Chain of Custody: 64413
Client Project Name: 51410	Sample No: 14	Collect Date: 01/24/12
Client Project No: NA	Sample Matrix: Soil/Solid	Collect Time: 14:45

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48342-014		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	14		%	0.1	1.0	01/27/12	MC120127	01/30/12	MC120127

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48342-014		Matrix: Soil/Solid		Analyst: TMC	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/kg	4400	1.0	01/26/12	PS12A26B	01/26/12	S812A26A



Analytical Laboratory Report
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Laboratory Sample Number: 48342-015

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Client Identification: Merit Laboratories, Inc.	Sample Description: 51410.17	Chain of Custody: 64413
Client Project Name: 51410	Sample No: 15	Collect Date: 01/24/12
Client Project No: NA	Sample Matrix: Soil/Solid	Collect Time: 15:35

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48342-015		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	8.7		%	0.1	1.0	01/27/12	MC120127	01/30/12	MC120127

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48342-015		Matrix: Soil/Solid		Analyst: TMC	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	6100		µg/kg	4400	1.0	01/26/12	PS12A26B	01/26/12	S812A26A

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Analytical Laboratory Report
Laboratory Project Number: 48342
Laboratory Sample Number: 48342-016

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Client Identification: Merit Laboratories, Inc.	Sample Description: 51410.18	Chain of Custody: 64413
Client Project Name: 51410	Sample No: 16	Collect Date: 01/24/12
Client Project No: NA	Sample Matrix: Soil/Solid	Collect Time: 16:30

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48342-016		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	6.4		%	0.1	1.0	01/27/12	MC120127	01/30/12	MC120127

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48342-016		Matrix: Soil/Solid		Analyst: TMC	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	19000		µg/kg	4400	1.0	01/26/12	PS12A26B	01/26/12	S812A26A

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Analytical Laboratory Report
Laboratory Project Number: 48342
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Client Identification: Merit Laboratories, Inc.	Sample Description: 51410.19	Chain of Custody: 64413
Client Project Name: 51410	Sample No: 17	Collect Date: 01/25/12
Client Project No: NA	Sample Matrix: Soil/Solid	Collect Time: 09:55

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48342-017		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	6.5		%	0.1	1.0	01/27/12	MC120127	01/30/12	MC120127

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48342-017		Matrix: Soil/Solid		Analyst: TMC	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/kg	4400	1.0	01/26/12	PS12A26B	01/26/12	S812A26A

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T: (231) 775-8368

F: (517) 699-0388
F: (810) 220-3311
F: (231) 775-8584



Analytical Laboratory Report
Laboratory Project Number: 48342
Laboratory Sample Number: 48342-018

Order: 48342
Page: 19 of 21
Date: 01/31/12

Client Identification: **Merit Laboratories, Inc.** Sample Description: **51410.20** Chain of Custody: **64413**
Client Project Name: **51410** Sample No: **18** Collect Date: **01/25/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **11:50**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48342-018		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	7.9		%	0.1	1.0	01/27/12	MC120127	01/30/12	MC120127

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48342-018		Matrix: Soil/Solid		Analyst: TMC	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/kg	4400	1.0	01/26/12	PS12A26B	01/26/12	S812A26A

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8660 S. Mackinaw Trail

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Analytical Laboratory Report
Laboratory Project Number: 48342
Laboratory Sample Number: 48342-019

Order: 48342
Page: 20 of 21
Date: 01/31/12

Client Identification: Merit Laboratories, Inc.	Sample Description: 51410.23	Chain of Custody: 64413
Client Project Name: 51410	Sample No: 19	Collect Date: 01/25/12
Client Project No: NA	Sample Matrix: Soil/Solid	Collect Time: 10:30

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48342-019		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	12		%	0.1	1.0	01/27/12	MC120127	01/30/12	MC120127

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48342-019		Matrix: Soil/Solid		Analyst: TMC	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/kg	4400	1.0	01/26/12	PS12A26B	01/26/12	S812A26A

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Definitions/ Qualifiers:

- A:** Spike recovery or precision unusable due to dilution.
- B:** The analyte was detected in the associated method blank.
- E:** The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J:** The concentration is an estimated value.
- M:** Modified Method
- U:** The analyte was not detected at or above the reporting limit.
- X:** Matrix Interference has resulted in a raised reporting limit or distorted result.
- W:** Results reported on a wet-weight basis.
- *:** Value reported is outside QA limits

Exception Summary:



1914 Holloway Drive
11766 E. Grand River
8660 S. Mackinaw Trail

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Analytical Laboratory Report

Report ID: S51442.01(01)
Generated on 02/02/2012

Report to

Attention: Mike Brennan
Arcadis
10559 Citation Drive
Suite 100
Brighton, MI 48116

Phone: 810-229-8594 FAX: 810-229-8837
Email: Michael.Brennan@arcadis-us.com

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S51442.01-S51442.06
Project: B0064410.2012.00900 / Buick City / Flint MI
Collected Date: 01/25/2012 - 01/26/2012
Submitted Date/Time: 01/27/2012 13:00
Sampled by: Megan Meckley
P.O. #: MLT1295

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
Samples are held by the lab for 30 days from the sample submittal date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories.

Laboratory Certifications:

Michigan DNRE (#9956), DOD/ISO 17025 (#L11-184), WBENC (#2005110032)
Ohio EPA (#CL0002), IN Drinking Water (#C-MI-07), NELAC NY (#11814), NELAC FL (#E871045)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Sample Summary (6 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S51442.01	WMU10_SB5_01252012	Groundwater	01/25/2012 15:45
S51442.02	WMU2_SB3_01262012 (2-2.2')	Soil	01/26/2012 11:30
S51442.03	Tripblank2_01252012	Water	01/25/2012 16:00
S51442.04	Tripblank_01252012	Methonal	01/25/2012 13:00
S51442.05	WMU10_SB6_01252012 (11.5-12)	Soil	01/25/2012 14:55
S51442.06	WMU10_SB6A_01252012 (17.5-18')	Soil	01/25/2012 15:00



Analytical Laboratory Report

Lab Sample ID: S51442.01
Sample Tag: WMU10_SB5_01252012
Collected Date/Time: 01/25/2012 15:45
Matrix: Groundwater
COC Reference: BC012712.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40ml Glass	None	Yes	4.4	IR
1	4oz Glass	None	Yes	4.4	IR
2	40ml Glass	HCL	Yes	4.4	IR
4	1L Amber	None	Yes	4.4	IR
1	125ml Plastic	HNO3	Yes	4.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Inorganics								
Flash Point	Not detected	oF	180	ASTM D3278	01/27/12 14:18	PL		



Analytical Laboratory Report

Lab Sample ID: S51442.02
 Sample Tag: WMU2_SB3_01262012 (2-2.2')
 Collected Date/Time: 01/26/2012 11:30
 Matrix: Soil
 COC Reference: BC012712.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.4	IR
2	4oz Glass	None	Yes	4.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	01/30/12 22:33	EMR		
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Inorganics

Total Solids	92	%	1	Std M 2540 B	01/30/12 12:00	WAR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	01/31/12 16:50	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	01/31/12 16:50	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	01/31/12 16:50	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	01/31/12 16:50	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	01/31/12 16:50	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/27/12 15:26	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	60,000	8260M	01/31/12 16:57	JGH		
Cyclohexanone	Not detected	ug/kg	6,000	8260M	01/31/12 16:57	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	6,000	8260M	01/31/12 16:57	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	60,000	8260M	01/31/12 16:57	JGH		
2-Nitropropane	Not detected	ug/kg	6,000	8260M	01/31/12 16:57	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	60	8260M	01/31/12 16:57	JGH	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	60	8260M	01/31/12 16:57	JGH	56-23-5	
Chlorobenzene	Not detected	ug/kg	60	8260M	01/31/12 16:57	JGH	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	60	8260M	01/31/12 16:57	JGH	95-50-1	
Ethylbenzene	Not detected	ug/kg	60	8260M	01/31/12 16:57	JGH	100-41-4	
Methylene chloride	Not detected	ug/kg	60	8260M	01/31/12 16:57	JGH	75-09-2	
Tetrachloroethene	Not detected	ug/kg	60	8260M	01/31/12 16:57	JGH	127-18-4	
Toluene	Not detected	ug/kg	60	8260M	01/31/12 16:57	JGH	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/kg	60	8260M	01/31/12 16:57	JGH	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	8260M	01/31/12 16:57	JGH	79-00-5	
Trichloroethene	Not detected	ug/kg	60	8260M	01/31/12 16:57	JGH	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	60	8260M	01/31/12 16:57	JGH	75-69-4	
p,m-Xylene	320	ug/kg	60	8260M	01/31/12 16:57	JGH		
o-Xylene	140	ug/kg	60	8260M	01/31/12 16:57	JGH	95-47-6	
Acetone	Not detected	ug/kg	6,000	8260M	01/31/12 16:57	JGH	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	6,000	8260M	01/31/12 16:57	JGH	78-93-3	
Carbon disulfide	Not detected	ug/kg	6,000	8260M	01/31/12 16:57	JGH	75-15-0	
Diethyl ether	Not detected	ug/kg	6,000	8260M	01/31/12 16:57	JGH	60-29-7	



Analytical Laboratory Report

Lab Sample ID: S51442.02 (continued)

Sample Tag: WMU2_SB3_01262012 (2-2.2')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	6,000	8260M	01/31/12 16:57	JGH	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	60	8260B	01/31/12 16:57	JGH	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	60	8260B	01/31/12 16:57	JGH	76-13-1	
Other / Misc.								
Methanol	6,400	ug/kg	4,400	8015M	01/30/12 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S51442.03
 Sample Tag: Tripblank2_01252012
 Collected Date/Time: 01/25/2012 16:00
 Matrix: Water
 COC Reference: BC012712.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	4.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	8260B	01/30/12 17:46	JGH	60-29-7	
Acetone	Not detected	ug/L	50	8260B	01/30/12 17:46	JGH	67-64-1	
Methyl iodide	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	74-88-4	
Carbon disulfide	Not detected	ug/L	5	8260B	01/30/12 17:46	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	8260B	01/30/12 17:46	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	8260B	01/30/12 17:46	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	8260B	01/30/12 17:46	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	8260B	01/30/12 17:46	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	8260B	01/30/12 17:46	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	8260B	01/30/12 17:46	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	8260B	01/30/12 17:46	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	8260B	01/30/12 17:46	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	8260B	01/30/12 17:46	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	8260B	01/30/12 17:46	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	8260B	01/30/12 17:46	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	56-23-5	
Benzene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	8260B	01/30/12 17:46	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	8260B	01/30/12 17:46	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	100-41-4	



Analytical Laboratory Report

Lab Sample ID: S51442.03 (continued)

Sample Tag: Tripblank2_01252012

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
p,m-Xylene	Not detected	ug/L	2	8260B	01/30/12 17:46	JGH		
o-Xylene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	95-47-6	
Styrene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	8260B	01/30/12 17:46	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	8260B	01/30/12 17:46	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	8260B	01/30/12 17:46	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	8260B	01/30/12 17:46	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	8260B	01/30/12 17:46	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	8260B	01/30/12 17:46	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	8260B	01/30/12 17:46	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	8260B	01/30/12 17:46	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	8260B	01/30/12 17:46	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S51442.04
Sample Tag: Tripblank_01252012
Collected Date/Time: 01/25/2012 13:00
Matrix: Methonal
COC Reference: BC012712.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Organics - Volatiles

Volatile Organics 5035

Diethyl ether	Not detected	ug/kg	200	8260B/5035	01/31/12 17:16	JGH	60-29-7	
Acetone	Not detected	ug/kg	1,000	8260B/5035	01/31/12 17:16	JGH	67-64-1	
Methyl iodide	Not detected	ug/kg	100	8260B/5035	01/31/12 17:16	JGH	74-88-4	
Carbon disulfide	Not detected	ug/kg	300	8260B/5035	01/31/12 17:16	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	200	8260B/5035	01/31/12 17:16	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	8260B/5035	01/31/12 17:16	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	750	8260B/5035	01/31/12 17:16	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	8260B/5035	01/31/12 17:16	JGH	75-71-8	
Chloromethane	Not detected	ug/kg	300	8260B/5035	01/31/12 17:16	JGH	74-87-3	
Vinyl chloride	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	75-01-4	
Bromomethane	Not detected	ug/kg	200	8260B/5035	01/31/12 17:16	JGH	74-83-9	
Chloroethane	Not detected	ug/kg	300	8260B/5035	01/31/12 17:16	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	8260B/5035	01/31/12 17:16	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	75-35-4	
Methylene chloride	Not detected	ug/kg	100	8260B/5035	01/31/12 17:16	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	1,000	8260B/5035	01/31/12 17:16	JGH	109-99-9	
Chloroform	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	8260B/5035	01/31/12 17:16	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	3,000	8260B/5035	01/31/12 17:16	JGH	108-10-1	
2-Hexanone	Not detected	ug/kg	3,000	8260B/5035	01/31/12 17:16	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	56-23-5	
Benzene	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	107-06-2	
Trichloroethene	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	8260B/5035	01/31/12 17:16	JGH	75-27-4	
Dibromomethane	Not detected	ug/kg	300	8260B/5035	01/31/12 17:16	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	10061-01-5	
Toluene	Not detected	ug/kg	100	8260B/5035	01/31/12 17:16	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	8260B/5035	01/31/12 17:16	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	106-93-4	
Chlorobenzene	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	8260B/5035	01/31/12 17:16	JGH	630-20-6	
Ethylbenzene	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	100-41-4	



Analytical Laboratory Report

Lab Sample ID: S51442.04 (continued)

Sample Tag: Tripblank_01252012

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
p,m-Xylene	Not detected	ug/kg	100	8260B/5035	01/31/12 17:16	JGH		
o-Xylene	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	95-47-6	
Styrene	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	8260B/5035	01/31/12 17:16	JGH	98-82-8	
Bromoform	Not detected	ug/kg	100	8260B/5035	01/31/12 17:16	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/kg	100	8260B/5035	01/31/12 17:16	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/kg	100	8260B/5035	01/31/12 17:16	JGH	103-65-1	
Bromobenzene	Not detected	ug/kg	100	8260B/5035	01/31/12 17:16	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	100	8260B/5035	01/31/12 17:16	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	100	8260B/5035	01/31/12 17:16	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	8260B/5035	01/31/12 17:16	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	8260B/5035	01/31/12 17:16	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	8260B/5035	01/31/12 17:16	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	8260B/5035	01/31/12 17:16	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	100	8260B/5035	01/31/12 17:16	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/kg	50	8260B/5035	01/31/12 17:16	JGH	104-51-8	
Hexachloroethane	Not detected	ug/kg	300	8260B/5035	01/31/12 17:16	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	300	8260B/5035	01/31/12 17:16	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	330	8260B/5035	01/31/12 17:16	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	330	8260B/5035	01/31/12 17:16	JGH	87-61-6	
Naphthalene	Not detected	ug/kg	330	8260B/5035	01/31/12 17:16	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	330	8260B/5035	01/31/12 17:16	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S51442.05
 Sample Tag: WMU10_SB6_01252012 (11.5-12)
 Collected Date/Time: 01/25/2012 14:55
 Matrix: Soil
 COC Reference: BC012712.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.4	IR
2	4oz Glass	None	Yes	4.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	01/30/12 22:33	EMR		
Metal Digestion	Completed			3050B	02/01/12 01:00	SLR		

Inorganics

Flashpoint for Solids	Not detected	mm/sec	2.2	1030	01/27/12 14:18	PL		
Total Solids	92	%	1	Std M 2540 B	01/30/12 12:00	WAR		

Metals

Lead	2.62	mg/kg	0.30	6020	02/02/12 15:44	PER	7439-92-1	
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	01/31/12 17:09	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	01/31/12 17:09	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	01/31/12 17:09	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	01/31/12 17:09	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	01/31/12 17:09	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	01/27/12 15:58	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	60,000	8260M	01/31/12 17:34	JGH		
Cyclohexanone	Not detected	ug/kg	6,000	8260M	01/31/12 17:34	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	6,000	8260M	01/31/12 17:34	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	60,000	8260M	01/31/12 17:34	JGH		
2-Nitropropane	Not detected	ug/kg	6,000	8260M	01/31/12 17:34	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	60	8260M	01/31/12 17:34	JGH	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	60	8260M	01/31/12 17:34	JGH	56-23-5	
Chlorobenzene	Not detected	ug/kg	60	8260M	01/31/12 17:34	JGH	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	60	8260M	01/31/12 17:34	JGH	95-50-1	
Ethylbenzene	Not detected	ug/kg	60	8260M	01/31/12 17:34	JGH	100-41-4	
Methylene chloride	Not detected	ug/kg	60	8260M	01/31/12 17:34	JGH	75-09-2	
Tetrachloroethene	Not detected	ug/kg	60	8260M	01/31/12 17:34	JGH	127-18-4	
Toluene	Not detected	ug/kg	60	8260M	01/31/12 17:34	JGH	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/kg	60	8260M	01/31/12 17:34	JGH	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	8260M	01/31/12 17:34	JGH	79-00-5	
Trichloroethene	Not detected	ug/kg	60	8260M	01/31/12 17:34	JGH	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	60	8260M	01/31/12 17:34	JGH	75-69-4	
p,m-Xylene	Not detected	ug/kg	60	8260M	01/31/12 17:34	JGH		



Analytical Laboratory Report

Lab Sample ID: S51442.05 (continued)

Sample Tag: WMU10_SB6_01252012 (11.5-12)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
o-Xylene	Not detected	ug/kg	60	8260M	01/31/12 17:34	JGH	95-47-6	
Acetone	Not detected	ug/kg	6,000	8260M	01/31/12 17:34	JGH	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	6,000	8260M	01/31/12 17:34	JGH	78-93-3	
Carbon disulfide	Not detected	ug/kg	6,000	8260M	01/31/12 17:34	JGH	75-15-0	
Diethyl ether	Not detected	ug/kg	6,000	8260M	01/31/12 17:34	JGH	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	6,000	8260M	01/31/12 17:34	JGH	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	60	8260B	01/31/12 17:34	JGH	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	60	8260B	01/31/12 17:34	JGH	76-13-1	
Other / Misc.								
Methanol	99,000	ug/kg	13,000	8015M	01/30/12 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S51442.06
 Sample Tag: WMU10_SB6A_01252012 (17.5-18')
 Collected Date/Time: 01/25/2012 15:00
 Matrix: Soil
 COC Reference: BC012712.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.4	IR
2	4oz Glass	None	Yes	4.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	01/30/12 22:33	EMR		
Metal Digestion	Completed			3050B	02/01/12 01:00	SLR		

Inorganics

Flashpoint for Solids	Not detected	mm/sec	2.2	1030	01/27/12 14:18	PL		
Total Solids	82	%	1	Std M 2540 B	01/30/12 12:00	WAR		

Metals

Lead	2.61	mg/kg	0.30	6020	02/02/12 15:47	PER	7439-92-1	
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	01/31/12 17:28	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	01/31/12 17:28	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	01/31/12 17:28	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	01/31/12 17:28	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	01/31/12 17:28	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	2,000	8260M	01/27/12 16:15	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	80,000	8260M	01/31/12 17:52	JGH		
Cyclohexanone	Not detected	ug/kg	8,000	8260M	01/31/12 17:52	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	8,000	8260M	01/31/12 17:52	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	80,000	8260M	01/31/12 17:52	JGH		
2-Nitropropane	Not detected	ug/kg	8,000	8260M	01/31/12 17:52	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	80	8260M	01/31/12 17:52	JGH	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	80	8260M	01/31/12 17:52	JGH	56-23-5	
Chlorobenzene	Not detected	ug/kg	80	8260M	01/31/12 17:52	JGH	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	80	8260M	01/31/12 17:52	JGH	95-50-1	
Ethylbenzene	Not detected	ug/kg	80	8260M	01/31/12 17:52	JGH	100-41-4	
Methylene chloride	Not detected	ug/kg	80	8260M	01/31/12 17:52	JGH	75-09-2	
Tetrachloroethene	Not detected	ug/kg	80	8260M	01/31/12 17:52	JGH	127-18-4	
Toluene	Not detected	ug/kg	80	8260M	01/31/12 17:52	JGH	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/kg	80	8260M	01/31/12 17:52	JGH	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	80	8260M	01/31/12 17:52	JGH	79-00-5	
Trichloroethene	Not detected	ug/kg	80	8260M	01/31/12 17:52	JGH	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	80	8260M	01/31/12 17:52	JGH	75-69-4	
p,m-Xylene	Not detected	ug/kg	80	8260M	01/31/12 17:52	JGH		



Analytical Laboratory Report

Lab Sample ID: S51442.06 (continued)

Sample Tag: WMU10_SB6A_01252012 (17.5-18')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
o-Xylene	Not detected	ug/kg	80	8260M	01/31/12 17:52	JGH	95-47-6	
Acetone	Not detected	ug/kg	8,000	8260M	01/31/12 17:52	JGH	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	8,000	8260M	01/31/12 17:52	JGH	78-93-3	
Carbon disulfide	Not detected	ug/kg	8,000	8260M	01/31/12 17:52	JGH	75-15-0	
Diethyl ether	Not detected	ug/kg	8,000	8260M	01/31/12 17:52	JGH	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	8,000	8260M	01/31/12 17:52	JGH	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	80	8260B	01/31/12 17:52	JGH	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	80	8260B	01/31/12 17:52	JGH	76-13-1	
Other / Misc.								
Methanol	110,000	ug/kg	15,000	8015M	01/30/12 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

eCOC ID: **BC012712.1**

Send Results To:	Contact & Company Name: Mike Brennan ARCADIS	Telephone: 248-994-2276	Preservative	E	F	E	E	B	D	E	E	KEYS Preservation Key: A. H ₂ O ₄ B. HCL C. NaOH D. HNO ₃ E. None F. MeOH G. H. Matrix Key: SE = Sediment SO = Soil Wipe W = Water Container Information Key: 1. 40 mL VOA 2. 1 L Amber 3. 125 mL Plastic 4. 250 mL Plastic 5. 500 mL Plastic 6. 1 L Plastic 7. 2 oz. Glass 8. 32 oz. Glass 9. 8 oz. Glass 10. Other A = Air NL = NAPL / Oil SL = Sludge SW = Surface T = Tissue
	Address: 10559 Citation Dr, Suite 100	Fax: 810-229-8837	Filtered (✓)	NA	NA	NA	NA	NA	NA	NA	NA	
	City State Zip Brighton, MI 48116	E-mail Address: michael.brennan@arcadis-usa.com	# of Containers	1	1	1	4	2	1	1	1	
	Project Name/Location (City, State): Buick City/ Flint, MI	Project #: B0064410.2012.00900	Container Information	10	1	10	2	1	3	10	10	
Sampler's Printed Name: Megan Meckley	Sampler's Signature: <i>Megan Meckley</i>	PARAMETER ANALYSIS & METHOD										
Sample ID	Collectionw2	Type	Matrix	Feces SVOCs, Total Solids	Feces VOCs plus 1,1,2-Trichloro-1,2,2-Trifluoroethane and dichlorodifluoromethane	Methanol	PCBair/SVOCs	VOCs	Total Metals	Ignitability	Feces SVOCs, Total Solids, Ignitability, Lead	REMARKS
	Date Time	Comp Grab										
51442.01 WMU10_SB5_01252012	1/25/12 1545		X GW			X	X	X	X	X		
WMU2_SB3_01262012 (2-2.2)	1/26/12 1130		X SO	X	X	X						
TRIPBLANK2_01252012	1/25/12 1600		X W					X				Lab filled water VOA
TRIPBLANK_01252012	1/25/12 1300		X W			X						
WMU10_SB5_01252012 (11.5-12)	1/25/12 1455		X SO		X	X					X	
WMU10_SB6A_01252012 (17.5-18')	1/25/12 1500		X SO		X	X					X	

Special Instructions/Comments: Invoice to: Ms. Monica Wallingford, Racer Trust, 2930 Ecorse Road, Ypsilanti, MI 48198, (313) 486.2928, P.O.No: MT1295a - Please also send copy of Invoicing to Micki Maki (ARCADIS). Special QA/QC Instructions: Standard deliverable with EDD Requested.

Laboratory Information and Receipt		Relinquished By		Received By		Laboratory Received By	
Lab Name:	Cooler Custody Seal	Printed Name:	Printed Name:	Printed Name:	Printed Name:	Printed Name:	Printed Name:
Merit	<input type="checkbox"/> Intact <input type="checkbox"/> Not Intact	Megan Meckley	<i>Megan Meckley</i>	<i>Chris Capelance</i>	<i>Andrew Ball</i>	<i>Andrew Ball</i>	<i>Andrew Ball</i>
<input checked="" type="checkbox"/> Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements:	Sample Receipt:	ARCADIS		<i>Meert</i>			
5-day TAT	Condition/Cooler Temp:	Date/Time:	Date/Time:	Date/Time:	Date/Time:	Date/Time:	Date/Time:
Fed-Ex Tracking #	4.4°	1/27/2012 1200	1-27-12 1200	1-27-12 1200	1-27-12 1300	1-27-12 1300	1-27-12 1300
Not Applicable							



Thursday, February 02, 2012

Fibertec Project Number: 48376
Project Identification: 51442 /
Submittal Date: 01/27/2012

Ms. Paula Shaw
Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Dear Ms. Shaw,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note samples will be disposed of 30 days after reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

A handwritten signature in black ink, appearing to read "Daryl Strandbergh", written in a cursive style.

Daryl P. Strandbergh
Laboratory Director

DPS/kc

Enclosures

1914 Holloway Drive
11766 E. Grand River
8660 S. Mackinaw Trail

Holt, MI 48842
Brighton, MI 48116
Cadillac, MI 49601

T: (517) 699-0345
T: (810) 220-3300
T: (231) 775-8368

F: (517) 699-0388
F: (810) 220-3311
F: (231) 775-8584



Analytical Laboratory Report
Laboratory Project Number: 48376
Laboratory Sample Number: 48376-001

Order: 48376
Page: 2 of 5
Date: 02/02/12

Client Identification: **Merit Laboratories, Inc.** Sample Description: **51442.02** Chain of Custody: **64414**
Client Project Name: **51442** Sample No: **1** Collect Date: **01/26/12**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **11:30**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48376-001		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	8.2		%	0.1	1.0	01/30/12	MC120130	01/31/12	MC120130

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48376-001		Matrix: Soil/Solid		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	6400		µg/kg	4400	1.0	01/30/12	PS12A30A	01/30/12	SD12A30A

1914 Holloway Drive
11766 E. Grand River
8660 S. Mackinaw Trail

Holt, MI 48842
Brighton, MI 48116
Cadillac, MI 49601

T: (517) 699-0345
T: (810) 220-3300
T: (231) 775-8368

F: (517) 699-0388
F: (810) 220-3311
F: (231) 775-8584

Client Identification: Merit Laboratories, Inc.	Sample Description: 51442.05	Chain of Custody: 64414
Client Project Name: 51442	Sample No: 2	Collect Date: 01/25/12
Client Project No: NA	Sample Matrix: Soil/Solid	Collect Time: 14:55

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48376-002		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	7.1		%	0.1	1.0	01/30/12	MC120130	01/31/12	MC120130

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48376-002		Matrix: Soil/Solid		Analyst: TMC	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	99000		µg/kg	13000	5.0	01/30/12	S812A30A	01/30/12	S812A30A

Client Identification: Merit Laboratories, Inc.	Sample Description: 51442.06	Chain of Custody: 64414
Client Project Name: 51442	Sample No: 3	Collect Date: 01/25/12
Client Project No: NA	Sample Matrix: Soil/Solid	Collect Time: 15:00

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 48376-003		Matrix: Soil/Solid		Analyst: BMG	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	18		%	0.1	1.0	01/30/12	MC120130	01/31/12	MC120130

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 48376-003		Matrix: Soil/Solid		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	110000		µg/kg	15000	5.0	01/30/12	PS12A30A	01/30/12	SD12A30A

Definitions/ Qualifiers:

- A:** Spike recovery or precision unusable due to dilution.
- B:** The analyte was detected in the associated method blank.
- E:** The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J:** The concentration is an estimated value.
- M:** Modified Method
- U:** The analyte was not detected at or above the reporting limit.
- X:** Matrix Interference has resulted in a raised reporting limit or distorted result.
- W:** Results reported on a wet-weight basis.
- *:** Value reported is outside QA limits

Exception Summary:



1914 Holloway Drive
11766 E. Grand River
8660 S. Mackinaw Trail

Holt, MI 48842
Brighton, MI 48116
Cadillac, MI 49601

T: (517) 699-0345
T: (810) 220-3300
T: (231) 775-8368

F: (517) 699-0388
F: (810) 220-3311
F: (231) 775-8584



Analytical Laboratory Report

Report ID: S50304.01(01)
Generated on 10/17/2011

Report to

Attention: Mike Brennan
Arcadis
10559 Citation Drive
Suite 100
Brighton, MI 48116

Phone: 810-229-8594 FAX: 810-229-8837
Email: Michael.Brennan@arcadis-us.com

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S50304.01-S50304.13
Project: B0064410.2011.00900 / Buick City / Flint MI
Collected Date: 10/07/2011
Submitted Date/Time: 10/10/2011 11:50
Sampled by: Tony Maffeo
P.O. #: MT1295A

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories.

Laboratory Certifications:

Michigan DNRE (#9956), Ohio EPA (#CL0002), NELAC NY (#11814), NELAC FL (#E871045), WBENC (#2005110032)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Sample Summary (13 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S50304.01	WMU#4-TANK1-FR	Water	10/07/2011 14:10
S50304.02	WMU#4-TANK2-FR	Water	10/07/2011 13:30
S50304.03	WMU#4-TANK3-FR	Water	10/07/2011 13:20
S50304.04	WMU#4-TANK4-FR	Water	10/07/2011 14:55
S50304.05	WMU#4-TANK5-FR	Water	10/07/2011 14:35
S50304.06	WMU#4-TANK6-FR	Water	10/07/2011 10:45
S50304.07	WMU#4-TANK1&2SC-FR	Water	10/07/2011 14:25
S50304.08	WMU#4-TANK3&4SC-FR	Water	10/07/2011 14:30
S50304.09	WMU#4-TANK5&6SC-FR	Water	10/07/2011 11:30
S50304.10	WMU#5-SUMP-FR	Water	10/07/2011 12:55
S50304.11	WMU#5-FLOOR-FR	Water	10/07/2011 12:15
S50304.12	WMU#5-TOTE-FR	Water	10/07/2011 11:50
S50304.13	Trip Blank	Water	10/07/2011 00:01



Analytical Laboratory Report

Lab Sample ID: S50304.01
Sample Tag: WMU#4-TANK1-FR
Collected Date/Time: 10/07/2011 14:10
Matrix: Water
COC Reference: BC101011.0

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.1	IR
2	40ml Glass	HCL	Yes	5.1	IR
2	40ml Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

BNA Extraction	Completed			3510C	10/13/11 20:19	EMR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/L	300	8270C	10/14/11 18:02	PL	95-48-7	
p,m-Cresol	Not detected	ug/L	300	8270C	10/14/11 18:02	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	300	8270C	10/14/11 18:02	PL	95-48-7	
Nitrobenzene	Not detected	ug/L	300	8270C	10/14/11 18:02	PL	98-95-3	
Pyridine	Not detected	ug/L	300	8270C	10/14/11 18:02	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/L	2,000	8260M	10/14/11 15:21	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/L	1,000	8260M	10/13/11 15:31	WAT		
Cyclohexanone	Not detected	ug/L	100	8260M	10/13/11 15:31	WAT	108-94-1	
Ethyl Acetate	Not detected	ug/L	100	8260M	10/13/11 15:31	WAT	141-78-6	
Isobutanol	Not detected	ug/L	1,000	8260M	10/13/11 15:31	WAT		
2-Nitropropane	Not detected	ug/L	100	8260M	10/13/11 15:31	WAT	79-46-9	

F Scan

Benzene	Not detected	ug/L	1	8260M	10/13/11 15:31	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/L	1	8260M	10/13/11 15:31	WAT	56-23-5	
Chlorobenzene	Not detected	ug/L	1	8260M	10/13/11 15:31	WAT	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	8260M	10/13/11 15:31	WAT	95-50-1	
Ethylbenzene	Not detected	ug/L	1	8260M	10/13/11 15:31	WAT	100-41-4	
Methylene chloride	Not detected	ug/L	1	8260M	10/13/11 15:31	WAT	75-09-2	
Tetrachloroethene	Not detected	ug/L	1	8260M	10/13/11 15:31	WAT	127-18-4	
Toluene	158	ug/L	1	8260M	10/13/11 15:31	WAT	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 15:31	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 15:31	WAT	79-00-5	
Trichloroethene	Not detected	ug/L	1	8260M	10/13/11 15:31	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/L	1	8260M	10/13/11 15:31	WAT	75-69-4	
p,m-Xylene	Not detected	ug/L	1	8260M	10/13/11 15:31	WAT		
o-Xylene	Not detected	ug/L	1	8260M	10/13/11 15:31	WAT	95-47-6	
Acetone	Not detected	ug/L	100	8260M	10/13/11 15:31	WAT	67-64-1	
2-Butanone (MEK)	Not detected	ug/L	100	8260M	10/13/11 15:31	WAT	78-93-3	
Carbon disulfide	Not detected	ug/L	100	8260M	10/13/11 15:31	WAT	75-15-0	
Diethyl ether	Not detected	ug/L	100	8260M	10/13/11 15:31	WAT	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	100	8260M	10/13/11 15:31	WAT	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S50304.01 (continued)

Sample Tag: WMU#4-TANK1-FR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst CAS #	Flags
Organics - Volatiles (continued)							
Volatile Halocarbons							
Dichlorodifluoromethane	Not detected	ug/L	1	8260B	10/13/11 15:31	WAT 75-71-8	
Trichlorofluoromethane	Not detected	ug/L	1	8260B	10/13/11 15:31	WAT 75-69-4	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/L	1	8260B	10/13/11 15:31	WAT 76-13-1	
Other / Misc.							
Methanol	Not detected	mg/L	0.400	8015M	10/14/11 12:00	Fiber	O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S50304.02
 Sample Tag: WMU#4-TANK2-FR
 Collected Date/Time: 10/07/2011 13:30
 Matrix: Water
 COC Reference: BC101011.0

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.1	IR
2	40ml Glass	HCL	Yes	5.1	IR
2	40ml Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

BNA Extraction	Completed			3510C	10/13/11 20:19	EMR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/L	300	8270C	10/14/11 21:12	PL	95-48-7	
p,m-Cresol	Not detected	ug/L	300	8270C	10/14/11 21:12	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	300	8270C	10/14/11 21:12	PL	95-48-7	
Nitrobenzene	Not detected	ug/L	300	8270C	10/14/11 21:12	PL	98-95-3	
Pyridine	Not detected	ug/L	300	8270C	10/14/11 21:12	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/L	2,000	8260M	10/14/11 15:37	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/L	1,000	8260M	10/13/11 16:08	WAT		
Cyclohexanone	Not detected	ug/L	100	8260M	10/13/11 16:08	WAT	108-94-1	
Ethyl Acetate	Not detected	ug/L	100	8260M	10/13/11 16:08	WAT	141-78-6	
Isobutanol	Not detected	ug/L	1,000	8260M	10/13/11 16:08	WAT		
2-Nitropropane	Not detected	ug/L	100	8260M	10/13/11 16:08	WAT	79-46-9	

F Scan

Benzene	Not detected	ug/L	1	8260M	10/14/11 12:36	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/L	1	8260M	10/14/11 12:36	WAT	56-23-5	
Chlorobenzene	Not detected	ug/L	1	8260M	10/14/11 12:36	WAT	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	8260M	10/14/11 12:36	WAT	95-50-1	
Ethylbenzene	Not detected	ug/L	1	8260M	10/14/11 12:36	WAT	100-41-4	
Methylene chloride	Not detected	ug/L	1	8260M	10/14/11 12:36	WAT	75-09-2	
Tetrachloroethene	Not detected	ug/L	1	8260M	10/14/11 12:36	WAT	127-18-4	
Toluene	20	ug/L	1	8260M	10/14/11 12:36	WAT	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/L	1	8260M	10/14/11 12:36	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	8260M	10/14/11 12:36	WAT	79-00-5	
Trichloroethene	Not detected	ug/L	1	8260M	10/14/11 12:36	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/L	1	8260M	10/14/11 12:36	WAT	75-69-4	
p,m-Xylene	Not detected	ug/L	1	8260M	10/14/11 12:36	WAT		
o-Xylene	Not detected	ug/L	1	8260M	10/14/11 12:36	WAT	95-47-6	
Acetone	Not detected	ug/L	100	8260M	10/14/11 12:36	WAT	67-64-1	
2-Butanone (MEK)	Not detected	ug/L	100	8260M	10/14/11 12:36	WAT	78-93-3	
Carbon disulfide	Not detected	ug/L	100	8260M	10/14/11 12:36	WAT	75-15-0	
Diethyl ether	Not detected	ug/L	100	8260M	10/14/11 12:36	WAT	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	100	8260M	10/14/11 12:36	WAT	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S50304.02 (continued)

Sample Tag: WMU#4-TANK2-FR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst CAS #	Flags
Organics - Volatiles (continued)							
Volatile Halocarbons							
Dichlorodifluoromethane	Not detected	ug/L	1	8260B	10/14/11 12:36	WAT 75-71-8	
Trichlorofluoromethane	Not detected	ug/L	1	8260B	10/14/11 12:36	WAT 75-69-4	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/L	1	8260B	10/14/11 12:36	WAT 76-13-1	
Other / Misc.							
Methanol	Not detected	mg/L	0.400	8015M	10/14/11 12:00	Fiber	O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S50304.03
 Sample Tag: WMU#4-TANK3-FR
 Collected Date/Time: 10/07/2011 13:20
 Matrix: Water
 COC Reference: BC101011.0

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.1	IR
2	40ml Glass	HCL	Yes	5.1	IR
2	40ml Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

BNA Extraction	Completed			3510C	10/13/11 20:19	EMR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/L	300	8270C	10/14/11 21:32	PL	95-48-7	
p,m-Cresol	Not detected	ug/L	300	8270C	10/14/11 21:32	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	300	8270C	10/14/11 21:32	PL	95-48-7	
Nitrobenzene	Not detected	ug/L	300	8270C	10/14/11 21:32	PL	98-95-3	
Pyridine	Not detected	ug/L	300	8270C	10/14/11 21:32	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/L	2,000	8260M	10/14/11 15:53	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/L	1,000	8260M	10/13/11 16:26	WAT		
Cyclohexanone	Not detected	ug/L	100	8260M	10/13/11 16:26	WAT	108-94-1	
Ethyl Acetate	Not detected	ug/L	100	8260M	10/13/11 16:26	WAT	141-78-6	
Isobutanol	Not detected	ug/L	1,000	8260M	10/13/11 16:26	WAT		
2-Nitropropane	Not detected	ug/L	100	8260M	10/13/11 16:26	WAT	79-46-9	

F Scan

Benzene	Not detected	ug/L	1	8260M	10/13/11 16:26	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/L	1	8260M	10/13/11 16:26	WAT	56-23-5	
Chlorobenzene	Not detected	ug/L	1	8260M	10/13/11 16:26	WAT	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	8260M	10/13/11 16:26	WAT	95-50-1	
Ethylbenzene	Not detected	ug/L	1	8260M	10/13/11 16:26	WAT	100-41-4	
Methylene chloride	Not detected	ug/L	1	8260M	10/13/11 16:26	WAT	75-09-2	
Tetrachloroethene	Not detected	ug/L	1	8260M	10/13/11 16:26	WAT	127-18-4	
Toluene	113	ug/L	1	8260M	10/13/11 16:26	WAT	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 16:26	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 16:26	WAT	79-00-5	
Trichloroethene	Not detected	ug/L	1	8260M	10/13/11 16:26	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/L	1	8260M	10/13/11 16:26	WAT	75-69-4	
p,m-Xylene	Not detected	ug/L	1	8260M	10/13/11 16:26	WAT		
o-Xylene	Not detected	ug/L	1	8260M	10/13/11 16:26	WAT	95-47-6	
Acetone	Not detected	ug/L	100	8260M	10/13/11 16:26	WAT	67-64-1	
2-Butanone (MEK)	Not detected	ug/L	100	8260M	10/13/11 16:26	WAT	78-93-3	
Carbon disulfide	Not detected	ug/L	100	8260M	10/13/11 16:26	WAT	75-15-0	
Diethyl ether	Not detected	ug/L	100	8260M	10/13/11 16:26	WAT	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	100	8260M	10/13/11 16:26	WAT	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S50304.03 (continued)

Sample Tag: WMU#4-TANK3-FR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst CAS #	Flags
Organics - Volatiles (continued)							
Volatile Halocarbons							
Dichlorodifluoromethane	Not detected	ug/L	1	8260B	10/13/11 16:26	WAT 75-71-8	
Trichlorofluoromethane	Not detected	ug/L	1	8260B	10/13/11 16:26	WAT 75-69-4	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/L	1	8260B	10/13/11 16:26	WAT 76-13-1	
Other / Misc.							
Methanol	Not detected	mg/L	0.400	8015M	10/14/11 12:00	Fiber	O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S50304.04
 Sample Tag: WMU#4-TANK4-FR
 Collected Date/Time: 10/07/2011 14:55
 Matrix: Water
 COC Reference: BC101011.0

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.1	IR
2	40ml Glass	HCL	Yes	5.1	IR
2	40ml Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

BNA Extraction	Completed			3510C	10/13/11 20:19	EMR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/L	300	8270C	10/14/11 21:50	PL	95-48-7	
p,m-Cresol	Not detected	ug/L	300	8270C	10/14/11 21:50	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	300	8270C	10/14/11 21:50	PL	95-48-7	
Nitrobenzene	Not detected	ug/L	300	8270C	10/14/11 21:50	PL	98-95-3	
Pyridine	Not detected	ug/L	300	8270C	10/14/11 21:50	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/L	2,000	8260M	10/14/11 16:09	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/L	1,000	8260M	10/13/11 16:45	WAT		
Cyclohexanone	Not detected	ug/L	100	8260M	10/13/11 16:45	WAT	108-94-1	
Ethyl Acetate	Not detected	ug/L	100	8260M	10/13/11 16:45	WAT	141-78-6	
Isobutanol	Not detected	ug/L	1,000	8260M	10/13/11 16:45	WAT		
2-Nitropropane	Not detected	ug/L	100	8260M	10/13/11 16:45	WAT	79-46-9	

F Scan

Benzene	Not detected	ug/L	1	8260M	10/14/11 12:54	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/L	1	8260M	10/14/11 12:54	WAT	56-23-5	
Chlorobenzene	Not detected	ug/L	1	8260M	10/14/11 12:54	WAT	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	8260M	10/14/11 12:54	WAT	95-50-1	
Ethylbenzene	Not detected	ug/L	1	8260M	10/14/11 12:54	WAT	100-41-4	
Methylene chloride	Not detected	ug/L	1	8260M	10/14/11 12:54	WAT	75-09-2	
Tetrachloroethene	Not detected	ug/L	1	8260M	10/14/11 12:54	WAT	127-18-4	
Toluene	4	ug/L	1	8260M	10/14/11 12:54	WAT	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/L	1	8260M	10/14/11 12:54	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	8260M	10/14/11 12:54	WAT	79-00-5	
Trichloroethene	Not detected	ug/L	1	8260M	10/14/11 12:54	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/L	1	8260M	10/14/11 12:54	WAT	75-69-4	
p,m-Xylene	2	ug/L	1	8260M	10/14/11 12:54	WAT		
o-Xylene	Not detected	ug/L	1	8260M	10/14/11 12:54	WAT	95-47-6	
Acetone	Not detected	ug/L	100	8260M	10/14/11 12:54	WAT	67-64-1	
2-Butanone (MEK)	Not detected	ug/L	100	8260M	10/14/11 12:54	WAT	78-93-3	
Carbon disulfide	Not detected	ug/L	100	8260M	10/14/11 12:54	WAT	75-15-0	
Diethyl ether	Not detected	ug/L	100	8260M	10/14/11 12:54	WAT	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	100	8260M	10/14/11 12:54	WAT	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S50304.04 (continued)

Sample Tag: WMU#4-TANK4-FR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst CAS #	Flags
Organics - Volatiles (continued)							
Volatile Halocarbons							
Dichlorodifluoromethane	Not detected	ug/L	1	8260B	10/14/11 12:54	WAT 75-71-8	
Trichlorofluoromethane	Not detected	ug/L	1	8260B	10/14/11 12:54	WAT 75-69-4	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/L	1	8260B	10/14/11 12:54	WAT 76-13-1	
Other / Misc.							
Methanol	Not detected	mg/L	0.400	8015M	10/14/11 12:00	Fiber	O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S50304.05
 Sample Tag: WMU#4-TANK5-FR
 Collected Date/Time: 10/07/2011 14:35
 Matrix: Water
 COC Reference: BC101011.0

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.1	IR
2	40ml Glass	HCL	Yes	5.1	IR
2	40ml Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

BNA Extraction	Completed			3510C	10/13/11 20:19	EMR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/L	300	8270C	10/14/11 22:09	PL	95-48-7	
p,m-Cresol	Not detected	ug/L	300	8270C	10/14/11 22:09	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	300	8270C	10/14/11 22:09	PL	95-48-7	
Nitrobenzene	Not detected	ug/L	300	8270C	10/14/11 22:09	PL	98-95-3	
Pyridine	Not detected	ug/L	300	8270C	10/14/11 22:09	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/L	2,000	8260M	10/14/11 16:25	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/L	1,000	8260M	10/13/11 17:03	WAT		
Cyclohexanone	Not detected	ug/L	100	8260M	10/13/11 17:03	WAT	108-94-1	
Ethyl Acetate	Not detected	ug/L	100	8260M	10/13/11 17:03	WAT	141-78-6	
Isobutanol	Not detected	ug/L	1,000	8260M	10/13/11 17:03	WAT		
2-Nitropropane	Not detected	ug/L	100	8260M	10/13/11 17:03	WAT	79-46-9	

F Scan

Benzene	Not detected	ug/L	1	8260M	10/13/11 17:03	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/L	1	8260M	10/13/11 17:03	WAT	56-23-5	
Chlorobenzene	Not detected	ug/L	1	8260M	10/13/11 17:03	WAT	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	8260M	10/13/11 17:03	WAT	95-50-1	
Ethylbenzene	Not detected	ug/L	1	8260M	10/13/11 17:03	WAT	100-41-4	
Methylene chloride	Not detected	ug/L	1	8260M	10/13/11 17:03	WAT	75-09-2	
Tetrachloroethene	Not detected	ug/L	1	8260M	10/13/11 17:03	WAT	127-18-4	
Toluene	58	ug/L	1	8260M	10/13/11 17:03	WAT	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 17:03	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 17:03	WAT	79-00-5	
Trichloroethene	Not detected	ug/L	1	8260M	10/13/11 17:03	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/L	1	8260M	10/13/11 17:03	WAT	75-69-4	
p,m-Xylene	Not detected	ug/L	1	8260M	10/13/11 17:03	WAT		
o-Xylene	Not detected	ug/L	1	8260M	10/13/11 17:03	WAT	95-47-6	
Acetone	Not detected	ug/L	100	8260M	10/13/11 17:03	WAT	67-64-1	
2-Butanone (MEK)	Not detected	ug/L	100	8260M	10/13/11 17:03	WAT	78-93-3	
Carbon disulfide	Not detected	ug/L	100	8260M	10/13/11 17:03	WAT	75-15-0	
Diethyl ether	Not detected	ug/L	100	8260M	10/13/11 17:03	WAT	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	100	8260M	10/13/11 17:03	WAT	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S50304.05 (continued)

Sample Tag: WMU#4-TANK5-FR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst CAS #	Flags
Organics - Volatiles (continued)							
Volatile Halocarbons							
Dichlorodifluoromethane	Not detected	ug/L	1	8260B	10/13/11 17:03	WAT 75-71-8	
Trichlorofluoromethane	Not detected	ug/L	1	8260B	10/13/11 17:03	WAT 75-69-4	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/L	1	8260B	10/13/11 17:03	WAT 76-13-1	
Other / Misc.							
Methanol	Not detected	mg/L	0.400	8015M	10/14/11 12:00	Fiber	O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S50304.06
 Sample Tag: WMU#4-TANK6-FR
 Collected Date/Time: 10/07/2011 10:45
 Matrix: Water
 COC Reference: BC101011.0

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.1	IR
2	40ml Glass	HCL	Yes	5.1	IR
2	40ml Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

BNA Extraction	Completed			3510C	10/13/11 20:19	EMR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/L	300	8270C	10/14/11 22:28	PL	95-48-7	
p,m-Cresol	Not detected	ug/L	300	8270C	10/14/11 22:28	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	300	8270C	10/14/11 22:28	PL	95-48-7	
Nitrobenzene	Not detected	ug/L	300	8270C	10/14/11 22:28	PL	98-95-3	
Pyridine	Not detected	ug/L	300	8270C	10/14/11 22:28	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/L	2,000	8260M	10/14/11 16:41	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/L	1,000	8260M	10/13/11 17:21	WAT		
Cyclohexanone	Not detected	ug/L	100	8260M	10/13/11 17:21	WAT	108-94-1	
Ethyl Acetate	Not detected	ug/L	100	8260M	10/13/11 17:21	WAT	141-78-6	
Isobutanol	Not detected	ug/L	1,000	8260M	10/13/11 17:21	WAT		
2-Nitropropane	Not detected	ug/L	100	8260M	10/13/11 17:21	WAT	79-46-9	

F Scan

Benzene	Not detected	ug/L	1	8260M	10/13/11 17:21	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/L	1	8260M	10/13/11 17:21	WAT	56-23-5	
Chlorobenzene	Not detected	ug/L	1	8260M	10/13/11 17:21	WAT	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	8260M	10/13/11 17:21	WAT	95-50-1	
Ethylbenzene	Not detected	ug/L	1	8260M	10/13/11 17:21	WAT	100-41-4	
Methylene chloride	Not detected	ug/L	1	8260M	10/13/11 17:21	WAT	75-09-2	
Tetrachloroethene	Not detected	ug/L	1	8260M	10/13/11 17:21	WAT	127-18-4	
Toluene	3	ug/L	1	8260M	10/13/11 17:21	WAT	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 17:21	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 17:21	WAT	79-00-5	
Trichloroethene	Not detected	ug/L	1	8260M	10/13/11 17:21	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/L	1	8260M	10/13/11 17:21	WAT	75-69-4	
p,m-Xylene	Not detected	ug/L	1	8260M	10/13/11 17:21	WAT		
o-Xylene	Not detected	ug/L	1	8260M	10/13/11 17:21	WAT	95-47-6	
Acetone	Not detected	ug/L	100	8260M	10/13/11 17:21	WAT	67-64-1	
2-Butanone (MEK)	Not detected	ug/L	100	8260M	10/13/11 17:21	WAT	78-93-3	
Carbon disulfide	Not detected	ug/L	100	8260M	10/13/11 17:21	WAT	75-15-0	
Diethyl ether	Not detected	ug/L	100	8260M	10/13/11 17:21	WAT	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	100	8260M	10/13/11 17:21	WAT	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S50304.06 (continued)

Sample Tag: WMU#4-TANK6-FR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst CAS #	Flags
Organics - Volatiles (continued)							
Volatile Halocarbons							
Dichlorodifluoromethane	Not detected	ug/L	1	8260B	10/13/11 17:21	WAT 75-71-8	
Trichlorofluoromethane	Not detected	ug/L	1	8260B	10/13/11 17:21	WAT 75-69-4	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/L	1	8260B	10/13/11 17:21	WAT 76-13-1	
Other / Misc.							
Methanol	Not detected	mg/L	0.400	8015M	10/14/11 12:00	Fiber	O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S50304.07
 Sample Tag: WMU#4-TANK1&2SC-FR
 Collected Date/Time: 10/07/2011 14:25
 Matrix: Water
 COC Reference: BC101011.0

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.1	IR
2	40ml Glass	HCL	Yes	5.1	IR
2	40ml Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

BNA Extraction	Completed			3510C	10/13/11 20:19	EMR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/L	300	8270C	10/14/11 22:47	PL	95-48-7	
p,m-Cresol	Not detected	ug/L	300	8270C	10/14/11 22:47	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	300	8270C	10/14/11 22:47	PL	95-48-7	
Nitrobenzene	Not detected	ug/L	300	8270C	10/14/11 22:47	PL	98-95-3	
Pyridine	Not detected	ug/L	300	8270C	10/14/11 22:47	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/L	2,000	8260M	10/14/11 16:57	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/L	1,000	8260M	10/13/11 17:39	WAT		
Cyclohexanone	Not detected	ug/L	100	8260M	10/13/11 17:39	WAT	108-94-1	
Ethyl Acetate	Not detected	ug/L	100	8260M	10/13/11 17:39	WAT	141-78-6	
Isobutanol	Not detected	ug/L	1,000	8260M	10/13/11 17:39	WAT		
2-Nitropropane	Not detected	ug/L	100	8260M	10/13/11 17:39	WAT	79-46-9	

F Scan

Benzene	Not detected	ug/L	1	8260M	10/13/11 17:39	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/L	1	8260M	10/13/11 17:39	WAT	56-23-5	
Chlorobenzene	Not detected	ug/L	1	8260M	10/13/11 17:39	WAT	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	8260M	10/13/11 17:39	WAT	95-50-1	
Ethylbenzene	Not detected	ug/L	1	8260M	10/13/11 17:39	WAT	100-41-4	
Methylene chloride	Not detected	ug/L	1	8260M	10/13/11 17:39	WAT	75-09-2	
Tetrachloroethene	Not detected	ug/L	1	8260M	10/13/11 17:39	WAT	127-18-4	
Toluene	6	ug/L	1	8260M	10/13/11 17:39	WAT	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 17:39	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 17:39	WAT	79-00-5	
Trichloroethene	Not detected	ug/L	1	8260M	10/13/11 17:39	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/L	1	8260M	10/13/11 17:39	WAT	75-69-4	
p,m-Xylene	Not detected	ug/L	1	8260M	10/13/11 17:39	WAT		
o-Xylene	Not detected	ug/L	1	8260M	10/13/11 17:39	WAT	95-47-6	
Acetone	Not detected	ug/L	100	8260M	10/13/11 17:39	WAT	67-64-1	
2-Butanone (MEK)	Not detected	ug/L	100	8260M	10/13/11 17:39	WAT	78-93-3	
Carbon disulfide	Not detected	ug/L	100	8260M	10/13/11 17:39	WAT	75-15-0	
Diethyl ether	Not detected	ug/L	100	8260M	10/13/11 17:39	WAT	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	100	8260M	10/13/11 17:39	WAT	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S50304.07 (continued)

Sample Tag: WMU#4-TANK1&2SC-FR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst CAS #	Flags
Organics - Volatiles (continued)							
Volatile Halocarbons							
Dichlorodifluoromethane	Not detected	ug/L	1	8260B	10/13/11 17:39	WAT 75-71-8	
Trichlorofluoromethane	Not detected	ug/L	1	8260B	10/13/11 17:39	WAT 75-69-4	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/L	1	8260B	10/13/11 17:39	WAT 76-13-1	
Other / Misc.							
Methanol	Not detected	mg/L	0.400	8015M	10/14/11 12:00	Fiber	O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S50304.08
 Sample Tag: WMU#4-TANK3&4SC-FR
 Collected Date/Time: 10/07/2011 14:30
 Matrix: Water
 COC Reference: BC101011.0

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.1	IR
2	40ml Glass	HCL	Yes	5.1	IR
2	40ml Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

BNA Extraction	Completed			3510C	10/13/11 20:19	EMR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/L	300	8270C	10/14/11 23:06	PL	95-48-7	
p,m-Cresol	Not detected	ug/L	300	8270C	10/14/11 23:06	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	300	8270C	10/14/11 23:06	PL	95-48-7	
Nitrobenzene	Not detected	ug/L	300	8270C	10/14/11 23:06	PL	98-95-3	
Pyridine	Not detected	ug/L	300	8270C	10/14/11 23:06	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/L	2,000	8260M	10/14/11 17:13	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/L	1,000	8260M	10/13/11 17:57	WAT		
Cyclohexanone	Not detected	ug/L	100	8260M	10/13/11 17:57	WAT	108-94-1	
Ethyl Acetate	Not detected	ug/L	100	8260M	10/13/11 17:57	WAT	141-78-6	
Isobutanol	Not detected	ug/L	1,000	8260M	10/13/11 17:57	WAT		
2-Nitropropane	Not detected	ug/L	100	8260M	10/13/11 17:57	WAT	79-46-9	

F Scan

Benzene	Not detected	ug/L	1	8260M	10/13/11 17:57	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/L	1	8260M	10/13/11 17:57	WAT	56-23-5	
Chlorobenzene	Not detected	ug/L	1	8260M	10/13/11 17:57	WAT	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	8260M	10/13/11 17:57	WAT	95-50-1	
Ethylbenzene	Not detected	ug/L	1	8260M	10/13/11 17:57	WAT	100-41-4	
Methylene chloride	Not detected	ug/L	1	8260M	10/13/11 17:57	WAT	75-09-2	
Tetrachloroethene	Not detected	ug/L	1	8260M	10/13/11 17:57	WAT	127-18-4	
Toluene	13	ug/L	1	8260M	10/13/11 17:57	WAT	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 17:57	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 17:57	WAT	79-00-5	
Trichloroethene	Not detected	ug/L	1	8260M	10/13/11 17:57	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/L	1	8260M	10/13/11 17:57	WAT	75-69-4	
p,m-Xylene	1	ug/L	1	8260M	10/13/11 17:57	WAT		
o-Xylene	Not detected	ug/L	1	8260M	10/13/11 17:57	WAT	95-47-6	
Acetone	Not detected	ug/L	100	8260M	10/13/11 17:57	WAT	67-64-1	
2-Butanone (MEK)	Not detected	ug/L	100	8260M	10/13/11 17:57	WAT	78-93-3	
Carbon disulfide	Not detected	ug/L	100	8260M	10/13/11 17:57	WAT	75-15-0	
Diethyl ether	Not detected	ug/L	100	8260M	10/13/11 17:57	WAT	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	100	8260M	10/13/11 17:57	WAT	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S50304.08 (continued)

Sample Tag: WMU#4-TANK3&4SC-FR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst CAS #	Flags
Organics - Volatiles (continued)							
Volatile Halocarbons							
Dichlorodifluoromethane	Not detected	ug/L	1	8260B	10/13/11 17:57	WAT 75-71-8	
Trichlorofluoromethane	Not detected	ug/L	1	8260B	10/13/11 17:57	WAT 75-69-4	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/L	1	8260B	10/13/11 17:57	WAT 76-13-1	
Other / Misc.							
Methanol	Not detected	mg/L	0.400	8015M	10/14/11 12:00	Fiber	O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S50304.09
 Sample Tag: WMU#4-TANK5&6SC-FR
 Collected Date/Time: 10/07/2011 11:30
 Matrix: Water
 COC Reference: BC101011.0

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.1	IR
2	40ml Glass	HCL	Yes	5.1	IR
2	40ml Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

BNA Extraction	Completed			3510C	10/13/11 20:19	EMR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/L	300	8270C	10/14/11 23:25	PL	95-48-7	
p,m-Cresol	Not detected	ug/L	300	8270C	10/14/11 23:25	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	300	8270C	10/14/11 23:25	PL	95-48-7	
Nitrobenzene	Not detected	ug/L	300	8270C	10/14/11 23:25	PL	98-95-3	
Pyridine	Not detected	ug/L	300	8270C	10/14/11 23:25	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/L	2,000	8260M	10/14/11 17:29	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/L	1,000	8260M	10/13/11 18:16	WAT		
Cyclohexanone	Not detected	ug/L	100	8260M	10/13/11 18:16	WAT	108-94-1	
Ethyl Acetate	Not detected	ug/L	100	8260M	10/13/11 18:16	WAT	141-78-6	
Isobutanol	Not detected	ug/L	1,000	8260M	10/13/11 18:16	WAT		
2-Nitropropane	Not detected	ug/L	100	8260M	10/13/11 18:16	WAT	79-46-9	

F Scan

Benzene	Not detected	ug/L	1	8260M	10/13/11 18:16	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/L	1	8260M	10/13/11 18:16	WAT	56-23-5	
Chlorobenzene	Not detected	ug/L	1	8260M	10/13/11 18:16	WAT	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	8260M	10/13/11 18:16	WAT	95-50-1	
Ethylbenzene	Not detected	ug/L	1	8260M	10/13/11 18:16	WAT	100-41-4	
Methylene chloride	Not detected	ug/L	1	8260M	10/13/11 18:16	WAT	75-09-2	
Tetrachloroethene	Not detected	ug/L	1	8260M	10/13/11 18:16	WAT	127-18-4	
Toluene	4	ug/L	1	8260M	10/13/11 18:16	WAT	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 18:16	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 18:16	WAT	79-00-5	
Trichloroethene	Not detected	ug/L	1	8260M	10/13/11 18:16	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/L	1	8260M	10/13/11 18:16	WAT	75-69-4	
p,m-Xylene	Not detected	ug/L	1	8260M	10/13/11 18:16	WAT		
o-Xylene	Not detected	ug/L	1	8260M	10/13/11 18:16	WAT	95-47-6	
Acetone	Not detected	ug/L	100	8260M	10/13/11 18:16	WAT	67-64-1	
2-Butanone (MEK)	Not detected	ug/L	100	8260M	10/13/11 18:16	WAT	78-93-3	
Carbon disulfide	Not detected	ug/L	100	8260M	10/13/11 18:16	WAT	75-15-0	
Diethyl ether	Not detected	ug/L	100	8260M	10/13/11 18:16	WAT	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	100	8260M	10/13/11 18:16	WAT	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S50304.09 (continued)

Sample Tag: WMU#4-TANK5&6SC-FR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst CAS #	Flags
Organics - Volatiles (continued)							
Volatile Halocarbons							
Dichlorodifluoromethane	Not detected	ug/L	1	8260B	10/13/11 18:16	WAT 75-71-8	
Trichlorofluoromethane	Not detected	ug/L	1	8260B	10/13/11 18:16	WAT 75-69-4	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/L	1	8260B	10/13/11 18:16	WAT 76-13-1	
Other / Misc.							
Methanol	Not detected	mg/L	0.400	8015M	10/14/11 12:00	Fiber	O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S50304.10
 Sample Tag: WMU#5-SUMP-FR
 Collected Date/Time: 10/07/2011 12:55
 Matrix: Water
 COC Reference: BC101011.0

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.1	IR
2	40ml Glass	HCL	Yes	5.1	IR
2	40ml Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

BNA Extraction	Completed			3510C	10/13/11 20:19	EMR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/L	300	8270C	10/14/11 18:21	PL	95-48-7	
p,m-Cresol	Not detected	ug/L	300	8270C	10/14/11 18:21	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	300	8270C	10/14/11 18:21	PL	95-48-7	
Nitrobenzene	Not detected	ug/L	300	8270C	10/14/11 18:21	PL	98-95-3	
Pyridine	Not detected	ug/L	300	8270C	10/14/11 18:21	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/L	2,000	8260M	10/14/11 17:45	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/L	1,000	8260M	10/13/11 18:34	WAT		
Cyclohexanone	Not detected	ug/L	100	8260M	10/13/11 18:34	WAT	108-94-1	
Ethyl Acetate	Not detected	ug/L	100	8260M	10/13/11 18:34	WAT	141-78-6	
Isobutanol	Not detected	ug/L	1,000	8260M	10/13/11 18:34	WAT		
2-Nitropropane	Not detected	ug/L	100	8260M	10/13/11 18:34	WAT	79-46-9	

F Scan

Benzene	Not detected	ug/L	1	8260M	10/13/11 18:34	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/L	1	8260M	10/13/11 18:34	WAT	56-23-5	
Chlorobenzene	Not detected	ug/L	1	8260M	10/13/11 18:34	WAT	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	8260M	10/13/11 18:34	WAT	95-50-1	
Ethylbenzene	Not detected	ug/L	1	8260M	10/13/11 18:34	WAT	100-41-4	
Methylene chloride	Not detected	ug/L	1	8260M	10/13/11 18:34	WAT	75-09-2	
Tetrachloroethene	Not detected	ug/L	1	8260M	10/13/11 18:34	WAT	127-18-4	
Toluene	2	ug/L	1	8260M	10/13/11 18:34	WAT	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 18:34	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 18:34	WAT	79-00-5	
Trichloroethene	Not detected	ug/L	1	8260M	10/13/11 18:34	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/L	1	8260M	10/13/11 18:34	WAT	75-69-4	
p,m-Xylene	Not detected	ug/L	1	8260M	10/13/11 18:34	WAT		
o-Xylene	Not detected	ug/L	1	8260M	10/13/11 18:34	WAT	95-47-6	
Acetone	Not detected	ug/L	100	8260M	10/13/11 18:34	WAT	67-64-1	
2-Butanone (MEK)	Not detected	ug/L	100	8260M	10/13/11 18:34	WAT	78-93-3	
Carbon disulfide	Not detected	ug/L	100	8260M	10/13/11 18:34	WAT	75-15-0	
Diethyl ether	Not detected	ug/L	100	8260M	10/13/11 18:34	WAT	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	100	8260M	10/13/11 18:34	WAT	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S50304.10 (continued)

Sample Tag: WMU#5-SUMP-FR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst CAS #	Flags
Organics - Volatiles (continued)							
Volatile Halocarbons							
Dichlorodifluoromethane	Not detected	ug/L	1	8260B	10/13/11 18:34	WAT 75-71-8	
Trichlorofluoromethane	Not detected	ug/L	1	8260B	10/13/11 18:34	WAT 75-69-4	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/L	1	8260B	10/13/11 18:34	WAT 76-13-1	
Other / Misc.							
Methanol	Not detected	mg/L	0.400	8015M	10/14/11 12:00	Fiber	O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S50304.11
 Sample Tag: WMU#5-FLOOR-FR
 Collected Date/Time: 10/07/2011 12:15
 Matrix: Water
 COC Reference: BC101011.0

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.1	IR
2	40ml Glass	HCL	Yes	5.1	IR
2	40ml Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

BNA Extraction	Completed			3510C	10/13/11 20:19	EMR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/L	300	8270C	10/14/11 18:40	PL	95-48-7	
p,m-Cresol	Not detected	ug/L	300	8270C	10/14/11 18:40	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	300	8270C	10/14/11 18:40	PL	95-48-7	
Nitrobenzene	Not detected	ug/L	300	8270C	10/14/11 18:40	PL	98-95-3	
Pyridine	Not detected	ug/L	300	8270C	10/14/11 18:40	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/L	2,000	8260M	10/14/11 18:01	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/L	1,000	8260M	10/13/11 18:52	WAT		
Cyclohexanone	Not detected	ug/L	100	8260M	10/13/11 18:52	WAT	108-94-1	
Ethyl Acetate	Not detected	ug/L	100	8260M	10/13/11 18:52	WAT	141-78-6	
Isobutanol	Not detected	ug/L	1,000	8260M	10/13/11 18:52	WAT		
2-Nitropropane	Not detected	ug/L	100	8260M	10/13/11 18:52	WAT	79-46-9	

F Scan

Benzene	Not detected	ug/L	1	8260M	10/13/11 18:52	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/L	1	8260M	10/13/11 18:52	WAT	56-23-5	
Chlorobenzene	Not detected	ug/L	1	8260M	10/13/11 18:52	WAT	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	8260M	10/13/11 18:52	WAT	95-50-1	
Ethylbenzene	Not detected	ug/L	1	8260M	10/13/11 18:52	WAT	100-41-4	
Methylene chloride	Not detected	ug/L	1	8260M	10/13/11 18:52	WAT	75-09-2	
Tetrachloroethene	Not detected	ug/L	1	8260M	10/13/11 18:52	WAT	127-18-4	
Toluene	59	ug/L	1	8260M	10/13/11 18:52	WAT	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 18:52	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 18:52	WAT	79-00-5	
Trichloroethene	Not detected	ug/L	1	8260M	10/13/11 18:52	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/L	1	8260M	10/13/11 18:52	WAT	75-69-4	
p,m-Xylene	Not detected	ug/L	1	8260M	10/13/11 18:52	WAT		
o-Xylene	Not detected	ug/L	1	8260M	10/13/11 18:52	WAT	95-47-6	
Acetone	Not detected	ug/L	100	8260M	10/13/11 18:52	WAT	67-64-1	
2-Butanone (MEK)	Not detected	ug/L	100	8260M	10/13/11 18:52	WAT	78-93-3	
Carbon disulfide	Not detected	ug/L	100	8260M	10/13/11 18:52	WAT	75-15-0	
Diethyl ether	Not detected	ug/L	100	8260M	10/13/11 18:52	WAT	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	100	8260M	10/13/11 18:52	WAT	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S50304.11 (continued)

Sample Tag: WMU#5-FLOOR-FR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst CAS #	Flags
Organics - Volatiles (continued)							
Volatile Halocarbons							
Dichlorodifluoromethane	Not detected	ug/L	1	8260B	10/13/11 18:52	WAT 75-71-8	
Trichlorofluoromethane	Not detected	ug/L	1	8260B	10/13/11 18:52	WAT 75-69-4	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/L	1	8260B	10/13/11 18:52	WAT 76-13-1	
Other / Misc.							
Methanol	Not detected	mg/L	0.400	8015M	10/14/11 12:00	Fiber	O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S50304.12
 Sample Tag: WMU#5-TOTE-FR
 Collected Date/Time: 10/07/2011 11:50
 Matrix: Water
 COC Reference: BC101011.0

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.1	IR
2	40ml Glass	HCL	Yes	5.1	IR
2	40ml Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

BNA Extraction	Completed			3510C	10/13/11 20:19	EMR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/L	300	8270C	10/14/11 18:59	PL	95-48-7	
p,m-Cresol	Not detected	ug/L	300	8270C	10/14/11 18:59	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	300	8270C	10/14/11 18:59	PL	95-48-7	
Nitrobenzene	Not detected	ug/L	300	8270C	10/14/11 18:59	PL	98-95-3	
Pyridine	Not detected	ug/L	300	8270C	10/14/11 18:59	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/L	2,000	8260M	10/14/11 18:17	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/L	1,000	8260M	10/13/11 19:10	WAT		
Cyclohexanone	Not detected	ug/L	100	8260M	10/13/11 19:10	WAT	108-94-1	
Ethyl Acetate	Not detected	ug/L	100	8260M	10/13/11 19:10	WAT	141-78-6	
Isobutanol	Not detected	ug/L	1,000	8260M	10/13/11 19:10	WAT		
2-Nitropropane	Not detected	ug/L	100	8260M	10/13/11 19:10	WAT	79-46-9	

F Scan

Benzene	Not detected	ug/L	1	8260M	10/13/11 19:10	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/L	1	8260M	10/13/11 19:10	WAT	56-23-5	
Chlorobenzene	Not detected	ug/L	1	8260M	10/13/11 19:10	WAT	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	8260M	10/13/11 19:10	WAT	95-50-1	
Ethylbenzene	Not detected	ug/L	1	8260M	10/13/11 19:10	WAT	100-41-4	
Methylene chloride	Not detected	ug/L	1	8260M	10/13/11 19:10	WAT	75-09-2	
Tetrachloroethene	Not detected	ug/L	1	8260M	10/13/11 19:10	WAT	127-18-4	
Toluene	Not detected	ug/L	1	8260M	10/13/11 19:10	WAT	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 19:10	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 19:10	WAT	79-00-5	
Trichloroethene	Not detected	ug/L	1	8260M	10/13/11 19:10	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/L	1	8260M	10/13/11 19:10	WAT	75-69-4	
p,m-Xylene	Not detected	ug/L	1	8260M	10/13/11 19:10	WAT		
o-Xylene	Not detected	ug/L	1	8260M	10/13/11 19:10	WAT	95-47-6	
Acetone	Not detected	ug/L	100	8260M	10/13/11 19:10	WAT	67-64-1	
2-Butanone (MEK)	Not detected	ug/L	100	8260M	10/13/11 19:10	WAT	78-93-3	
Carbon disulfide	Not detected	ug/L	100	8260M	10/13/11 19:10	WAT	75-15-0	
Diethyl ether	Not detected	ug/L	100	8260M	10/13/11 19:10	WAT	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	100	8260M	10/13/11 19:10	WAT	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S50304.12 (continued)

Sample Tag: WMU#5-TOTE-FR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst CAS #	Flags
Organics - Volatiles (continued)							
Volatile Halocarbons							
Dichlorodifluoromethane	Not detected	ug/L	1	8260B	10/13/11 19:10	WAT 75-71-8	
Trichlorofluoromethane	Not detected	ug/L	1	8260B	10/13/11 19:10	WAT 75-69-4	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/L	1	8260B	10/13/11 19:10	WAT 76-13-1	
Other / Misc.							
Methanol	Not detected	mg/L	0.400	8015M	10/14/11 12:00	Fiber	O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S50304.13
 Sample Tag: Trip Blank
 Collected Date/Time: 10/07/2011 00:01
 Matrix: Water
 COC Reference: BC101011.0

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40ml Glass	HCL	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/L	2,000	8260M	10/14/11 18:34	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/L	1,000	8260M	10/13/11 19:29	WAT		
Cyclohexanone	Not detected	ug/L	100	8260M	10/13/11 19:29	WAT	108-94-1	
Ethyl Acetate	Not detected	ug/L	100	8260M	10/13/11 19:29	WAT	141-78-6	
Isobutanol	Not detected	ug/L	1,000	8260M	10/13/11 19:29	WAT		
2-Nitropropane	Not detected	ug/L	100	8260M	10/13/11 19:29	WAT	79-46-9	

F Scan

Benzene	Not detected	ug/L	1	8260M	10/13/11 19:29	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/L	1	8260M	10/13/11 19:29	WAT	56-23-5	
Chlorobenzene	Not detected	ug/L	1	8260M	10/13/11 19:29	WAT	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	8260M	10/13/11 19:29	WAT	95-50-1	
Ethylbenzene	Not detected	ug/L	1	8260M	10/13/11 19:29	WAT	100-41-4	
Methylene chloride	Not detected	ug/L	1	8260M	10/13/11 19:29	WAT	75-09-2	
Tetrachloroethene	Not detected	ug/L	1	8260M	10/13/11 19:29	WAT	127-18-4	
Toluene	Not detected	ug/L	1	8260M	10/13/11 19:29	WAT	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 19:29	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 19:29	WAT	79-00-5	
Trichloroethene	Not detected	ug/L	1	8260M	10/13/11 19:29	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/L	1	8260M	10/13/11 19:29	WAT	75-69-4	
p,m-Xylene	Not detected	ug/L	1	8260M	10/13/11 19:29	WAT		
o-Xylene	Not detected	ug/L	1	8260M	10/13/11 19:29	WAT	95-47-6	
Acetone	Not detected	ug/L	100	8260M	10/13/11 19:29	WAT	67-64-1	
2-Butanone (MEK)	Not detected	ug/L	100	8260M	10/13/11 19:29	WAT	78-93-3	
Carbon disulfide	Not detected	ug/L	100	8260M	10/13/11 19:29	WAT	75-15-0	
Diethyl ether	Not detected	ug/L	100	8260M	10/13/11 19:29	WAT	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	100	8260M	10/13/11 19:29	WAT	108-10-1	

Volatile Halocarbons

Dichlorodifluoromethane	Not detected	ug/L	1	8260B	10/13/11 19:29	WAT	75-71-8	
Trichlorofluoromethane	Not detected	ug/L	1	8260B	10/13/11 19:29	WAT	75-69-4	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/L	1	8260B	10/13/11 19:29	WAT	76-13-1	



CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

eCOC ID: BC101011.01

Send Results To:	Contact & Company Name: Mike Brennan ARCADIS		Telephone: 248-994-2276		Preservation	B	E	E	B							KEYS Preservation Key: A. H ₂ SO ₄ B. HCl C. NaOH D. HNO ₃ E. None F. G. H. Matrix Key: SE = Sediment A = Air SW = Sludge SO = Soil NL = NAPL / Oil SW = Surface Wipe: W = Water T = Tissue
	Address: 10559 Citation DR., Suite 100		Fax: 810-229-8837		# of Containers	2	2	2	1							
	City State Zip Brighton, MI 48116		E-mail Address: michael.brennan@arcadis-us.com		Containers Requisition	1	1	2	1							
	Project Name/Location (City, State): Buick City/ Flint, MI		Project #: B0064410.2011.00900		PARAMETER ANALYSIS & METHOD											
Sampler's Printed Name: Tony Maffeo		Sampler's Signature: 			See attached Sheet For "Buick City F-List Analyte List"	See attached Sheet For "Buick City F-List Analyte List"	See attached Sheet For "Buick City F-List Analyte List"	See attached Sheet For "Buick City F-List Analyte List" - VOC's Only								
Sample ID	Collection		Type		Matrix											
	Date	Time	Comp	Grab												
WMU#4-TANK1-FR	10/7/11	1410	X		W	X	X	X								
WMU#4-TANK2-FR	10/7/11	1330	X		W	X	X	X								
WMU#4-TANK3-FR	10/7/11	1320	X		W	X	X	X								
WMU#4-TANK4-FR	10/7/11	1455	X		W	X	X	X								
WMU#4-TANK5-FR	10/7/11	1435	X		W	X	X	X								
WMU#4-TANK6-FR	10/7/11	1045	X		W	X	X	X								
WMU#4-TANK1&2SC-FR	10/7/11	1425	X		W	X	X	X								
WMU#4-TANK3&4SC-FR	10/7/11	1430	X		W	X	X	X								
WMU#4-TANK5&6SC-FR	10/7/11	1130	X		W	X	X	X								
WMU#5-SUMP-FR	10/7/11	1255	X		W	X	X	X								
WMU#5-FLOOR-FR	10/7/11	1215	X		W	X	X	X								
WMU#5-TOTE-FR	10/7/11	1150	X		W	X	X	X								
TRIP BLANK				X	W				X							
Special Instructions/Comments: Invoice to: Ms. Monica Wallingford, Racer Trust, 2930 Ecorse Road, Ypsilanti, MI 48198, (313) 486.2928, P.O.No: MT1295a - Please also send copy of Invoicing to Micki Maki (ARCADIS).																
Special QA/QC Instructions: Standard deliverable with EDD Requested.																
Laboratory Information and Receipt				Relinquished By				Received By				Laboratory Received By				
Lab Name: Merit		Cooler Custody Seal		Printed Name: Tony Maffeo		Signature: 		Printed Name: Jim Glees		Signature: 		Printed Name: Paula Straw		Signature: 		
<input checked="" type="checkbox"/> Cooler packed with ice (✓)		<input type="checkbox"/> Intact <input type="checkbox"/> Not Intact		ARCADIS		Firm: Merit		Date/Time: 10/10/11 10:45		Firm: Merit		Date/Time: 10-10-11 1150				
Specify Turnaround Requirements: 5-Day TAT		Sample Receipt:		Date/Time: 10/10/11 10:45		Date/Time: 10/10/11 10:45		Date/Time: 10/10/11 10:45		Date/Time: 10/10/11 10:45		Date/Time: 10/10/11 10:45				
Fed-Ex Tracking #: Not Applicable		Condition/Cooler Temp:		Date/Time: 10/10/11 10:45		Date/Time: 10/10/11 10:45		Date/Time: 10/10/11 10:45		Date/Time: 10/10/11 10:45		Date/Time: 10/10/11 10:45				

50309
10/10/11 10:45

BUICK CITY F-LIST SELECT ANALYTE LIST

Select VOCs (USEPA Method 8260): 2-Ethoxyethanol, 2-Nitropropane, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Acetone, Benzene, Carbon Disulfide, Carbon Tetrachloride, Chlorobenzene, Chlorinated Fluorocarbons (dichlorodifluoromethane and trichlorofluoromethane), Ethyl Ether, Methylene Chloride, Methyl Ethyl Ketone, Methyl Isobutyl Ketone, ortho-Dichlorobenzene, Tetrachloroethylene, Toluene, Trichloroethylene, Trichlorofluoromethane, and Xylenes.

Select F-Scan VOCs (USEPA Method 8260): Cyclohexanone and Ethyl Acetate.

Select USEPA Method 8015: Isobutanol, methanol, and n-butyl alcohol.

Select F-Scan SVOCs (USEPA Method 8270): Cresols, Cresylic Acid, Nitrobenzene, and Pyridine.



Monday, October 17, 2011

Fibertec Project Number: 46757
Project Identification: 50304 /
Submittal Date: 10/10/2011

Ms. Paula Shaw
Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Dear Ms. Shaw,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note samples will be disposed of 30 days after reporting date.

Samples were received at 14.7 degrees Celsius.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

A handwritten signature in black ink, appearing to read "Daryl Strandbergh", written in a cursive style.

Daryl P. Strandbergh
Laboratory Director

DPS/kc

Enclosures

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Cadillac, MI 49601

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T: (231) 775-8368

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F: (810) 220-3311
F: (231) 775-8584



Analytical Laboratory Report
Laboratory Project Number: 46757
Laboratory Sample Number: 46757-001

Order: 46757
Page: 2 of 14
Date: 10/17/11

Client Identification: Merit Laboratories, Inc.	Sample Description: 50304.01	Chain of Custody: 62695
Client Project Name: 50304	Sample No: 1	Collect Date: 10/07/11
Client Project No: NA	Sample Matrix: Ground Water	Collect Time: 14:10

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 46757-001		Matrix: Ground Water		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/L	400	1.0	10/12/11	PS11J12A	10/14/11	S811J13A

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Analytical Laboratory Report
Laboratory Project Number: 46757
Laboratory Sample Number: 46757-002

Order: 46757
Page: 3 of 14
Date: 10/17/11

Client Identification: Merit Laboratories, Inc.	Sample Description: 50304.02	Chain of Custody: 62695
Client Project Name: 50304	Sample No: 2	Collect Date: 10/07/11
Client Project No: NA	Sample Matrix: Ground Water	Collect Time: 13:30

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 46757-002		Matrix: Ground Water		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/L	400	1.0	10/12/11	PS11J12A	10/14/11	S811J13A

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Analytical Laboratory Report
Laboratory Project Number: 46757
Laboratory Sample Number: 46757-003

Order: 46757
Page: 4 of 14
Date: 10/17/11

Client Identification: Merit Laboratories, Inc.	Sample Description: 50304.03	Chain of Custody: 62695
Client Project Name: 50304	Sample No: 3	Collect Date: 10/07/11
Client Project No: NA	Sample Matrix: Ground Water	Collect Time: 13:20

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 46757-003		Matrix: Ground Water		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/L	400	1.0	10/12/11	PS11J12A	10/14/11	S811J13A

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Analytical Laboratory Report
Laboratory Project Number: 46757
Laboratory Sample Number: 46757-004

Order: 46757
Page: 5 of 14
Date: 10/17/11

Client Identification: Merit Laboratories, Inc.	Sample Description: 50304.04	Chain of Custody: 62695
Client Project Name: 50304	Sample No: 4	Collect Date: 10/07/11
Client Project No: NA	Sample Matrix: Ground Water	Collect Time: 14:55

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 46757-004		Matrix: Ground Water		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/L	400	1.0	10/12/11	PS11J12A	10/14/11	S811J13A

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Analytical Laboratory Report
Laboratory Project Number: 46757
Laboratory Sample Number: 46757-005

Order: 46757
Page: 6 of 14
Date: 10/17/11

Client Identification: Merit Laboratories, Inc.	Sample Description: 50304.05	Chain of Custody: 62695
Client Project Name: 50304	Sample No: 5	Collect Date: 10/07/11
Client Project No: NA	Sample Matrix: Ground Water	Collect Time: 14:35

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 46757-005		Matrix: Ground Water		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/L	400	1.0	10/12/11	PS11J12A	10/14/11	S811J13A

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Analytical Laboratory Report
Laboratory Project Number: 46757
Laboratory Sample Number: 46757-006

Order: 46757
Page: 7 of 14
Date: 10/17/11

Client Identification: Merit Laboratories, Inc.	Sample Description: 50304.06	Chain of Custody: 62695
Client Project Name: 50304	Sample No: 6	Collect Date: 10/07/11
Client Project No: NA	Sample Matrix: Ground Water	Collect Time: 10:45

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 46757-006		Matrix: Ground Water		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/L	400	1.0	10/12/11	PS11J12A	10/14/11	S811J13A

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Analytical Laboratory Report
Laboratory Project Number: 46757
Laboratory Sample Number: 46757-007

Order: 46757
Page: 8 of 14
Date: 10/17/11

Client Identification: Merit Laboratories, Inc.	Sample Description: 50304.07	Chain of Custody: 62695
Client Project Name: 50304	Sample No: 7	Collect Date: 10/07/11
Client Project No: NA	Sample Matrix: Ground Water	Collect Time: 14:25

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 46757-007		Matrix: Ground Water		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/L	400	1.0	10/12/11	PS11J12A	10/14/11	S811J13A

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Analytical Laboratory Report
Laboratory Project Number: 46757
Laboratory Sample Number: 46757-008

Order: 46757
Page: 9 of 14
Date: 10/17/11

Client Identification: Merit Laboratories, Inc.	Sample Description: 50304.08	Chain of Custody: 62695
Client Project Name: 50304	Sample No: 8	Collect Date: 10/07/11
Client Project No: NA	Sample Matrix: Ground Water	Collect Time: 14:30

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 46757-008		Matrix: Ground Water		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/L	400	1.0	10/12/11	PS11J12A	10/14/11	S811J13A

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Analytical Laboratory Report
Laboratory Project Number: 46757
Laboratory Sample Number: 46757-009

Order: 46757
Page: 10 of 14
Date: 10/17/11

Client Identification: Merit Laboratories, Inc.	Sample Description: 50304.09	Chain of Custody: 62695
Client Project Name: 50304	Sample No: 9	Collect Date: 10/07/11
Client Project No: NA	Sample Matrix: Ground Water	Collect Time: 11:30

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 46757-009		Matrix: Ground Water		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/L	400	1.0	10/12/11	PS11J12A	10/14/11	S811J13A

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Analytical Laboratory Report
Laboratory Project Number: 46757
Laboratory Sample Number: 46757-010

Order: 46757
Page: 11 of 14
Date: 10/17/11

Client Identification: Merit Laboratories, Inc.	Sample Description: 50304.10	Chain of Custody: 62695
Client Project Name: 50304	Sample No: 10	Collect Date: 10/07/11
Client Project No: NA	Sample Matrix: Ground Water	Collect Time: 12:55

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 46757-010		Matrix: Ground Water		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/L	400	1.0	10/12/11	PS11J12A	10/14/11	S811J13A

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Analytical Laboratory Report
Laboratory Project Number: 46757
Laboratory Sample Number: 46757-011

Order: 46757
Page: 12 of 14
Date: 10/17/11

Client Identification: Merit Laboratories, Inc.	Sample Description: 50304.11	Chain of Custody: 62695
Client Project Name: 50304	Sample No: 11	Collect Date: 10/07/11
Client Project No: NA	Sample Matrix: Ground Water	Collect Time: 12:15

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 46757-011		Matrix: Ground Water		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/L	400	1.0	10/12/11	PS11J12A	10/14/11	S811J13A

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Analytical Laboratory Report
Laboratory Project Number: 46757
Laboratory Sample Number: 46757-012

Order: 46757
Page: 13 of 14
Date: 10/17/11

Client Identification: Merit Laboratories, Inc.	Sample Description: 50304.12	Chain of Custody: 62695
Client Project Name: 50304	Sample No: 12	Collect Date: 10/07/11
Client Project No: NA	Sample Matrix: Ground Water	Collect Time: 11:50

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 46757-012		Matrix: Ground Water		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/L	400	1.0	10/12/11	PS11J12A	10/14/11	S811J13A

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Definitions/ Qualifiers:

- A:** Spike recovery or precision unusable due to dilution.
- B:** The analyte was detected in the associated method blank.
- E:** The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J:** The concentration is an estimated value.
- M:** Modified Method
- U:** The analyte was not detected at or above the reporting limit.
- X:** Matrix Interference has resulted in a raised reporting limit or distorted result.
- W:** Results reported on a wet-weight basis.
- *:** Value reported is outside QA limits

Exception Summary:



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Analytical Laboratory Report

Final Report

Report ID: S51100.01(02)
Generated on 12/27/2011
Replaces report S51100.01(01) generated on 12/23/2011

Report to

Attention: Mike Brennan
Arcadis
10559 Citation Drive
Suite 100
Brighton, MI 48116

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Phone: 810-229-8594 FAX: 810-229-8837
Email: Michael.Brennan@arcadis-us.com

Report Summary

Lab Sample ID(s): S51100.01-S51100.11
Project: B0064410.2011.00900 / Buick City / Flint MI
Collected Date: 12/15/2011
Submitted Date/Time: 12/16/2011 16:50
Sampled by: Megan Meckley
P.O. #: MLT1295

All analyses completed

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
Samples are held by the lab for 30 days from the sample submittal date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories.

Laboratory Certifications:

Michigan DNRE (#9956), Ohio EPA (#CL0002), NELAC NY (#11814), NELAC FL (#E871045), WBENC (#2005110032)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Final Report

Sample Summary (11 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S51100.01	Tripblank_12152011	Methanol	12/15/2011 08:00
S51100.02	WMU4_SB1_12152011	Soil	12/15/2011 10:40
S51100.03	WMU4_SB2_12152011	Soil	12/15/2011 11:35
S51100.04	WMU4_SB3_12152011	Soil	12/15/2011 11:50
S51100.05	WMU4_SB4_12152011	Soil	12/15/2011 12:15
S51100.06	WMU5_SB1_12152011	Soil	12/15/2011 14:50
S51100.07	WMU5_SB2_12152011	Soil	12/15/2011 15:10
S51100.08	WMU5_SB3_12152011	Soil	12/15/2011 15:40
S51100.09	WMU5_SB4_12152011	Soil	12/15/2011 15:25
S51100.10	WMU5_SB5_12152011	Soil	12/15/2011 15:15
S51100.11	WMU6_SB1_12152011	Soil	12/15/2011 16:30



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.01
Sample Tag: Tripblank_12152011
Collected Date/Time: 12/15/2011 08:00
Matrix: Methanol
COC Reference: BC121511.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Other / Misc.								
Hold until notified	Completed				12/19/11 16:45	PCS		



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.02
 Sample Tag: WMU4_SB1_12152011
 Collected Date/Time: 12/15/2011 10:40
 Matrix: Soil
 COC Reference: BC121511.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	5.1	IR
2	4oz Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
----------	---------	-------	----	--------	---------------	---------	-------	-------

Extraction / Prep.

FScan Extraction	Completed			3550B	12/20/11 23:06	EMR		
------------------	-----------	--	--	-------	----------------	-----	--	--

Inorganics

Total Solids	89	%	1	Std M 2540 B	12/19/11 11:00	DJS		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	12/22/11 12:56	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	12/22/11 12:56	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	12/22/11 12:56	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	12/22/11 12:56	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	12/22/11 12:56	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	12/22/11 16:43	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	3,000	8260M	12/22/11 20:32	JGH		
Cyclohexanone	Not detected	ug/kg	3,000	8260M	12/22/11 20:32	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	3,000	8260M	12/22/11 20:32	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	3,000	8260M	12/22/11 20:32	JGH		
2-Nitropropane	Not detected	ug/kg	3,000	8260M	12/22/11 20:32	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	60	8260M	12/21/11 03:48	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	60	8260M	12/21/11 03:48	WAT	56-23-5	
Chlorobenzene	Not detected	ug/kg	60	8260M	12/21/11 03:48	WAT	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	60	8260M	12/21/11 03:48	WAT	95-50-1	
Ethylbenzene	Not detected	ug/kg	60	8260M	12/21/11 03:48	WAT	100-41-4	
Methylene chloride	Not detected	ug/kg	60	8260M	12/21/11 03:48	WAT	75-09-2	
Tetrachloroethene	Not detected	ug/kg	60	8260M	12/21/11 03:48	WAT	127-18-4	
Toluene	Not detected	ug/kg	60	8260M	12/21/11 03:48	WAT	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/kg	60	8260M	12/21/11 03:48	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	8260M	12/21/11 03:48	WAT	79-00-5	
Trichloroethene	Not detected	ug/kg	60	8260M	12/21/11 03:48	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	60	8260M	12/21/11 03:48	WAT	75-69-4	
p,m-Xylene	Not detected	ug/kg	60	8260M	12/21/11 03:48	WAT		
o-Xylene	Not detected	ug/kg	60	8260M	12/21/11 03:48	WAT	95-47-6	
Acetone	Not detected	ug/kg	6,000	8260M	12/21/11 03:48	WAT	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	6,000	8260M	12/21/11 03:48	WAT	78-93-3	
Carbon disulfide	Not detected	ug/kg	6,000	8260M	12/21/11 03:48	WAT	75-15-0	
Diethyl ether	Not detected	ug/kg	6,000	8260M	12/21/11 03:48	WAT	60-29-7	



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.02 (continued)

Sample Tag: WMU4_SB1_12152011

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	6,000	8260M	12/21/11 03:48	WAT	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	60	8260B	12/21/11 03:48	WAT	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	60	8260B	12/21/11 03:48	WAT	76-13-1	
Other / Misc.								
Methanol	28,000	ug/kg	4,400	8015M	12/22/11 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.03
 Sample Tag: WMU4_SB2_12152011
 Collected Date/Time: 12/15/2011 11:35
 Matrix: Soil
 COC Reference: BC121511.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	5.1	IR
2	4oz Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	12/20/11 23:06	EMR		
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Inorganics

Total Solids	92	%	1	Std M 2540 B	12/19/11 11:00	DJS		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	12/22/11 13:14	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	12/22/11 13:14	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	12/22/11 13:14	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	12/22/11 13:14	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	12/22/11 13:14	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	12/22/11 17:00	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	3,000	8260M	12/22/11 20:50	JGH		
Cyclohexanone	Not detected	ug/kg	3,000	8260M	12/22/11 20:50	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	3,000	8260M	12/22/11 20:50	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	3,000	8260M	12/22/11 20:50	JGH		
2-Nitropropane	Not detected	ug/kg	3,000	8260M	12/22/11 20:50	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	70	8260M	12/21/11 04:07	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	70	8260M	12/21/11 04:07	WAT	56-23-5	
Chlorobenzene	Not detected	ug/kg	70	8260M	12/21/11 04:07	WAT	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	70	8260M	12/21/11 04:07	WAT	95-50-1	
Ethylbenzene	Not detected	ug/kg	70	8260M	12/21/11 04:07	WAT	100-41-4	
Methylene chloride	Not detected	ug/kg	70	8260M	12/21/11 04:07	WAT	75-09-2	
Tetrachloroethene	Not detected	ug/kg	70	8260M	12/21/11 04:07	WAT	127-18-4	
Toluene	Not detected	ug/kg	70	8260M	12/21/11 04:07	WAT	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/kg	70	8260M	12/21/11 04:07	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	8260M	12/21/11 04:07	WAT	79-00-5	
Trichloroethene	Not detected	ug/kg	70	8260M	12/21/11 04:07	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	70	8260M	12/21/11 04:07	WAT	75-69-4	
p,m-Xylene	Not detected	ug/kg	70	8260M	12/21/11 04:07	WAT		
o-Xylene	Not detected	ug/kg	70	8260M	12/21/11 04:07	WAT	95-47-6	
Acetone	Not detected	ug/kg	7,000	8260M	12/21/11 04:07	WAT	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	7,000	8260M	12/21/11 04:07	WAT	78-93-3	
Carbon disulfide	Not detected	ug/kg	7,000	8260M	12/21/11 04:07	WAT	75-15-0	
Diethyl ether	Not detected	ug/kg	7,000	8260M	12/21/11 04:07	WAT	60-29-7	



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.03 (continued)

Sample Tag: WMU4_SB2_12152011

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	7,000	8260M	12/21/11 04:07	WAT	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	70	8260B	12/21/11 04:07	WAT	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	70	8260B	12/21/11 04:07	WAT	76-13-1	
Other / Misc.								
Methanol	150,000	ug/kg	14,000	8015M	12/22/11 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.04
 Sample Tag: WMU4_SB3_12152011
 Collected Date/Time: 12/15/2011 11:50
 Matrix: Soil
 COC Reference: BC121511.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	5.1	IR
2	4oz Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction Completed 3550B 12/20/11 23:06 EMR

Inorganics

Total Solids 89 % 1 Std M 2540 B 12/19/11 11:00 DJS

Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	12/22/11 13:33	PL	95-48-7
p,m-Cresol	Not detected	ug/kg	300	8270C	12/22/11 13:33	PL	3/4-Cresol
o-Cresol	Not detected	ug/kg	300	8270C	12/22/11 13:33	PL	95-48-7
Nitrobenzene	Not detected	ug/kg	300	8270C	12/22/11 13:33	PL	98-95-3
Pyridine	Not detected	ug/kg	300	8270C	12/22/11 13:33	PL	110-86-1

Organics - Volatiles

2-Ethoxyethanol Not detected ug/kg 1,000 8260M 12/22/11 17:16 JGH 110-80-5

F Scan

1-Butanol	Not detected	ug/kg	3,000	8260M	12/22/11 21:08	JGH	
Cyclohexanone	Not detected	ug/kg	3,000	8260M	12/22/11 21:08	JGH	108-94-1
Ethyl Acetate	Not detected	ug/kg	3,000	8260M	12/22/11 21:08	JGH	141-78-6
Isobutanol	Not detected	ug/kg	3,000	8260M	12/22/11 21:08	JGH	
2-Nitropropane	Not detected	ug/kg	3,000	8260M	12/22/11 21:08	JGH	79-46-9

F Scan

Benzene	Not detected	ug/kg	60	8260M	12/21/11 04:26	WAT	71-43-2
Carbon tetrachloride	Not detected	ug/kg	60	8260M	12/21/11 04:26	WAT	56-23-5
Chlorobenzene	Not detected	ug/kg	60	8260M	12/21/11 04:26	WAT	108-90-7
1,2-Dichlorobenzene	Not detected	ug/kg	60	8260M	12/21/11 04:26	WAT	95-50-1
Ethylbenzene	Not detected	ug/kg	60	8260M	12/21/11 04:26	WAT	100-41-4
Methylene chloride	Not detected	ug/kg	60	8260M	12/21/11 04:26	WAT	75-09-2
Tetrachloroethene	Not detected	ug/kg	60	8260M	12/21/11 04:26	WAT	127-18-4
Toluene	Not detected	ug/kg	60	8260M	12/21/11 04:26	WAT	108-88-3
1,1,1-Trichloroethane	Not detected	ug/kg	60	8260M	12/21/11 04:26	WAT	71-55-6
1,1,2-Trichloroethane	Not detected	ug/kg	60	8260M	12/21/11 04:26	WAT	79-00-5
Trichloroethene	Not detected	ug/kg	60	8260M	12/21/11 04:26	WAT	79-01-6
Trichlorofluoromethane	Not detected	ug/kg	60	8260M	12/21/11 04:26	WAT	75-69-4
p,m-Xylene	Not detected	ug/kg	60	8260M	12/21/11 04:26	WAT	
o-Xylene	Not detected	ug/kg	60	8260M	12/21/11 04:26	WAT	95-47-6
Acetone	Not detected	ug/kg	6,000	8260M	12/21/11 04:26	WAT	67-64-1
2-Butanone (MEK)	Not detected	ug/kg	6,000	8260M	12/21/11 04:26	WAT	78-93-3
Carbon disulfide	Not detected	ug/kg	6,000	8260M	12/21/11 04:26	WAT	75-15-0
Diethyl ether	Not detected	ug/kg	6,000	8260M	12/21/11 04:26	WAT	60-29-7



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.04 (continued)

Sample Tag: WMU4_SB3_12152011

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	6,000	8260M	12/21/11 04:26	WAT	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	60	8260B	12/21/11 04:26	WAT	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	60	8260B	12/21/11 04:26	WAT	76-13-1	
Other / Misc.								
Methanol	Not detected	ug/kg	4,400	8015M	12/22/11 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.05
 Sample Tag: WMU4_SB4_12152011
 Collected Date/Time: 12/15/2011 12:15
 Matrix: Soil
 COC Reference: BC121511.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	5.1	IR
2	4oz Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	12/20/11 23:06	EMR		
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Inorganics

Total Solids	89	%	1	Std M 2540 B	12/19/11 11:00	DJS		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	12/22/11 13:53	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	12/22/11 13:53	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	12/22/11 13:53	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	12/22/11 13:53	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	12/22/11 13:53	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	12/22/11 17:32	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	3,000	8260M	12/22/11 21:26	JGH		
Cyclohexanone	Not detected	ug/kg	3,000	8260M	12/22/11 21:26	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	3,000	8260M	12/22/11 21:26	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	3,000	8260M	12/22/11 21:26	JGH		
2-Nitropropane	Not detected	ug/kg	3,000	8260M	12/22/11 21:26	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	60	8260M	12/21/11 04:46	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	60	8260M	12/21/11 04:46	WAT	56-23-5	
Chlorobenzene	Not detected	ug/kg	60	8260M	12/21/11 04:46	WAT	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	60	8260M	12/21/11 04:46	WAT	95-50-1	
Ethylbenzene	Not detected	ug/kg	60	8260M	12/21/11 04:46	WAT	100-41-4	
Methylene chloride	Not detected	ug/kg	60	8260M	12/21/11 04:46	WAT	75-09-2	
Tetrachloroethene	Not detected	ug/kg	60	8260M	12/21/11 04:46	WAT	127-18-4	
Toluene	Not detected	ug/kg	60	8260M	12/21/11 04:46	WAT	108-88-3	
1,1,1-Trichloroethane	120	ug/kg	60	8260M	12/21/11 04:46	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	8260M	12/21/11 04:46	WAT	79-00-5	
Trichloroethene	Not detected	ug/kg	60	8260M	12/21/11 04:46	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	60	8260M	12/21/11 04:46	WAT	75-69-4	
p,m-Xylene	Not detected	ug/kg	60	8260M	12/21/11 04:46	WAT		
o-Xylene	Not detected	ug/kg	60	8260M	12/21/11 04:46	WAT	95-47-6	
Acetone	Not detected	ug/kg	6,000	8260M	12/21/11 04:46	WAT	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	6,000	8260M	12/21/11 04:46	WAT	78-93-3	
Carbon disulfide	Not detected	ug/kg	6,000	8260M	12/21/11 04:46	WAT	75-15-0	
Diethyl ether	Not detected	ug/kg	6,000	8260M	12/21/11 04:46	WAT	60-29-7	



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.05 (continued)

Sample Tag: WMU4_SB4_12152011

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	6,000	8260M	12/21/11 04:46	WAT	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	60	8260B	12/21/11 04:46	WAT	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	60	8260B	12/21/11 04:46	WAT	76-13-1	
Other / Misc.								
Methanol	Not detected	ug/kg	4,400	8015M	12/22/11 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.06
Sample Tag: WMU5_SB1_12152011
Collected Date/Time: 12/15/2011 14:50
Matrix: Soil
COC Reference: BC121511.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	5.1	IR
2	4oz Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	12/20/11 23:06	EMR		
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Inorganics

Total Solids	92	%	1	Std M 2540 B	12/19/11 11:00	DJS		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	12/22/11 14:31	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	12/22/11 14:31	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	12/22/11 14:31	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	12/22/11 14:31	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	12/22/11 14:31	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	12/22/11 17:48	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	3,000	8260M	12/22/11 21:44	JGH		
Cyclohexanone	Not detected	ug/kg	3,000	8260M	12/22/11 21:44	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	3,000	8260M	12/22/11 21:44	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	3,000	8260M	12/22/11 21:44	JGH		
2-Nitropropane	Not detected	ug/kg	3,000	8260M	12/22/11 21:44	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	60	8260M	12/21/11 05:05	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	60	8260M	12/21/11 05:05	WAT	56-23-5	
Chlorobenzene	Not detected	ug/kg	60	8260M	12/21/11 05:05	WAT	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	60	8260M	12/21/11 05:05	WAT	95-50-1	
Ethylbenzene	Not detected	ug/kg	60	8260M	12/21/11 05:05	WAT	100-41-4	
Methylene chloride	Not detected	ug/kg	60	8260M	12/21/11 05:05	WAT	75-09-2	
Tetrachloroethene	80	ug/kg	60	8260M	12/21/11 05:05	WAT	127-18-4	
Toluene	80	ug/kg	60	8260M	12/21/11 05:05	WAT	108-88-3	
1,1,1-Trichloroethane	1,770	ug/kg	60	8260M	12/21/11 05:05	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	8260M	12/21/11 05:05	WAT	79-00-5	
Trichloroethene	Not detected	ug/kg	60	8260M	12/21/11 05:05	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	60	8260M	12/21/11 05:05	WAT	75-69-4	
p,m-Xylene	150	ug/kg	60	8260M	12/21/11 05:05	WAT		
o-Xylene	90	ug/kg	60	8260M	12/21/11 05:05	WAT	95-47-6	
Acetone	Not detected	ug/kg	6,000	8260M	12/21/11 05:05	WAT	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	6,000	8260M	12/21/11 05:05	WAT	78-93-3	
Carbon disulfide	Not detected	ug/kg	6,000	8260M	12/21/11 05:05	WAT	75-15-0	
Diethyl ether	Not detected	ug/kg	6,000	8260M	12/21/11 05:05	WAT	60-29-7	



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.06 (continued)

Sample Tag: WMU5_SB1_12152011

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	6,000	8260M	12/21/11 05:05	WAT	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	60	8260B	12/21/11 05:05	WAT	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	60	8260B	12/21/11 05:05	WAT	76-13-1	
Other / Misc.								
Methanol	Not detected	ug/kg	4,400	8015M	12/22/11 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.07
 Sample Tag: WMU5_SB2_12152011
 Collected Date/Time: 12/15/2011 15:10
 Matrix: Soil
 COC Reference: BC121511.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	5.1	IR
2	4oz Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	12/20/11 23:06	EMR		
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Inorganics

Total Solids	89	%	1	Std M 2540 B	12/19/11 11:00	DJS		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	12/22/11 14:50	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	12/22/11 14:50	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	12/22/11 14:50	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	12/22/11 14:50	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	12/22/11 14:50	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	12/22/11 18:04	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	3,000	8260M	12/22/11 22:02	JGH		
Cyclohexanone	Not detected	ug/kg	3,000	8260M	12/22/11 22:02	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	3,000	8260M	12/22/11 22:02	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	3,000	8260M	12/22/11 22:02	JGH		
2-Nitropropane	Not detected	ug/kg	3,000	8260M	12/22/11 22:02	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	60	8260M	12/21/11 05:25	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	60	8260M	12/21/11 05:25	WAT	56-23-5	
Chlorobenzene	Not detected	ug/kg	60	8260M	12/21/11 05:25	WAT	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	60	8260M	12/21/11 05:25	WAT	95-50-1	
Ethylbenzene	Not detected	ug/kg	60	8260M	12/21/11 05:25	WAT	100-41-4	
Methylene chloride	Not detected	ug/kg	60	8260M	12/21/11 05:25	WAT	75-09-2	
Tetrachloroethene	Not detected	ug/kg	60	8260M	12/21/11 05:25	WAT	127-18-4	
Toluene	Not detected	ug/kg	60	8260M	12/21/11 05:25	WAT	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/kg	60	8260M	12/21/11 05:25	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	8260M	12/21/11 05:25	WAT	79-00-5	
Trichloroethene	100	ug/kg	60	8260M	12/21/11 05:25	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	60	8260M	12/21/11 05:25	WAT	75-69-4	
p,m-Xylene	Not detected	ug/kg	60	8260M	12/21/11 05:25	WAT		
o-Xylene	Not detected	ug/kg	60	8260M	12/21/11 05:25	WAT	95-47-6	
Acetone	Not detected	ug/kg	6,000	8260M	12/21/11 05:25	WAT	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	6,000	8260M	12/21/11 05:25	WAT	78-93-3	
Carbon disulfide	Not detected	ug/kg	6,000	8260M	12/21/11 05:25	WAT	75-15-0	
Diethyl ether	Not detected	ug/kg	6,000	8260M	12/21/11 05:25	WAT	60-29-7	



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.07 (continued)

Sample Tag: WMU5_SB2_12152011

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	6,000	8260M	12/21/11 05:25	WAT	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	60	8260B	12/21/11 05:25	WAT	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	60	8260B	12/21/11 05:25	WAT	76-13-1	
Other / Misc.								
Methanol	Not detected	ug/kg	4,400	8015M	12/22/11 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.08
 Sample Tag: WMU5_SB3_12152011
 Collected Date/Time: 12/15/2011 15:40
 Matrix: Soil
 COC Reference: BC121511.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	5.1	IR
2	4oz Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction Completed 3550B 12/20/11 23:06 EMR

Inorganics

Total Solids 86 % 1 Std M 2540 B 12/19/11 11:00 DJS

Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	12/22/11 15:09	PL	95-48-7
p,m-Cresol	Not detected	ug/kg	300	8270C	12/22/11 15:09	PL	3/4-Cresol
o-Cresol	Not detected	ug/kg	300	8270C	12/22/11 15:09	PL	95-48-7
Nitrobenzene	Not detected	ug/kg	300	8270C	12/22/11 15:09	PL	98-95-3
Pyridine	Not detected	ug/kg	300	8270C	12/22/11 15:09	PL	110-86-1

Organics - Volatiles

2-Ethoxyethanol Not detected ug/kg 1,000 8260M 12/22/11 18:20 JGH 110-80-5

F Scan

1-Butanol	Not detected	ug/kg	3,000	8260M	12/22/11 22:20	JGH	
Cyclohexanone	Not detected	ug/kg	3,000	8260M	12/22/11 22:20	JGH	108-94-1
Ethyl Acetate	Not detected	ug/kg	3,000	8260M	12/22/11 22:20	JGH	141-78-6
Isobutanol	Not detected	ug/kg	3,000	8260M	12/22/11 22:20	JGH	
2-Nitropropane	Not detected	ug/kg	3,000	8260M	12/22/11 22:20	JGH	79-46-9

F Scan

Benzene	Not detected	ug/kg	70	8260M	12/21/11 05:44	WAT	71-43-2
Carbon tetrachloride	Not detected	ug/kg	70	8260M	12/21/11 05:44	WAT	56-23-5
Chlorobenzene	Not detected	ug/kg	70	8260M	12/21/11 05:44	WAT	108-90-7
1,2-Dichlorobenzene	Not detected	ug/kg	70	8260M	12/21/11 05:44	WAT	95-50-1
Ethylbenzene	Not detected	ug/kg	70	8260M	12/21/11 05:44	WAT	100-41-4
Methylene chloride	Not detected	ug/kg	70	8260M	12/21/11 05:44	WAT	75-09-2
Tetrachloroethene	Not detected	ug/kg	70	8260M	12/21/11 05:44	WAT	127-18-4
Toluene	Not detected	ug/kg	70	8260M	12/21/11 05:44	WAT	108-88-3
1,1,1-Trichloroethane	470	ug/kg	70	8260M	12/21/11 05:44	WAT	71-55-6
1,1,2-Trichloroethane	Not detected	ug/kg	70	8260M	12/21/11 05:44	WAT	79-00-5
Trichloroethene	Not detected	ug/kg	70	8260M	12/21/11 05:44	WAT	79-01-6
Trichlorofluoromethane	Not detected	ug/kg	70	8260M	12/21/11 05:44	WAT	75-69-4
p,m-Xylene	Not detected	ug/kg	70	8260M	12/21/11 05:44	WAT	
o-Xylene	Not detected	ug/kg	70	8260M	12/21/11 05:44	WAT	95-47-6
Acetone	Not detected	ug/kg	7,000	8260M	12/21/11 05:44	WAT	67-64-1
2-Butanone (MEK)	Not detected	ug/kg	7,000	8260M	12/21/11 05:44	WAT	78-93-3
Carbon disulfide	Not detected	ug/kg	7,000	8260M	12/21/11 05:44	WAT	75-15-0
Diethyl ether	Not detected	ug/kg	7,000	8260M	12/21/11 05:44	WAT	60-29-7



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.08 (continued)

Sample Tag: WMU5_SB3_12152011

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	7,000	8260M	12/21/11 05:44	WAT	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	70	8260B	12/21/11 05:44	WAT	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	70	8260B	12/21/11 05:44	WAT	76-13-1	
Other / Misc.								
Methanol	6,800	ug/kg	4,400	8015M	12/22/11 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.09
 Sample Tag: WMU5_SB4_12152011
 Collected Date/Time: 12/15/2011 15:25
 Matrix: Soil
 COC Reference: BC121511.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	5.1	IR
2	4oz Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	12/20/11 23:06	EMR		
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Inorganics

Total Solids	95	%	1	Std M 2540 B	12/19/11 11:00	DJS		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	12/22/11 14:12	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	12/22/11 14:12	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	12/22/11 14:12	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	12/22/11 14:12	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	12/22/11 14:12	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	12/22/11 18:36	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	3,000	8260M	12/22/11 22:38	JGH		
Cyclohexanone	Not detected	ug/kg	3,000	8260M	12/22/11 22:38	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	3,000	8260M	12/22/11 22:38	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	3,000	8260M	12/22/11 22:38	JGH		
2-Nitropropane	Not detected	ug/kg	3,000	8260M	12/22/11 22:38	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	50	8260M	12/21/11 06:04	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	50	8260M	12/21/11 06:04	WAT	56-23-5	
Chlorobenzene	Not detected	ug/kg	50	8260M	12/21/11 06:04	WAT	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	50	8260M	12/21/11 06:04	WAT	95-50-1	
Ethylbenzene	Not detected	ug/kg	50	8260M	12/21/11 06:04	WAT	100-41-4	
Methylene chloride	Not detected	ug/kg	50	8260M	12/21/11 06:04	WAT	75-09-2	
Tetrachloroethene	Not detected	ug/kg	50	8260M	12/21/11 06:04	WAT	127-18-4	
Toluene	Not detected	ug/kg	50	8260M	12/21/11 06:04	WAT	108-88-3	
1,1,1-Trichloroethane	730	ug/kg	50	8260M	12/21/11 06:04	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	50	8260M	12/21/11 06:04	WAT	79-00-5	
Trichloroethene	Not detected	ug/kg	50	8260M	12/21/11 06:04	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	50	8260M	12/21/11 06:04	WAT	75-69-4	
p,m-Xylene	Not detected	ug/kg	50	8260M	12/21/11 06:04	WAT		
o-Xylene	Not detected	ug/kg	50	8260M	12/21/11 06:04	WAT	95-47-6	
Acetone	Not detected	ug/kg	5,000	8260M	12/21/11 06:04	WAT	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	5,000	8260M	12/21/11 06:04	WAT	78-93-3	
Carbon disulfide	Not detected	ug/kg	5,000	8260M	12/21/11 06:04	WAT	75-15-0	
Diethyl ether	Not detected	ug/kg	5,000	8260M	12/21/11 06:04	WAT	60-29-7	



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.09 (continued)

Sample Tag: WMU5_SB4_12152011

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	5,000	8260M	12/21/11 06:04	WAT	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	50	8260B	12/21/11 06:04	WAT	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	50	8260B	12/21/11 06:04	WAT	76-13-1	
Other / Misc.								
Methanol	44,000	ug/kg	4,400	8015M	12/22/11 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.10
 Sample Tag: WMU5_SB5_12152011
 Collected Date/Time: 12/15/2011 15:15
 Matrix: Soil
 COC Reference: BC121511.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	5.1	IR
2	4oz Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

FScan Extraction	Completed			3550B	12/20/11 23:06	EMR		
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Inorganics

Total Solids	85	%	1	Std M 2540 B	12/19/11 11:00	DJS		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/kg	300	8270C	12/22/11 15:28	PL	95-48-7	
p,m-Cresol	Not detected	ug/kg	300	8270C	12/22/11 15:28	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	12/22/11 15:28	PL	95-48-7	
Nitrobenzene	Not detected	ug/kg	300	8270C	12/22/11 15:28	PL	98-95-3	
Pyridine	Not detected	ug/kg	300	8270C	12/22/11 15:28	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	12/22/11 18:52	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/kg	3,000	8260M	12/22/11 22:57	JGH		
Cyclohexanone	Not detected	ug/kg	3,000	8260M	12/22/11 22:57	JGH	108-94-1	
Ethyl Acetate	Not detected	ug/kg	3,000	8260M	12/22/11 22:57	JGH	141-78-6	
Isobutanol	Not detected	ug/kg	3,000	8260M	12/22/11 22:57	JGH		
2-Nitropropane	Not detected	ug/kg	3,000	8260M	12/22/11 22:57	JGH	79-46-9	

F Scan

Benzene	Not detected	ug/kg	70	8260M	12/21/11 06:23	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/kg	70	8260M	12/21/11 06:23	WAT	56-23-5	
Chlorobenzene	Not detected	ug/kg	70	8260M	12/21/11 06:23	WAT	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/kg	70	8260M	12/21/11 06:23	WAT	95-50-1	
Ethylbenzene	Not detected	ug/kg	70	8260M	12/21/11 06:23	WAT	100-41-4	
Methylene chloride	Not detected	ug/kg	70	8260M	12/21/11 06:23	WAT	75-09-2	
Tetrachloroethene	Not detected	ug/kg	70	8260M	12/21/11 06:23	WAT	127-18-4	
Toluene	70	ug/kg	70	8260M	12/21/11 06:23	WAT	108-88-3	
1,1,1-Trichloroethane	80	ug/kg	70	8260M	12/21/11 06:23	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	8260M	12/21/11 06:23	WAT	79-00-5	
Trichloroethene	Not detected	ug/kg	70	8260M	12/21/11 06:23	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/kg	70	8260M	12/21/11 06:23	WAT	75-69-4	
p,m-Xylene	80	ug/kg	70	8260M	12/21/11 06:23	WAT		
o-Xylene	Not detected	ug/kg	70	8260M	12/21/11 06:23	WAT	95-47-6	
Acetone	Not detected	ug/kg	7,000	8260M	12/21/11 06:23	WAT	67-64-1	
2-Butanone (MEK)	Not detected	ug/kg	7,000	8260M	12/21/11 06:23	WAT	78-93-3	
Carbon disulfide	Not detected	ug/kg	7,000	8260M	12/21/11 06:23	WAT	75-15-0	
Diethyl ether	Not detected	ug/kg	7,000	8260M	12/21/11 06:23	WAT	60-29-7	



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.10 (continued)

Sample Tag: WMU5_SB5_12152011

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	7,000	8260M	12/21/11 06:23	WAT	108-10-1	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	70	8260B	12/21/11 06:23	WAT	75-71-8	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	70	8260B	12/21/11 06:23	WAT	76-13-1	
Other / Misc.								
Methanol	Not detected	ug/kg	4,400	8015M	12/22/11 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.11
 Sample Tag: WMU6_SB1_12152011
 Collected Date/Time: 12/15/2011 16:30
 Matrix: Soil
 COC Reference: BC121511.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	5.1	IR
1	4oz Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

BNA Extraction	Completed			3550B	12/21/11 22:08	EMR		
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Inorganics

Total Solids	81	%	1	Std M 2540 B	12/19/11 11:00	DJS		
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Organics - Semi-Volatiles

TCL Semi-Volatile Organics

Acenaphthene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	83-32-9	X
Acenaphthylene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	208-96-8	X
Acetophenone	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	98-86-2	X
Anthracene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	120-12-7	X
Atrazine	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	1912-24-9	X
1,1'-Biphenyl	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	92-52-4	X
4-Bromophenyl phenyl ether	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	101-55-3	X
di-n-Butyl phthalate	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	84-74-2	X
Benzaldehyde	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	100-52-7	X
Benzo(a)anthracene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	56-55-3	X
Benzo(a)pyrene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	50-32-8	X
Benzo(b)fluoranthene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	205-99-2	X
Benzo(ghi)perylene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	191-24-2	X
Benzo(k)fluoranthene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	207-08-9	X
Butyl benzyl phthalate	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	85-68-7	X
2-Chloronaphthalene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	91-58-7	X
2-Chlorophenol	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	95-57-8	X
4-Chloro-3-methylphenol	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	59-50-7	X
4-Chloroaniline	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	106-47-8	X
4-Chlorophenyl phenyl ether	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	7005-72-3	X
Caprolactam	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	105-60-2	X
Carbazole	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	86-74-8	X
bis(2-Chloroethoxy)methane	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	111-91-1	X
bis(2-Chloroethyl)ether	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	111-44-4	X
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	108-60-1	X
Chrysene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	218-01-9	X
2,4-Dichlorophenol	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	120-83-2	X
2,4-Dimethylphenol	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	105-67-9	X
2,4-Dinitrophenol	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	51-28-5	X
2,4-Dinitrotoluene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	121-14-2	X
2,6-Dinitrotoluene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	606-20-2	X
3,3'-Dichlorobenzidine	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	91-94-1	X
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	534-52-1	X
Dibenzo(ah)anthracene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	53-70-3	X

X-Elevated reporting limit due to matrix interference



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.11 (continued)

Sample Tag: WMU6_SB1_12152011

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
TCL Semi-Volatile Organics (continued)								
Dibenzofuran	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	132-64-9	X
Diethyl phthalate	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	84-66-2	X
Dimethyl phthalate	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	131-11-3	X
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	117-81-7	X
Fluoranthene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	206-44-0	X
Fluorene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	86-73-7	X
Hexachlorobenzene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	118-74-1	X
Hexachlorobutadiene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	87-68-3	X
Hexachlorocyclopentadiene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	77-47-4	X
Hexachloroethane	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	67-72-1	X
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	193-39-5	X
Isophorone	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	78-59-1	X
2-Methylnaphthalene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	91-57-6	X
2-Methylphenol	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	95-48-7	X
3-, 4-Methylphenol	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	3/4-Cresol	X
2-Nitroaniline	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	88-74-4	X
2-Nitrophenol	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	88-75-5	X
3-Nitroaniline	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	99-09-2	X
4-Nitroaniline	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	100-01-6	X
4-Nitrophenol	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	100-02-7	X
N-Nitrosodi-n-propylamine	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	621-64-7	X
N-Nitrosodiphenylamine	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	86-30-6	X
Naphthalene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	91-20-3	X
Nitrobenzene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	98-95-3	X
di-n-Octyl phthalate	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	117-84-0	X
Pentachlorophenol	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	87-86-5	X
Phenanthrene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	85-01-8	X
Phenol	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	108-95-2	X
Pyrene	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	129-00-0	X
2,4,5-Trichlorophenol	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	95-95-4	X
2,4,6-Trichlorophenol	Not detected	ug/kg	1,230	8270C	12/23/11 12:30	PL	88-06-2	X
Organics - Volatiles								
TCL Volatile Organics HighLevl 5035/8260								
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	100	5035/8260B	12/21/11 14:51	JGH	76-13-1	
Acetone	Not detected	ug/kg	1,100	5035/8260B	12/21/11 14:51	JGH	67-64-1	
Carbon disulfide	Not detected	ug/kg	400	5035/8260B	12/21/11 14:51	JGH	75-15-0	
Methyl Acetate	Not detected	ug/kg	4,000	5035/8260B	12/21/11 14:51	JGH	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	400	5035/8260B	12/21/11 14:51	JGH	1634-04-4	
2-Butanone (MEK)	Not detected	ug/kg	1,100	5035/8260B	12/21/11 14:51	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	75-71-8	
Chloromethane	Not detected	ug/kg	400	5035/8260B	12/21/11 14:51	JGH	74-87-3	
Vinyl chloride	Not detected	ug/kg	100	5035/8260B	12/21/11 14:51	JGH	75-01-4	
Bromomethane	Not detected	ug/kg	400	5035/8260B	12/21/11 14:51	JGH	74-83-9	
Chloroethane	Not detected	ug/kg	400	5035/8260B	12/21/11 14:51	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	5035/8260B	12/21/11 14:51	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	75-35-4	
Methylene chloride	Not detected	ug/kg	400	5035/8260B	12/21/11 14:51	JGH	75-09-2	

X-Elevated reporting limit due to matrix interference



Analytical Laboratory Report

Final Report

Lab Sample ID: S51100.11 (continued)

Sample Tag: WMU6_SB1_12152011

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
TCL Volatile Organics HighLevel 5035/8260 (continued)								
trans-1,2-Dichloroethene	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	156-60-5	
1,1-Dichloroethane	200	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	156-59-2	
Chloroform	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	67-66-3	
1,1,1-Trichloroethane	90	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	71-55-6	
Cyclohexane	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	4,000	5035/8260B	12/21/11 14:51	JGH	108-10-1	
2-Hexanone	Not detected	ug/kg	4,000	5035/8260B	12/21/11 14:51	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	56-23-5	
Benzene	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	107-06-2	
Trichloroethene	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	75-27-4	
Methyl cyclohexane	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	108-87-2	
cis-1,3-Dichloropropene	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	10061-01-5	
Toluene	400	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	127-18-4	
Dibromochloromethane	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	106-93-4	
Chlorobenzene	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	79-34-5	
Ethylbenzene	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	100-41-4	
p,m-Xylene	110	ug/kg	70	5035/8260B	12/21/11 14:51	JGH		
o-Xylene	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	95-47-6	
Styrene	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	98-82-8	
Bromoform	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	75-25-2	
1,3-Dichlorobenzene	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	106-46-7	
1,2-Dichlorobenzene	180	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	70	5035/8260B	12/21/11 14:51	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	100	5035/8260B	12/21/11 14:51	JGH	120-82-1	



CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

eCOC ID: BC121511

Send Results To:	Contact & Company Name: Mike Brennan ARCADIS	Telephone: 248-994-2276	Preservative	E	F	E	E	F	F	E	KEYS Preservation Key: A. H ₂ SO ₄ B. HCL C. NaOH D. HNO ₃ E. None F. MeOH G. H. Matrix Key: SE = Sediment SO = Soil Wipe W = Water Container Information Key: 1. 40 mL VOA 2. 1 L Amber 3. 125 mL Plastic 4. 250 mL Plastic 5. 500 mL Plastic 6. 1 L Plastic 7. 2 oz. Glass 8. 32 oz. Glass 9. 8 oz. Glass 10. Other A = Air NL = NAPL / Oil SL = Sludge SW = Surface T = Tissue
	Address: 10559 Citation Dr, Suite 100	Fax: 810-229-8837	Filtered (✓)	NA	NA	NA	NA	NA	NA	NA	
	City State Zip Brighton, MI 48116	E-mail Address: michael.brennan@arcadis-us.com	# of Containers	1	1	1	1	1	1	1	
	Project Name/Location (City, State): Buick City/ Flint, MI		Project #: B0064410.2011.00900	Container Information	10	1	10	10	1	1	
Sampler's Printed Name: Megan Meckley		Sampler's Signature: <i>Megan Meckley</i>		PARAMETER ANALYSIS & METHOD							
Sample ID	Collection Date Time	Type Comp Grab	Matrix	Fescan SVOCs, Total Solids	Fescan VOCs plus 1,1,2-Trichloro-1,2,2-Trifluoroethane and Dichlorodifluoromethane	Methanol	TCLSVOCs, Total Solids	TCL VOCs	TCL VOCs, Fescan VOCs		
51100 01 Tripblank_12152011	12/15/11 8:00	X W							1		
02 WMU4_SB1_12152011	12/15/11 1040	X SO		1	1	1					
03 WMU4_SB2_12152011	12/15/11 1135	X SO		1	1	1					
04 WMU4_SB3_12152011	12/15/11 1150	X SO		1	1	1					
05 WMU4_SB4_12152011	12/15/11 1215	X SO		1	1	1					
06 WMU5_SB1_12152011	12/15/11 1450	X SO		1	1	1					
07 WMU5_SB2_12152011	12/15/11 1510	X SO		1	1	1					
08 WMU5_SB3_12152011	12/15/11 1540	X SO		1	1	1					
09 WMU5_SB4_12152011	12/15/11 1525	X SO		1	1	1					
10 WMU5_SB5_12152011	12/15/11 1515	X SO		1	1	1					
11 WMU6_SB1_12152011	12/15/11 1630	X SO					1	1			
Special Instructions/Comments: Invoice to: Ms. Monica Wallingford, Racer Trust, 2930 Ecorse Road, Ypsilanti, MI 48198, (313) 486.2928, P.O.No: MT1295a - Please also send copy of Invoicing to Micki Maki (ARCADIS).											
Special QA/QC Instructions: Standard deliverable with EDD Requested.											
Laboratory Information and Receipt			Relinquished By			Received By			Laboratory Received By		
Lab Name: Merit	Cooler Custody Seal <input checked="" type="checkbox"/> Cooler packed with ice (✓) <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact		Printed Name: <i>Megan Meckley</i>	Signature: <i>Megan Meckley</i>		Printed Name: <i>Paula Strau</i>	Signature: <i>Paula Strau</i>		Firm: <i>Merit</i>		
Specify Turnaround Requirements: 5-day TAT	Sample Receipt:		ARCADIS			Firm:		Date/Time: 12-16-11 1650			
Fed-Ex Tracking #: Not Applicable	Condition/Cooler Temp: 5.1		Date/Time: 12/16/11 4:00 pm		Date/Time:		Date/Time: 12-16-11 1650				

Tuesday, December 27, 2011

Fibertec Project Number: 47942
Project Identification: 51100 /
Submittal Date: 12/20/2011

Ms. Paula Shaw
Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Dear Ms. Shaw,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note samples will be disposed of 30 days after reporting date.

Samples were received at 8.6 degrees Celsius.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,



Daryl P. Strandbergh
Laboratory Director

DPS/kc

Enclosures



Analytical Laboratory Report
Laboratory Project Number: 47942
Laboratory Sample Number: 47942-001

Order: 47942
Page: 2 of 11
Date: 12/27/11

Client Identification: **Merit Laboratories, Inc.** Sample Description: **51100.02** Chain of Custody: **65668**
Client Project Name: **51100** Sample No: **1** Collect Date: **12/15/11**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **10:40**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 47942-001			Matrix: Soil/Solid		Analyst: CMS
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	13		%	0.1	1.0	12/20/11	MC111220	12/21/11	MC111220

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 47942-001			Matrix: Soil/Solid		Analyst: BDA
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	28000		µg/kg	4400	1.0	12/22/11	PS11L22E	12/22/11	S811L22A

1914 Holloway Drive
11766 E. Grand River
8660 S. Mackinaw Trail

Holt, MI 48842
Brighton, MI 48116
Cadillac, MI 49601

T: (517) 699-0345
T: (810) 220-3300
T: (231) 775-8368

F: (517) 699-0388
F: (810) 220-3311
F: (231) 775-8584



Analytical Laboratory Report
Laboratory Project Number: 47942
Laboratory Sample Number: 47942-002

Order: 47942
Page: 3 of 11
Date: 12/27/11

Client Identification: Merit Laboratories, Inc.	Sample Description: 51100.03	Chain of Custody: 65668
Client Project Name: 51100	Sample No: 2	Collect Date: 12/15/11
Client Project No: NA	Sample Matrix: Soil/Solid	Collect Time: 11:55

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 47942-002		Matrix: Soil/Solid		Analyst: CMS	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	9.5		%	0.1	1.0	12/20/11	MC111220	12/21/11	MC111220

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 47942-002		Matrix: Soil/Solid		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	150000		µg/kg	14000	5.0	12/22/11	PS11L22E	12/22/11	S811L22A

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11766 E. Grand River
8660 S. Mackinaw Trail

Holt, MI 48842
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Cadillac, MI 49601

T: (517) 699-0345
T: (810) 220-3300
T: (231) 775-8368

F: (517) 699-0388
F: (810) 220-3311
F: (231) 775-8584



Analytical Laboratory Report
Laboratory Project Number: 47942
Laboratory Sample Number: 47942-003

Order: 47942
Page: 4 of 11
Date: 12/27/11

Client Identification: **Merit Laboratories, Inc.** Sample Description: **51100.04** Chain of Custody: **65668**
Client Project Name: **51100** Sample No: **3** Collect Date: **12/15/11**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **11:50**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 47942-003			Matrix: Soil/Solid		Analyst: CMS
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	9.6		%	0.1	1.0	12/20/11	MC111220	12/21/11	MC111220

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 47942-003			Matrix: Soil/Solid		Analyst:
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/kg	4400	1.0	12/20/11	PS11L20D	12/22/11	SD11L21A

1914 Holloway Drive
11766 E. Grand River
8660 S. Mackinaw Trail

Holt, MI 48842
Brighton, MI 48116
Cadillac, MI 49601

T: (517) 699-0345
T: (810) 220-3300
T: (231) 775-8368

F: (517) 699-0388
F: (810) 220-3311
F: (231) 775-8584



Analytical Laboratory Report
Laboratory Project Number: 47942
Laboratory Sample Number: 47942-004

Order: 47942
Page: 5 of 11
Date: 12/27/11

Client Identification: **Merit Laboratories, Inc.** Sample Description: **51100.05** Chain of Custody: **65668**
Client Project Name: **51100** Sample No: **4** Collect Date: **12/15/11**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **12:15**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 47942-004			Matrix: Soil/Solid		Analyst: CMS
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	12		%	0.1	1.0	12/20/11	MC111220	12/21/11	MC111220

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 47942-004			Matrix: Soil/Solid		Analyst: BDA
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/kg	4400	1.0	12/22/11	PS11L22E	12/22/11	S811L22A

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F: (810) 220-3311
F: (231) 775-8584



Analytical Laboratory Report
Laboratory Project Number: 47942
Laboratory Sample Number: 47942-005

Order: 47942
Page: 6 of 11
Date: 12/27/11

Client Identification: Merit Laboratories, Inc.	Sample Description: 51100.06	Chain of Custody: 65668
Client Project Name: 51100	Sample No: 5	Collect Date: 12/15/11
Client Project No: NA	Sample Matrix: Soil/Solid	Collect Time: 14:50

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 47942-005		Matrix: Soil/Solid		Analyst: CMS	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	7.1		%	0.1	1.0	12/20/11	MC111220	12/21/11	MC111220

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 47942-005		Matrix: Soil/Solid		Analyst:	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/kg	4400	1.0	12/20/11	PS11L20D	12/22/11	SD11L21A

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F: (517) 699-0388
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Analytical Laboratory Report
Laboratory Project Number: 47942
Laboratory Sample Number: 47942-006

Order: 47942
Page: 7 of 11
Date: 12/27/11

Client Identification: **Merit Laboratories, Inc.** Sample Description: **51100.07** Chain of Custody: **65668**
Client Project Name: **51100** Sample No: **6** Collect Date: **12/15/11**
Client Project No: **NA** Sample Matrix: **Soil/Solid** Collect Time: **15:10**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 47942-006		Matrix: Soil/Solid		Analyst: CMS	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	13		%	0.1	1.0	12/20/11	MC111220	12/21/11	MC111220

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 47942-006		Matrix: Soil/Solid		Analyst:	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/kg	4400	1.0	12/20/11	PS11L20D	12/22/11	SD11L21A

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T: (231) 775-8368

F: (517) 699-0388
F: (810) 220-3311
F: (231) 775-8584

Client Identification: Merit Laboratories, Inc.	Sample Description: 51100.08	Chain of Custody: 65668
Client Project Name: 51100	Sample No: 7	Collect Date: 12/15/11
Client Project No: NA	Sample Matrix: Soil/Solid	Collect Time: 15:40

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 47942-007			Matrix: Soil/Solid		Analyst: CMS
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	14		%	0.1	1.0	12/20/11	MC111220	12/21/11	MC111220

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 47942-007			Matrix: Soil/Solid		Analyst: BDA
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	6800		µg/kg	4400	1.0	12/22/11	PS11L22E	12/22/11	S811L22A



Analytical Laboratory Report
Laboratory Project Number: 47942
Laboratory Sample Number: 47942-008

Order: 47942
Page: 9 of 11
Date: 12/27/11

Client Identification: Merit Laboratories, Inc.	Sample Description: 51100.09	Chain of Custody: 65668
Client Project Name: 51100	Sample No: 8	Collect Date: 12/15/11
Client Project No: NA	Sample Matrix: Soil/Solid	Collect Time: 15:25

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 47942-008		Matrix: Soil/Solid		Analyst: CMS	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	5.4		%	0.1	1.0	12/20/11	MC111220	12/21/11	MC111220

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 47942-008		Matrix: Soil/Solid		Analyst: BDA	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	44000		µg/kg	4400	1.0	12/22/11	PS11L22E	12/22/11	S811L22A

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F: (810) 220-3311
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Analytical Laboratory Report
Laboratory Project Number: 47942
Laboratory Sample Number: 47942-009

Order: 47942
Page: 10 of 11
Date: 12/27/11

Client Identification: Merit Laboratories, Inc.	Sample Description: 51100.10	Chain of Custody: 65668
Client Project Name: 51100	Sample No: 9	Collect Date: 12/15/11
Client Project No: NA	Sample Matrix: Soil/Solid	Collect Time: 15:15

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Dry Weight Determination (ASTM D 2974-87)				Aliquot ID: 47942-009		Matrix: Soil/Solid		Analyst: CMS	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Percent Moisture (Water Content) (NN)	14		%	0.1	1.0	12/20/11	MC111220	12/21/11	MC111220

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 47942-009		Matrix: Soil/Solid		Analyst:	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/kg	4400	1.0	12/20/11	PS11L20D	12/22/11	SD11L21A

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Definitions/ Qualifiers:

- A:** Spike recovery or precision unusable due to dilution.
- B:** The analyte was detected in the associated method blank.
- E:** The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J:** The concentration is an estimated value.
- M:** Modified Method
- U:** The analyte was not detected at or above the reporting limit.
- X:** Matrix Interference has resulted in a raised reporting limit or distorted result.
- W:** Results reported on a wet-weight basis.
- *:** Value reported is outside QA limits

Exception Summary:



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Analytical Laboratory Report

Report ID: S49874.01(01)
Generated on 09/08/2011

Report to

Attention: Mike Brennan
Arcadis
10559 Citation Drive
Suite 100
Brighton, MI 48116

Phone: 810-229-8594 FAX: 810-229-8837
Email: Michael.Brennan@arcadis-us.com

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S49874.01
Project: B0064410.2011.00900/Bucik City/Flint, MI
Collected Date: 08/31/2011
Submitted Date/Time: 08/31/2011 15:15
Sampled by: D. Newcom
P.O. #: MLT1295

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
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Laboratory Certifications:

Michigan DNRE (#9956), Ohio EPA (#CL0002), NELAC NY (#11814), NELAC FL (#E871045), WBENC (#2005110032)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Sample Summary (1 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S49874.01	RACER-WMU4&5-ContainW(080311)	Liquid	08/31/2011 12:30



Analytical Laboratory Report

Lab Sample ID: S49874.01
 Sample Tag: RACER-WMU4&5-ContainW(080311)
 Collected Date/Time: 08/31/2011 12:30
 Matrix: Liquid
 COC Reference: 090111.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
4	1L Amber	None	Yes	5.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
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Extraction / Prep.

Extraction, PCB	Completed			3550B	09/07/11 11:19	ADB		
Mercury Digestion	Completed			7471A	09/07/11 13:30	JRH		
Metal Digestion	Completed			3015A	09/08/11 01:00	SLR		
TCLP Zero Headspace Ext.	<5.0%			1311	09/06/11 16:50	WAR		
TCLP/SPLP BNA Extraction	Completed			3510C	09/07/11 20:27	EMR		

TCLP Extraction

Initial Sample pH	<0.5%			1311	09/06/11 16:50	WAR		
pH after 3.5 ml HCl	<0.5%			1311	09/06/11 16:50	WAR		
% Solids	<0.5%			1311	09/06/11 16:50	WAR		
Sample Used g	<0.5%			1311	09/06/11 16:50	WAR		
Final Volume mL	<0.5%			1311	09/06/11 16:50	WAR		
TCLP Extraction Fluid	<0.5%			1311	09/06/11 16:50	WAR		
Final Extract pH	<0.5%			1311	09/06/11 16:50	WAR		

Inorganics

Flash Point	Not detected	oF	180	ASTM D3278	09/08/11 13:44	DJS	<140	
pH	8.10	STD Units	0.1	9045D	09/08/11 14:00	WAR	12.5	
Reactive Cyanide	Not detected	mg/kg	0.02	335.4/4500-CN-E	09/06/11 13:10	JDP		
Reactive Sulfide	Not detected	mg/kg	0.08	4500-S2 D	09/06/11 10:08	JDP		

Metals

Arsenic, TCLP	Not detected	mg/L	0.02	6020	09/08/11 15:06	SLS	5.0	
Barium, TCLP	0.08	mg/L	0.05	6020	09/08/11 15:06	SLS	100.0	
Cadmium, TCLP	Not detected	mg/L	0.005	6020	09/08/11 15:06	SLS	1.0	
Chromium, TCLP	Not detected	mg/L	0.05	6020	09/08/11 15:06	SLS	5.0	
Lead, TCLP	Not detected	mg/L	0.03	6020	09/08/11 15:06	SLS	5.0	
Mercury, TCLP	Not detected	mg/L	0.0005	7471A	09/07/11 16:05	JRT	0.2	
Selenium, TCLP	Not detected	mg/L	0.05	6020	09/08/11 15:06	SLS	1.0	
Silver, TCLP	Not detected	mg/L	0.005	6020	09/08/11 15:06	SLS	5.0	

Organics - PCBs/Pesticides

PCB, TCLP

PCB-1016	Not detected	ug/L	0.1	608	09/07/11 14:46	JANB		
PCB-1221	Not detected	ug/L	0.1	608	09/07/11 14:46	JANB		
PCB-1232	Not detected	ug/L	0.1	608	09/07/11 14:46	JANB		
PCB-1242	Not detected	ug/L	0.1	608	09/07/11 14:46	JANB		
PCB-1248	Not detected	ug/L	0.1	608	09/07/11 14:46	JANB		
PCB-1254	Not detected	ug/L	0.1	608	09/07/11 14:46	JANB		
PCB-1260	Not detected	ug/L	0.1	608	09/07/11 14:46	JANB		
PCB, Total	Not detected	ug/L	0.1	608	09/07/11 14:46	JANB		



Analytical Laboratory Report

Lab Sample ID: S49874.01 (continued)

Sample Tag: RACER-WMU4&5-ContainW(080311)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Organics - Semi-Volatiles								
TCLP Semi Volatiles								
o-Cresol	Not detected	ug/L	1,000	8270C	09/08/11 13:01	PL	200,000	
p,m-Cresol	Not detected	ug/L	1,000	8270C	09/08/11 13:01	PL	200,000	
Pentachlorophenol	Not detected	ug/L	1,000	8270C	09/08/11 13:01	PL	100,000	
2,4,5-Trichlorophenol	Not detected	ug/L	1,000	8270C	09/08/11 13:01	PL	400,000	
2,4,6-Trichlorophenol	Not detected	ug/L	1,000	8270C	09/08/11 13:01	PL	2,000	
2,4-Dinitrotoluene	Not detected	ug/L	90	8270C	09/08/11 13:01	PL	130	
Hexachlorobenzene	Not detected	ug/L	90	8270C	09/08/11 13:01	PL	130	
Hexachlorobutadiene	Not detected	ug/L	100	8270C	09/08/11 13:01	PL	500	
Hexachloroethane	Not detected	ug/L	100	8270C	09/08/11 13:01	PL	3,000	
Nitrobenzene	Not detected	ug/L	100	8270C	09/08/11 13:01	PL	2,000	
Pyridine	Not detected	ug/L	100	8270C	09/08/11 13:01	PL	5,000	
Organics - Volatiles								
TCLP Volatiles								
Benzene	Not detected	ug/L	100	8260B	09/07/11 22:11	WAT	500	
Carbon tetrachloride	Not detected	ug/L	100	8260B	09/07/11 22:11	WAT	500	
Chlorobenzene	Not detected	ug/L	100	8260B	09/07/11 22:11	WAT	100,000	
Chloroform	Not detected	ug/L	100	8260B	09/07/11 22:11	WAT	6,000	
1,4-Dichlorobenzene	Not detected	ug/L	100	8260B	09/07/11 22:11	WAT	7,500	
1,2-Dichloroethane	Not detected	ug/L	100	8260B	09/07/11 22:11	WAT	500	
1,1-Dichloroethene	Not detected	ug/L	100	8260B	09/07/11 22:11	WAT	700	
2-Butanone (MEK)	Not detected	ug/L	1,000	8260B	09/07/11 22:11	WAT	200,000	
Tetrachloroethene	Not detected	ug/L	100	8260B	09/07/11 22:11	WAT	700	
Trichloroethene	Not detected	ug/L	100	8260B	09/07/11 22:11	WAT	500	
Vinyl chloride	Not detected	ug/L	100	8260B	09/07/11 22:11	WAT	200	



Analytical Laboratory Report

Report ID: S50119.01(01)
Generated on 09/26/2011

Report to

Attention: Mike Brennan
Arcadis
10559 Citation Drive
Suite 100
Brighton, MI 48116

Phone: 810-229-8594 FAX: 810-229-8837
Email: Michael.Brennan@arcadis-us.com

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S50119.01
Project: B0064410.2011.00900 / Buick City / Flint MI
Collected Date: 09/21/2011
Submitted Date/Time: 09/21/2011 14:30
Sampled by: Unknown
P.O. #: B0064410.2011.0

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
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Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Sample Summary (1 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S50119.01	WMU4&5-Containment Water (092111)	Water	09/21/2011 10:45



Analytical Laboratory Report

Lab Sample ID: S50119.01

Sample Tag: WMU4&5-Containment Water (092111)

Collected Date/Time: 09/21/2011 10:45

Matrix: Water

COC Reference: BC092111.1

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	1L Amber	None	Yes	5.5	IR
2	40ml Glass	HCL	Yes	5.5	IR
2	40ml Glass	None	Yes	5.5	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
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Extraction / Prep.

BNA Extraction	Completed			3510C	09/21/11 20:09	EMR		
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Organics - Semi-Volatiles

F-Scan

Cresylic Acid	Not detected	ug/L	300	8270C	09/23/11 14:45	PL	95-48-7	
p,m-Cresol	Not detected	ug/L	300	8270C	09/23/11 14:45	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	300	8270C	09/23/11 14:45	PL	95-48-7	
Nitrobenzene	Not detected	ug/L	300	8270C	09/23/11 14:45	PL	98-95-3	
Pyridine	Not detected	ug/L	300	8270C	09/23/11 14:45	PL	110-86-1	

Organics - Volatiles

2-Ethoxyethanol	Not detected	ug/L	2,000	8260M	09/22/11 20:46	JGH	110-80-5	
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F Scan

1-Butanol	Not detected	ug/L	1,000	8260M	09/22/11 18:21	WAT		
Cyclohexanone	Not detected	ug/L	100	8260M	09/22/11 18:21	WAT	108-94-1	
Ethyl Acetate	Not detected	ug/L	100	8260M	09/22/11 18:21	WAT	141-78-6	
Isobutanol	Not detected	ug/L	1,000	8260M	09/22/11 18:21	WAT		
2-Nitropropane	Not detected	ug/L	100	8260M	09/22/11 18:21	WAT	79-46-9	

F Scan

Benzene	Not detected	ug/L	1	8260M	09/22/11 18:21	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/L	1	8260M	09/22/11 18:21	WAT	56-23-5	
Chlorobenzene	Not detected	ug/L	1	8260M	09/22/11 18:21	WAT	108-90-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	8260M	09/22/11 18:21	WAT	95-50-1	
Ethylbenzene	Not detected	ug/L	1	8260M	09/22/11 18:21	WAT	100-41-4	
Methylene chloride	Not detected	ug/L	1	8260M	09/22/11 18:21	WAT	75-09-2	
Tetrachloroethene	Not detected	ug/L	1	8260M	09/22/11 18:21	WAT	127-18-4	
Toluene	Not detected	ug/L	1	8260M	09/22/11 18:21	WAT	108-88-3	
1,1,1-Trichloroethane	Not detected	ug/L	1	8260M	09/22/11 18:21	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	8260M	09/22/11 18:21	WAT	79-00-5	
Trichloroethene	Not detected	ug/L	1	8260M	09/22/11 18:21	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/L	1	8260M	09/22/11 18:21	WAT	75-69-4	
p,m-Xylene	Not detected	ug/L	1	8260M	09/22/11 18:21	WAT		
o-Xylene	Not detected	ug/L	1	8260M	09/22/11 18:21	WAT	95-47-6	
Acetone	Not detected	ug/L	100	8260M	09/22/11 18:21	WAT	67-64-1	
2-Butanone (MEK)	Not detected	ug/L	100	8260M	09/22/11 18:21	WAT	78-93-3	
Carbon disulfide	Not detected	ug/L	100	8260M	09/22/11 18:21	WAT	75-15-0	
Diethyl ether	Not detected	ug/L	100	8260M	09/22/11 18:21	WAT	60-29-7	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	100	8260M	09/22/11 18:21	WAT	108-10-1	



Analytical Laboratory Report

Lab Sample ID: S50119.01 (continued)

Sample Tag: WMU4&5-Containment Water (092111)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Halocarbons								
Bromodichloromethane	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	75-27-4	
Bromoform	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	75-25-2	
Bromomethane	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	74-83-9	
Carbon tetrachloride	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	56-23-5	
Chlorobenzene	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	108-90-7	
Chloroethane	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	75-00-3	
Chloroform	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	67-66-3	
Chloromethane	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	74-87-3	
Dibromochloromethane	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	124-48-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	96-12-8	
1,2-Dibromoethane	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	106-93-4	
1,2-Dichlorobenzene	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	106-46-7	
Dichlorodifluoromethane	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	75-71-8	
1,1-Dichloroethane	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	75-34-3	
1,2-Dichloroethane	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	107-06-2	
1,1-Dichloroethene	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	75-35-4	
cis-1,2-Dichloroethene	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	156-59-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	156-60-5	
1,2-Dichloropropane	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	78-87-5	
cis-1,3-Dichloropropene	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	10061-01-5	
trans-1,3-Dichloropropene	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	10061-02-6	
Methylene chloride	Not detected	ug/L	5	8260B	09/23/11 14:45	WAT	75-09-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	79-34-5	
Tetrachloroethene	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	127-18-4	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	8260B	09/23/11 14:45	WAT	120-82-1	
1,1,1-Trichloroethane	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	71-55-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	79-00-5	
Trichloroethene	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	79-01-6	
Trichlorofluoromethane	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	75-69-4	
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	76-13-1	
Vinyl chloride	Not detected	ug/L	1	8260B	09/23/11 14:45	WAT	75-01-4	
Other / Misc.								
Methanol	Not detected	mg/L	0.400	8015M	09/22/11 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.

1. **Liquid Samples** (Bottles per sample=2 40mL VOAs HCl; 2 40mL VOAs non-preserved; 2 Liter Amber non-preserved; 1 4oz Clear Glass Jar)

18 sample sets for:

- Standard VOC (USEPA Method 8260): **2-Ethoxyethanol, 2-Nitropropane, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Acetone, Benzene, Carbon Disulfide, Carbon Tetrachloride, Chlorobenzene, Chlorinated Fluorocarbons, Ethyl Benzene, Ethyl Ether, Methylene Chloride, Methyl Ethyl Ketone, Methyl Isobutyl Ketone, ortho-Dichlorobenzene, Tetrachloroethylene, Toluene, Trichloroethylene, Trichlorofluoromethane, and Xylenes.**
- F-Scan VOC (USEPA Method 8260): Cyclohexanone, Ethyl Acetate
- USEPA Method 8015: Isobutanol, methanol, and n-butyl alcohol
- F-Scan SVOC (USEPA Method 8270): Cresols, Cresylic Acid, Nitrobenzene, and Pyridine



Monday, September 26, 2011

Fibertec Project Number: 46457
Project Identification: 50119 /
Submittal Date: 09/21/2011

Ms. Julie Teague
Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Dear Ms. Teague,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note samples will be disposed of 30 days after reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

A handwritten signature in black ink, appearing to read "Daryl Strandbergh", written in a cursive style.

Daryl P. Strandbergh
Laboratory Director

DPS/kc

Enclosures

1914 Holloway Drive
11766 E. Grand River
8660 S. Mackinaw Trail

Holt, MI 48842
Brighton, MI 48116
Cadillac, MI 49601

T: (517) 699-0345
T: (810) 220-3300
T: (231) 775-8368

F: (517) 699-0388
F: (810) 220-3311
F: (231) 775-8584



Analytical Laboratory Report
Laboratory Project Number: 46457
Laboratory Sample Number: 46457-001

Order: 46457
Page: 2 of 3
Date: 09/26/11

Client Identification: Merit Laboratories, Inc.	Sample Description: 50119.01	Chain of Custody: 62577
Client Project Name: 50119	Sample No: 1	Collect Date: 09/21/11
Client Project No: NA	Sample Matrix: Ground Water	Collect Time: 10:45

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable NN: Parameter not included in NELAC Scope of Analysis.

Semivolatile Compounds by GC-FID (FES S-229/EPA 8015C)				Aliquot ID: 46457-001		Matrix: Ground Water		Analyst: TMC	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Prep Date	Prep Batch	Analysis Date	Analysis Batch
1. Methanol	U		µg/L	400	1.0	09/22/11	PS11I22B	09/22/11	S811I22A

1914 Holloway Drive
11766 E. Grand River
8660 S. Mackinaw Trail

Holt, MI 48842
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Cadillac, MI 49601

T: (517) 699-0345
T: (810) 220-3300
T: (231) 775-8368

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F: (810) 220-3311
F: (231) 775-8584

Definitions/ Qualifiers:

- A:** Spike recovery or precision unusable due to dilution.
- B:** The analyte was detected in the associated method blank.
- E:** The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J:** The concentration is an estimated value.
- M:** Modified Method
- U:** The analyte was not detected at or above the reporting limit.
- X:** Matrix Interference has resulted in a raised reporting limit or distorted result.
- W:** Results reported on a wet-weight basis.
- *:** Value reported is outside QA limits

Exception Summary:





Analytical Laboratory Report

Preliminary Report

Report ID: S50305.01(01)
Generated on 10/19/2011

Report to

Attention: Mike Brennan
Arcadis
10559 Citation Drive
Suite 100
Brighton, MI 48116

Phone: 810-229-8594 FAX: 810-229-8837
Email: Michael.Brennan@arcadis-us.com

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S50305.01-S50305.05
Project: B0064410.2011.00900 / Buick City / Flint MI
Collected Date: 10/07/2011
Submitted Date/Time: 10/10/2011 11:50
Sampled by: Tony Maffeo
P.O. #: MT1295A

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories.

Laboratory Certifications:

Michigan DNRE (#9956), Ohio EPA (#CL0002), NELAC NY (#11814), NELAC FL (#E871045), WBENC (#2005110032)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Preliminary Report

Sample Summary (5 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S50305.01	WMU#5-SOLID	Soil	10/07/2011 11:00
S50305.02	WMU#5-DECONWASH	Water	10/07/2011 09:00
S50305.03	WMU#4-SOLID	Soil	10/07/2011 12:50
S50305.04	WMU#4-TANK-DECONWASH	Water	10/07/2011 15:10
S50305.05	WMU#4-TANKSC-DECONWASH	Water	10/07/2011 14:45



Analytical Laboratory Report

Preliminary Report

Lab Sample ID: S50305.01
 Sample Tag: WMU#5-SOLID
 Collected Date/Time: 10/07/2011 11:00
 Matrix: Soil
 COC Reference: BC101011.0

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	32oz Glass	None	Yes	5.1	IR
1	40ml Glass	MeOH	Yes	5.1	IR
2	8oz Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
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Extraction / Prep.

BNA Extraction	Completed			3550B	10/13/11 22:04	EMR		
Extraction, PCB	Completed			3550B	10/12/11 13:45	CCM		
Mercury Digestion	Completed			7471A	10/17/11 12:10	JRH		
Metal Digestion	Completed			3015A	10/14/11 12:00	PER		
TCLP Zero Headspace Ext.	Completed			1311	10/12/11 16:20	WAR		
TCLP/SPLP BNA Extraction	Completed			3510C	10/13/11 21:47	EMR		

TCLP Extraction

Initial Sample pH	8.68			1311	10/12/11 16:20	WAR		
pH after 3.5 ml HCl	4.46			1311	10/12/11 16:20	WAR		
% Solids	100			1311	10/12/11 16:20	WAR		
Sample Used g	100			1311	10/12/11 16:20	WAR		
Final Volume mL	2,000			1311	10/12/11 16:20	WAR		
TCLP Extraction Fluid	1			1311	10/12/11 16:20	WAR		
Final Extract pH	5.26			1311	10/12/11 16:20	WAR		

Inorganics

Reactive Cyanide	Not detected	mg/kg	0.8	335.4/4500-CN-E	10/13/11 13:12	JDP		
Reactive Sulfide	Not detected	mg/kg	4	4500-S2 D	10/13/11 09:40	JDP		
Total Solids	79	%	1	Std M 2540 B	10/12/11 11:45	DJS		

Metals

Arsenic, TCLP	Not detected	mg/L	0.02	6020	10/14/11 15:31	PER	5.0	
Barium, TCLP	6.69	mg/L	0.05	6020	10/14/11 15:31	PER	100.0	
Cadmium, TCLP	0.019	mg/L	0.005	6020	10/14/11 15:31	PER	1.0	
Chromium, TCLP	Not detected	mg/L	0.05	6020	10/14/11 15:31	PER	5.0	
Lead, TCLP	Not detected	mg/L	0.03	6020	10/14/11 15:31	PER	5.0	
Mercury, TCLP	Not detected	mg/L	0.0002	7471A	10/17/11 15:43	JRT	0.2	
Selenium, TCLP	Not detected	mg/L	0.05	6020	10/14/11 15:31	PER	1.0	
Silver, TCLP	Not detected	mg/L	0.005	6020	10/14/11 15:31	PER	5.0	

Organics - PCBs/Pesticides

PCB List

PCB-1016	Not detected	ug/kg	330	8082A	10/12/11 17:32	JANB		
PCB-1242	Not detected	ug/kg	330	8082A	10/12/11 17:32	JANB		
PCB-1221	Not detected	ug/kg	330	8082A	10/12/11 17:32	JANB		
PCB-1232	Not detected	ug/kg	330	8082A	10/12/11 17:32	JANB		
PCB-1248	Not detected	ug/kg	330	8082A	10/12/11 17:32	JANB		
PCB-1254	Not detected	ug/kg	330	8082A	10/12/11 17:32	JANB		
PCB-1260	Not detected	ug/kg	330	8082A	10/12/11 17:32	JANB		



Analytical Laboratory Report

Preliminary Report

Lab Sample ID: S50305.01 (continued)

Sample Tag: WMU#5-SOLID

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Organics - Semi-Volatiles								
F-Scan								
Cresylic Acid	Not detected	ug/kg	300	8270C	10/15/11 00:03	PL		
p,m-Cresol	Not detected	ug/kg	300	8270C	10/15/11 00:03	PL		
o-Cresol	Not detected	ug/kg	300	8270C	10/15/11 00:03	PL		
Nitrobenzene	Not detected	ug/kg	300	8270C	10/15/11 00:03	PL		
Pyridine	Not detected	ug/kg	300	8270C	10/15/11 00:03	PL		
TCLP Semi Volatiles								
o-Cresol	Not detected	ug/L	1,000	8270C	10/14/11 19:18	PL	200,000	
p,m-Cresol	Not detected	ug/L	1,000	8270C	10/14/11 19:18	PL	200,000	
Pentachlorophenol	Not detected	ug/L	1,000	8270C	10/14/11 19:18	PL	100,000	
2,4,5-Trichlorophenol	Not detected	ug/L	1,000	8270C	10/14/11 19:18	PL	400,000	
2,4,6-Trichlorophenol	Not detected	ug/L	1,000	8270C	10/14/11 19:18	PL	2,000	
2,4-Dinitrotoluene	Not detected	ug/L	90	8270C	10/14/11 19:18	PL	130	
Hexachlorobenzene	Not detected	ug/L	90	8270C	10/14/11 19:18	PL	130	
Hexachlorobutadiene	Not detected	ug/L	100	8270C	10/14/11 19:18	PL	500	
Hexachloroethane	Not detected	ug/L	100	8270C	10/14/11 19:18	PL	3,000	
Nitrobenzene	Not detected	ug/L	100	8270C	10/14/11 19:18	PL	2,000	
Pyridine	Not detected	ug/L	100	8270C	10/14/11 19:18	PL	5,000	
Organics - Volatiles								
2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	10/14/11 19:38	JGH		
F Scan								
1-Butanol	Not detected	ug/kg	80,000	8260M	10/14/11 15:46	WAT		
Cyclohexanone	Not detected	ug/kg	8,000	8260M	10/14/11 15:46	WAT		
Ethyl Acetate	Not detected	ug/kg	8,000	8260M	10/14/11 15:46	WAT		
Isobutanol	Not detected	ug/kg	80,000	8260M	10/14/11 15:46	WAT		
2-Nitropropane	Not detected	ug/kg	8,000	8260M	10/14/11 15:46	WAT		
F Scan								
Benzene	Not detected	ug/kg	80	8260M	10/14/11 15:46	WAT		
Carbon tetrachloride	Not detected	ug/kg	80	8260M	10/14/11 15:46	WAT		
Chlorobenzene	Not detected	ug/kg	80	8260M	10/14/11 15:46	WAT		
1,2-Dichlorobenzene	Not detected	ug/kg	80	8260M	10/14/11 15:46	WAT		
Ethylbenzene	Not detected	ug/kg	80	8260M	10/14/11 15:46	WAT		
Methylene chloride	Not detected	ug/kg	80	8260M	10/14/11 15:46	WAT		
Tetrachloroethene	Not detected	ug/kg	80	8260M	10/14/11 15:46	WAT		
Toluene	Not detected	ug/kg	80	8260M	10/14/11 15:46	WAT		
1,1,1-Trichloroethane	Not detected	ug/kg	80	8260M	10/14/11 15:46	WAT		
1,1,2-Trichloroethane	Not detected	ug/kg	80	8260M	10/14/11 15:46	WAT		
Trichloroethene	Not detected	ug/kg	80	8260M	10/14/11 15:46	WAT		
Trichlorofluoromethane	Not detected	ug/kg	80	8260M	10/14/11 15:46	WAT		
p,m-Xylene	Not detected	ug/kg	80	8260M	10/14/11 15:46	WAT		
o-Xylene	Not detected	ug/kg	80	8260M	10/14/11 15:46	WAT		
Acetone	Not detected	ug/kg	8,000	8260M	10/14/11 15:46	WAT		
2-Butanone (MEK)	Not detected	ug/kg	8,000	8260M	10/14/11 15:46	WAT		
Carbon disulfide	Not detected	ug/kg	8,000	8260M	10/14/11 15:46	WAT		
Diethyl ether	Not detected	ug/kg	8,000	8260M	10/14/11 15:46	WAT		
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	8,000	8260M	10/14/11 15:46	WAT		



Analytical Laboratory Report

Preliminary Report

Lab Sample ID: S50305.01 (continued)

Sample Tag: WMU#5-SOLID

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Organics - Volatiles (continued)								
TCLP Volatiles								
Benzene	Incomplete	ug/L		8260B	//		500	
Carbon tetrachloride	Incomplete	ug/L		8260B	//		500	
Chlorobenzene	Incomplete	ug/L		8260B	//		100,000	
Chloroform	Incomplete	ug/L		8260B	//		6,000	
1,4-Dichlorobenzene	Incomplete	ug/L		8260B	//		7,500	
1,2-Dichloroethane	Incomplete	ug/L		8260B	//		500	
1,1-Dichloroethene	Incomplete	ug/L		8260B	//		700	
2-Butanone (MEK)	Incomplete	ug/L		8260B	//		200,000	
Tetrachloroethene	Incomplete	ug/L		8260B	//		700	
Trichloroethene	Incomplete	ug/L		8260B	//		500	
Vinyl chloride	Incomplete	ug/L		8260B	//		200	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	80	8260B	10/14/11 15:46	WAT		
Trichlorofluoromethane	Not detected	ug/kg	80	8260B	10/14/11 15:46	WAT		
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	80	8260B	10/14/11 15:46	WAT		
Other / Misc.								
Methanol	Not detected	mg/kg	4.40	8015M	10/13/11 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Preliminary Report

Lab Sample ID: S50305.02
 Sample Tag: WMU#5-DECONWASH
 Collected Date/Time: 10/07/2011 09:00
 Matrix: Water
 COC Reference: BC101011.0

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
6	1L Amber	None	Yes	5.1	IR
2	40ml Glass	HCL	Yes	5.1	IR
2	40ml Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
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Extraction / Prep.

BNA Extraction	Completed			3510C	10/13/11 21:48	EMR		
Extraction, PCB	Completed			3510C	10/11/11 12:30	CCM		
Mercury Digestion	Completed			7471A	10/17/11 12:10	JRH		
Metal Digestion	Completed			3015A	10/14/11 12:00	PER		
TCLP Zero Headspace Ext.	<0.5%			1311	10/12/11 16:20	WAR		
TCLP/SPLP BNA Extraction	Completed			3510C	10/13/11 21:47	EMR		

TCLP Extraction

Initial Sample pH	<0.5%			1311	10/12/11 16:20	WAR		
pH after 3.5 ml HCl	<0.5%			1311	10/12/11 16:20	WAR		
% Solids	<0.5%			1311	10/12/11 16:20	WAR		
Sample Used g	<0.5%			1311	10/12/11 16:20	WAR		
Final Volume mL	<0.5%			1311	10/12/11 16:20	WAR		
TCLP Extraction Fluid	<0.5%			1311	10/12/11 16:20	WAR		
Final Extract pH	<0.5%			1311	10/12/11 16:20	WAR		

Inorganics

Flash Point	Not detected	oF	180	ASTM D3278	10/17/11 15:06	DJS	<140	
pH	Incomplete	STD Units		9045D	/ /		12.5	
Reactive Cyanide	Not detected	mg/kg	1	335.4/4500-CN-E	10/13/11 13:20	JDP		
Reactive Sulfide	Not detected	mg/kg	10	4500-S2 D	10/13/11 09:48	JDP		

Metals

Arsenic, TCLP	Not detected	mg/L	0.02	6020	10/14/11 15:33	PER	5.0	
Barium, TCLP	1.00	mg/L	0.05	6020	10/14/11 15:33	PER	100.0	
Cadmium, TCLP	Not detected	mg/L	0.005	6020	10/14/11 15:33	PER	1.0	
Chromium, TCLP	Not detected	mg/L	0.05	6020	10/14/11 15:33	PER	5.0	
Lead, TCLP	Not detected	mg/L	0.03	6020	10/14/11 15:33	PER	5.0	
Mercury, TCLP	Not detected	mg/L	0.0002	7471A	10/17/11 15:45	JRT	0.2	
Selenium, TCLP	Not detected	mg/L	0.05	6020	10/14/11 15:33	PER	1.0	
Silver, TCLP	Not detected	mg/L	0.005	6020	10/14/11 15:33	PER	5.0	

Organics - PCBs/Pesticides

PCB

PCB-1016	Not detected	ug/L	0.1	608	10/12/11 18:03	JANB		
PCB-1221	Not detected	ug/L	0.1	608	10/12/11 18:03	JANB		
PCB-1232	Not detected	ug/L	0.1	608	10/12/11 18:03	JANB		
PCB-1242	Not detected	ug/L	0.1	608	10/12/11 18:03	JANB		
PCB-1248	Not detected	ug/L	0.1	608	10/12/11 18:03	JANB		
PCB-1254	Not detected	ug/L	0.1	608	10/12/11 18:03	JANB		
PCB-1260	Not detected	ug/L	0.1	608	10/12/11 18:03	JANB		



Analytical Laboratory Report

Preliminary Report

Lab Sample ID: S50305.02 (continued)

Sample Tag: WMU#5-DECONWASH

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Organics - PCBs/Pesticides (continued)								
PCB (continued)								
PCB, Total	Not detected	ug/L	0.1	608	10/12/11 18:03	JANB		
Organics - Semi-Volatiles								
F-Scan								
Cresylic Acid	Not detected	ug/L	300	8270C	10/14/11 20:34	PL		
p,m-Cresol	Not detected	ug/L	300	8270C	10/14/11 20:34	PL	200,000	
o-Cresol	Not detected	ug/L	300	8270C	10/14/11 20:34	PL	200,000	
Nitrobenzene	Not detected	ug/L	300	8270C	10/14/11 20:34	PL	2,000	
Pyridine	Not detected	ug/L	300	8270C	10/14/11 20:34	PL	5,000	
TCLP Semi Volatiles								
o-Cresol	Not detected	ug/L	1,000	8270C	10/14/11 20:34	PL	200,000	
p,m-Cresol	Not detected	ug/L	1,000	8270C	10/14/11 20:34	PL	200,000	
Pentachlorophenol	Not detected	ug/L	1,000	8270C	10/14/11 20:34	PL	100,000	
2,4,5-Trichlorophenol	Not detected	ug/L	1,000	8270C	10/14/11 20:34	PL	400,000	
2,4,6-Trichlorophenol	Not detected	ug/L	1,000	8270C	10/14/11 20:34	PL	2,000	
2,4-Dinitrotoluene	Not detected	ug/L	90	8270C	10/14/11 20:34	PL	130	
Hexachlorobenzene	Not detected	ug/L	90	8270C	10/14/11 20:34	PL	130	
Hexachlorobutadiene	Not detected	ug/L	100	8270C	10/14/11 20:34	PL	500	
Hexachloroethane	Not detected	ug/L	100	8270C	10/14/11 20:34	PL	3,000	
Nitrobenzene	Not detected	ug/L	100	8270C	10/14/11 20:34	PL	2,000	
Pyridine	Not detected	ug/L	100	8270C	10/14/11 20:34	PL	5,000	
Organics - Volatiles								
2-Ethoxyethanol	Not detected	ug/L	2,000	8260M	10/14/11 18:50	JGH		
F Scan								
1-Butanol	Not detected	ug/L	1,000	8260M	10/13/11 19:47	WAT		
Cyclohexanone	Not detected	ug/L	100	8260M	10/13/11 19:47	WAT		
Ethyl Acetate	Not detected	ug/L	100	8260M	10/13/11 19:47	WAT		
Isobutanol	Not detected	ug/L	1,000	8260M	10/13/11 19:47	WAT		
2-Nitropropane	Not detected	ug/L	100	8260M	10/13/11 19:47	WAT		
F Scan								
Benzene	Not detected	ug/L	1	8260M	10/13/11 19:47	WAT	500	
Carbon tetrachloride	Not detected	ug/L	1	8260M	10/13/11 19:47	WAT	500	
Chlorobenzene	Not detected	ug/L	1	8260M	10/13/11 19:47	WAT	100,000	
1,2-Dichlorobenzene	Not detected	ug/L	1	8260M	10/13/11 19:47	WAT		
Ethylbenzene	Not detected	ug/L	1	8260M	10/13/11 19:47	WAT		
Methylene chloride	Not detected	ug/L	1	8260M	10/13/11 19:47	WAT		
Tetrachloroethene	Not detected	ug/L	1	8260M	10/13/11 19:47	WAT	700	
Toluene	30	ug/L	1	8260M	10/13/11 19:47	WAT		
1,1,1-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 19:47	WAT		
1,1,2-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 19:47	WAT		
Trichloroethene	Not detected	ug/L	1	8260M	10/13/11 19:47	WAT	500	
Trichlorofluoromethane	Not detected	ug/L	1	8260M	10/13/11 19:47	WAT		
p,m-Xylene	2	ug/L	1	8260M	10/13/11 19:47	WAT		
o-Xylene	Not detected	ug/L	1	8260M	10/13/11 19:47	WAT		
Acetone	Not detected	ug/L	100	8260M	10/13/11 19:47	WAT		



Analytical Laboratory Report

Preliminary Report

Lab Sample ID: S50305.02 (continued)

Sample Tag: WMU#5-DECONWASH

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
2-Butanone (MEK)	Not detected	ug/L	100	8260M	10/13/11 19:47	WAT	200,000	
Carbon disulfide	Not detected	ug/L	100	8260M	10/13/11 19:47	WAT		
Diethyl ether	Not detected	ug/L	100	8260M	10/13/11 19:47	WAT		
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	100	8260M	10/13/11 19:47	WAT		
TCLP Volatiles								
Benzene	Incomplete	ug/L		8260B	//		500	
Carbon tetrachloride	Incomplete	ug/L		8260B	//		500	
Chlorobenzene	Incomplete	ug/L		8260B	//		100,000	
Chloroform	Incomplete	ug/L		8260B	//		6,000	
1,4-Dichlorobenzene	Incomplete	ug/L		8260B	//		7,500	
1,2-Dichloroethane	Incomplete	ug/L		8260B	//		500	
1,1-Dichloroethene	Incomplete	ug/L		8260B	//		700	
2-Butanone (MEK)	Incomplete	ug/L		8260B	//		200,000	
Tetrachloroethene	Incomplete	ug/L		8260B	//		700	
Trichloroethene	Incomplete	ug/L		8260B	//		500	
Vinyl chloride	Incomplete	ug/L		8260B	//		200	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/L	1	8260B	10/13/11 19:47	WAT		
Trichlorofluoromethane	Not detected	ug/L	1	8260B	10/13/11 19:47	WAT		
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/L	1	8260B	10/13/11 19:47	WAT		
Other / Misc.								
Methanol	Not detected	mg/L	0.400	8015M	10/14/11 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Preliminary Report

Lab Sample ID: S50305.03
 Sample Tag: WMU#4-SOLID
 Collected Date/Time: 10/07/2011 12:50
 Matrix: Soil
 COC Reference: BC101011.0

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	32oz Glass	None	Yes	5.1	IR
1	40ml Glass	MeOH	Yes	5.1	IR
2	8oz Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
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Extraction / Prep.

BNA Extraction	Completed			3550B	10/13/11 22:04	EMR		
Extraction, PCB	Completed			3550B	10/12/11 13:45	CCM		
Mercury Digestion	Completed			7471A	10/17/11 12:10	JRH		
Metal Digestion	Completed			3015A	10/14/11 12:00	PER		
TCLP Zero Headspace Ext.	Completed			1311	10/12/11 16:20	WAR		
TCLP/SPLP BNA Extraction	Completed			3510C	10/13/11 21:47	EMR		

TCLP Extraction

Initial Sample pH	7.78			1311	10/12/11 16:20	WAR		
pH after 3.5 ml HCl	6.28			1311	10/12/11 16:20	WAR		
% Solids	100			1311	10/12/11 16:20	WAR		
Sample Used g	100			1311	10/12/11 16:20	WAR		
Final Volume mL	2,000			1311	10/12/11 16:20	WAR		
TCLP Extraction Fluid	2			1311	10/12/11 16:20	WAR		
Final Extract pH	4.63			1311	10/12/11 16:20	WAR		

Inorganics

Reactive Cyanide	Not detected	mg/kg	0.8	335.4/4500-CN-E	10/13/11 13:22	JDP		
Reactive Sulfide	Not detected	mg/kg	4	4500-S2 D	10/13/11 09:50	JDP		
Total Solids	77	%	1	Std M 2540 B	10/12/11 11:45	DJS		

Metals

Arsenic, TCLP	Not detected	mg/L	0.02	6020	10/14/11 15:38	PER	5.0	
Barium, TCLP	3.15	mg/L	0.05	6020	10/14/11 15:38	PER	100.0	
Cadmium, TCLP	0.203	mg/L	0.005	6020	10/14/11 15:38	PER	1.0	
Chromium, TCLP	0.39	mg/L	0.05	6020	10/14/11 15:38	PER	5.0	
Lead, TCLP	0.20	mg/L	0.03	6020	10/14/11 15:38	PER	5.0	
Mercury, TCLP	Not detected	mg/L	0.0002	7471A	10/17/11 15:50	JRT	0.2	
Selenium, TCLP	Not detected	mg/L	0.05	6020	10/14/11 15:38	PER	1.0	
Silver, TCLP	Not detected	mg/L	0.005	6020	10/14/11 15:38	PER	5.0	

Organics - PCBs/Pesticides

PCB List

PCB-1016	Not detected	ug/kg	330	8082A	10/17/11 15:50	JANB		
PCB-1242	Not detected	ug/kg	330	8082A	10/17/11 15:50	JANB		
PCB-1221	Not detected	ug/kg	330	8082A	10/17/11 15:50	JANB		
PCB-1232	Not detected	ug/kg	330	8082A	10/17/11 15:50	JANB		
PCB-1248	Not detected	ug/kg	330	8082A	10/17/11 15:50	JANB		
PCB-1254	Not detected	ug/kg	330	8082A	10/17/11 15:50	JANB		
PCB-1260	Not detected	ug/kg	330	8082A	10/17/11 15:50	JANB		



Analytical Laboratory Report

Preliminary Report

Lab Sample ID: S50305.03 (continued)

Sample Tag: WMU#4-SOLID

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Organics - Semi-Volatiles								
F-Scan								
Cresylic Acid	Not detected	ug/kg	300	8270C	10/15/11 00:22	PL		
p,m-Cresol	Not detected	ug/kg	300	8270C	10/15/11 00:22	PL		
o-Cresol	Not detected	ug/kg	300	8270C	10/15/11 00:22	PL		
Nitrobenzene	Not detected	ug/kg	300	8270C	10/15/11 00:22	PL		
Pyridine	Not detected	ug/kg	300	8270C	10/15/11 00:22	PL		
TCLP Semi Volatiles								
o-Cresol	Not detected	ug/L	1,000	8270C	10/14/11 19:37	PL	200,000	
p,m-Cresol	Not detected	ug/L	1,000	8270C	10/14/11 19:37	PL	200,000	
Pentachlorophenol	Not detected	ug/L	1,000	8270C	10/14/11 19:37	PL	100,000	
2,4,5-Trichlorophenol	Not detected	ug/L	1,000	8270C	10/14/11 19:37	PL	400,000	
2,4,6-Trichlorophenol	Not detected	ug/L	1,000	8270C	10/14/11 19:37	PL	2,000	
2,4-Dinitrotoluene	Not detected	ug/L	90	8270C	10/14/11 19:37	PL	130	
Hexachlorobenzene	Not detected	ug/L	90	8270C	10/14/11 19:37	PL	130	
Hexachlorobutadiene	Not detected	ug/L	100	8270C	10/14/11 19:37	PL	500	
Hexachloroethane	Not detected	ug/L	100	8270C	10/14/11 19:37	PL	3,000	
Nitrobenzene	Not detected	ug/L	100	8270C	10/14/11 19:37	PL	2,000	
Pyridine	Not detected	ug/L	100	8270C	10/14/11 19:37	PL	5,000	
Organics - Volatiles								
2-Ethoxyethanol	Not detected	ug/kg	1,000	8260M	10/14/11 19:54	JGH		
F Scan								
1-Butanol	Not detected	ug/kg	80,000	8260M	10/14/11 16:04	WAT		
Cyclohexanone	Not detected	ug/kg	8,000	8260M	10/14/11 16:04	WAT		
Ethyl Acetate	Not detected	ug/kg	8,000	8260M	10/14/11 16:04	WAT		
Isobutanol	Not detected	ug/kg	80,000	8260M	10/14/11 16:04	WAT		
2-Nitropropane	Not detected	ug/kg	8,000	8260M	10/14/11 16:04	WAT		
F Scan								
Benzene	Not detected	ug/kg	80	8260M	10/14/11 16:04	WAT		
Carbon tetrachloride	Not detected	ug/kg	80	8260M	10/14/11 16:04	WAT		
Chlorobenzene	Not detected	ug/kg	80	8260M	10/14/11 16:04	WAT		
1,2-Dichlorobenzene	Not detected	ug/kg	80	8260M	10/14/11 16:04	WAT		
Ethylbenzene	Not detected	ug/kg	80	8260M	10/14/11 16:04	WAT		
Methylene chloride	Not detected	ug/kg	80	8260M	10/14/11 16:04	WAT		
Tetrachloroethene	Not detected	ug/kg	80	8260M	10/14/11 16:04	WAT		
Toluene	Not detected	ug/kg	80	8260M	10/14/11 16:04	WAT		
1,1,1-Trichloroethane	Not detected	ug/kg	80	8260M	10/14/11 16:04	WAT		
1,1,2-Trichloroethane	Not detected	ug/kg	80	8260M	10/14/11 16:04	WAT		
Trichloroethene	Not detected	ug/kg	80	8260M	10/14/11 16:04	WAT		
Trichlorofluoromethane	Not detected	ug/kg	80	8260M	10/14/11 16:04	WAT		
p,m-Xylene	280	ug/kg	80	8260M	10/14/11 16:04	WAT		
o-Xylene	130	ug/kg	80	8260M	10/14/11 16:04	WAT		
Acetone	Not detected	ug/kg	8,000	8260M	10/14/11 16:04	WAT		
2-Butanone (MEK)	Not detected	ug/kg	8,000	8260M	10/14/11 16:04	WAT		
Carbon disulfide	Not detected	ug/kg	8,000	8260M	10/14/11 16:04	WAT		
Diethyl ether	Not detected	ug/kg	8,000	8260M	10/14/11 16:04	WAT		
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	8,000	8260M	10/14/11 16:04	WAT		



Analytical Laboratory Report

Preliminary Report

Lab Sample ID: S50305.03 (continued)

Sample Tag: WMU#4-SOLID

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Organics - Volatiles (continued)								
TCLP Volatiles								
Benzene	Incomplete	ug/L		8260B	//		500	
Carbon tetrachloride	Incomplete	ug/L		8260B	//		500	
Chlorobenzene	Incomplete	ug/L		8260B	//		100,000	
Chloroform	Incomplete	ug/L		8260B	//		6,000	
1,4-Dichlorobenzene	Incomplete	ug/L		8260B	//		7,500	
1,2-Dichloroethane	Incomplete	ug/L		8260B	//		500	
1,1-Dichloroethene	Incomplete	ug/L		8260B	//		700	
2-Butanone (MEK)	Incomplete	ug/L		8260B	//		200,000	
Tetrachloroethene	Incomplete	ug/L		8260B	//		700	
Trichloroethene	Incomplete	ug/L		8260B	//		500	
Vinyl chloride	Incomplete	ug/L		8260B	//		200	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/kg	80	8260B	10/14/11 16:04	WAT		
Trichlorofluoromethane	Not detected	ug/kg	80	8260B	10/14/11 16:04	WAT		
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/kg	80	8260B	10/14/11 16:04	WAT		
Other / Misc.								
Methanol	Not detected	mg/kg	4.40	8015M	10/13/11 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Preliminary Report

Lab Sample ID: S50305.04
 Sample Tag: WMU#4-TANK-DECONWASH
 Collected Date/Time: 10/07/2011 15:10
 Matrix: Water
 COC Reference: BC101011.0

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
6	1L Amber	None	Yes	5.1	IR
2	40ml Glass	HCL	Yes	5.1	IR
2	40ml Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
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Extraction / Prep.

BNA Extraction	Completed			3510C	10/13/11 21:48	EMR		
Extraction, PCB	Completed			3510C	10/11/11 12:30	CCM		
Mercury Digestion	Completed			7471A	10/17/11 12:10	JRH		
Metal Digestion	Completed			3015A	10/14/11 12:00	PER		
TCLP Zero Headspace Ext.	<0.5%			1311	10/12/11 16:20	WAR		
TCLP/SPLP BNA Extraction	Completed			3510C	10/13/11 21:47	EMR		

TCLP Extraction

Initial Sample pH	<0.5%			1311	10/12/11 16:20	WAR		
pH after 3.5 ml HCl	<0.5%			1311	10/12/11 16:20	WAR		
% Solids	<0.5%			1311	10/12/11 16:20	WAR		
Sample Used g	<0.5%			1311	10/12/11 16:20	WAR		
Final Volume mL	<0.5%			1311	10/12/11 16:20	WAR		
TCLP Extraction Fluid	<0.5%			1311	10/12/11 16:20	WAR		
Final Extract pH	<0.5%			1311	10/12/11 16:20	WAR		

Inorganics

Flash Point	Not detected	oF	180	ASTM D3278	10/17/11 15:06	DJS	<140	
pH	Incomplete	STD Units		9045D	/ /		12.5	
Reactive Cyanide	Not detected	mg/kg	1	335.4/4500-CN-E	10/13/11 13:24	JDP		
Reactive Sulfide	Not detected	mg/kg	10	4500-S2 D	10/13/11 09:52	JDP		

Metals

Arsenic, TCLP	Not detected	mg/L	0.02	6020	10/14/11 15:35	PER	5.0	
Barium, TCLP	Not detected	mg/L	0.05	6020	10/14/11 15:35	PER	100.0	
Cadmium, TCLP	0.024	mg/L	0.005	6020	10/14/11 15:35	PER	1.0	
Chromium, TCLP	Not detected	mg/L	0.05	6020	10/14/11 15:35	PER	5.0	
Lead, TCLP	0.08	mg/L	0.03	6020	10/14/11 15:35	PER	5.0	
Mercury, TCLP	0.0005	mg/L	0.0002	7471A	10/17/11 15:48	JRT	0.2	
Selenium, TCLP	Not detected	mg/L	0.05	6020	10/14/11 15:35	PER	1.0	
Silver, TCLP	Not detected	mg/L	0.005	6020	10/14/11 15:35	PER	5.0	

Organics - PCBs/Pesticides

PCB	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
PCB-1016	Not detected	ug/L	2	608	10/17/11 14:59	JANB		X
PCB-1221	Not detected	ug/L	2	608	10/17/11 14:59	JANB		X
PCB-1232	Not detected	ug/L	2	608	10/17/11 14:59	JANB		X
PCB-1242	Not detected	ug/L	2	608	10/17/11 14:59	JANB		X
PCB-1248	Not detected	ug/L	2	608	10/17/11 14:59	JANB		X
PCB-1254	Not detected	ug/L	2	608	10/17/11 14:59	JANB		X

X-Elevated reporting limit due to matrix interference



Analytical Laboratory Report

Preliminary Report

Lab Sample ID: S50305.04 (continued)
 Sample Tag: WMU#4-TANK-DECONWASH

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Organics - PCBs/Pesticides (continued)								
PCB (continued)								
PCB-1260	Not detected	ug/L	2	608	10/17/11 14:59	JANB		X
PCB, Total	Not detected	ug/L	2	608	10/17/11 14:59	JANB		X
Organics - Semi-Volatiles								
F-Scan								
Cresylic Acid	Not detected	ug/L	300	8270C	10/14/11 23:44	PL		
p,m-Cresol	Not detected	ug/L	300	8270C	10/14/11 23:44	PL	200,000	
o-Cresol	Not detected	ug/L	300	8270C	10/14/11 23:44	PL	200,000	
Nitrobenzene	Not detected	ug/L	300	8270C	10/14/11 23:44	PL	2,000	
Pyridine	Not detected	ug/L	300	8270C	10/14/11 23:44	PL	5,000	
TCLP Semi Volatiles								
o-Cresol	Not detected	ug/L	1,000	8270C	10/14/11 23:44	PL	200,000	
p,m-Cresol	Not detected	ug/L	1,000	8270C	10/14/11 23:44	PL	200,000	
Pentachlorophenol	Not detected	ug/L	1,000	8270C	10/14/11 23:44	PL	100,000	
2,4,5-Trichlorophenol	Not detected	ug/L	1,000	8270C	10/14/11 23:44	PL	400,000	
2,4,6-Trichlorophenol	Not detected	ug/L	1,000	8270C	10/14/11 23:44	PL	2,000	
2,4-Dinitrotoluene	Not detected	ug/L	90	8270C	10/14/11 23:44	PL	130	
Hexachlorobenzene	Not detected	ug/L	90	8270C	10/14/11 23:44	PL	130	
Hexachlorobutadiene	Not detected	ug/L	100	8270C	10/14/11 23:44	PL	500	
Hexachloroethane	Not detected	ug/L	100	8270C	10/14/11 23:44	PL	3,000	
Nitrobenzene	Not detected	ug/L	100	8270C	10/14/11 23:44	PL	2,000	
Pyridine	Not detected	ug/L	100	8270C	10/14/11 23:44	PL	5,000	
Organics - Volatiles								
2-Ethoxyethanol	Not detected	ug/L	2,000	8260M	10/14/11 19:06	JGH		
F Scan								
1-Butanol	Not detected	ug/L	1,000	8260M	10/13/11 20:06	WAT		
Cyclohexanone	Not detected	ug/L	100	8260M	10/13/11 20:06	WAT		
Ethyl Acetate	Not detected	ug/L	100	8260M	10/13/11 20:06	WAT		
Isobutanol	Not detected	ug/L	1,000	8260M	10/13/11 20:06	WAT		
2-Nitropropane	Not detected	ug/L	100	8260M	10/13/11 20:06	WAT		
F Scan								
Benzene	Not detected	ug/L	1	8260M	10/13/11 20:06	WAT	500	
Carbon tetrachloride	Not detected	ug/L	1	8260M	10/13/11 20:06	WAT	500	
Chlorobenzene	Not detected	ug/L	1	8260M	10/13/11 20:06	WAT	100,000	
1,2-Dichlorobenzene	Not detected	ug/L	1	8260M	10/13/11 20:06	WAT		
Ethylbenzene	Not detected	ug/L	1	8260M	10/13/11 20:06	WAT		
Methylene chloride	Not detected	ug/L	1	8260M	10/13/11 20:06	WAT		
Tetrachloroethene	Not detected	ug/L	1	8260M	10/13/11 20:06	WAT	700	
Toluene	25	ug/L	1	8260M	10/13/11 20:06	WAT		
1,1,1-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 20:06	WAT		
1,1,2-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 20:06	WAT		
Trichloroethene	Not detected	ug/L	1	8260M	10/13/11 20:06	WAT	500	
Trichlorofluoromethane	Not detected	ug/L	1	8260M	10/13/11 20:06	WAT		
p,m-Xylene	Not detected	ug/L	1	8260M	10/13/11 20:06	WAT		

X-Elevated reporting limit due to matrix interference



Analytical Laboratory Report

Preliminary Report

Lab Sample ID: S50305.04 (continued)
 Sample Tag: WMU#4-TANK-DECONWASH

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
o-Xylene	Not detected	ug/L	1	8260M	10/13/11 20:06	WAT		
Acetone	Not detected	ug/L	100	8260M	10/13/11 20:06	WAT		
2-Butanone (MEK)	Not detected	ug/L	100	8260M	10/13/11 20:06	WAT	200,000	
Carbon disulfide	Not detected	ug/L	100	8260M	10/13/11 20:06	WAT		
Diethyl ether	Not detected	ug/L	100	8260M	10/13/11 20:06	WAT		
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	100	8260M	10/13/11 20:06	WAT		
TCLP Volatiles								
Benzene	Incomplete	ug/L		8260B	//		500	
Carbon tetrachloride	Incomplete	ug/L		8260B	//		500	
Chlorobenzene	Incomplete	ug/L		8260B	//		100,000	
Chloroform	Incomplete	ug/L		8260B	//		6,000	
1,4-Dichlorobenzene	Incomplete	ug/L		8260B	//		7,500	
1,2-Dichloroethane	Incomplete	ug/L		8260B	//		500	
1,1-Dichloroethene	Incomplete	ug/L		8260B	//		700	
2-Butanone (MEK)	Incomplete	ug/L		8260B	//		200,000	
Tetrachloroethene	Incomplete	ug/L		8260B	//		700	
Trichloroethene	Incomplete	ug/L		8260B	//		500	
Vinyl chloride	Incomplete	ug/L		8260B	//		200	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/L	1	8260B	10/13/11 20:06	WAT		
Trichlorofluoromethane	Not detected	ug/L	1	8260B	10/13/11 20:06	WAT		
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/L	1	8260B	10/13/11 20:06	WAT		
Other / Misc.								
Methanol	Not detected	mg/L	0.400	8015M	10/14/11 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Preliminary Report

Lab Sample ID: S50305.05
 Sample Tag: WMU#4-TANKSC-DECONWASH
 Collected Date/Time: 10/07/2011 14:45
 Matrix: Water
 COC Reference: BC101011.0

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
6	1L Amber	None	Yes	5.1	IR
2	40ml Glass	HCL	Yes	5.1	IR
2	40ml Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
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Extraction / Prep.

BNA Extraction	Completed			3510C	10/13/11 23:30	EMR		
Extraction, PCB	Completed			3510C	10/11/11 12:30	CCM		
Mercury Digestion	Incomplete			7471A	/ /			
Metal Digestion	Incomplete			3015A	/ /			
TCLP Zero Headspace Ext.	<5.0%			1311	10/12/11 16:20	WAR		
TCLP/SPLP BNA Extraction	Completed			3510C	10/13/11 23:30	EMR		

TCLP Extraction

Initial Sample pH	8.51			1311	10/17/11 15:00	WAR		
pH after 3.5 ml HCl	5.46			1311	10/17/11 15:00	WAR		
% Solids	4			1311	10/17/11 15:00	WAR		
Sample Used g	12			1311	10/17/11 15:00	WAR		
Final Volume mL	528			1311	10/17/11 15:00	WAR		
TCLP Extraction Fluid	2			1311	10/17/11 15:00	WAR		
Final Extract pH	5.01			1311	10/17/11 15:00	WAR		

Inorganics

Flash Point	Not detected	oF	180	ASTM D3278	10/17/11 15:06	DJS	<140	
pH	Incomplete	STD Units		9045D	/ /		12.5	
Reactive Cyanide	Not detected	mg/kg	1	335.4/4500-CN-E	10/13/11 13:26	JDP		
Reactive Sulfide	Not detected	mg/kg	10	4500-S2 D	10/13/11 09:54	JDP		

Metals

Arsenic, TCLP	Incomplete	mg/L		6020	/ /		5.0	
Barium, TCLP	Incomplete	mg/L		6020	/ /		100.0	
Cadmium, TCLP	Incomplete	mg/L		6020	/ /		1.0	
Chromium, TCLP	Incomplete	mg/L		6020	/ /		5.0	
Lead, TCLP	Incomplete	mg/L		6020	/ /		5.0	
Mercury, TCLP	Incomplete	mg/L		7471A	/ /		0.2	
Selenium, TCLP	Incomplete	mg/L		6020	/ /		1.0	
Silver, TCLP	Incomplete	mg/L		6020	/ /		5.0	

Organics - PCBs/Pesticides

PCB

PCB-1016	Not detected	ug/L	0.1	608	10/17/11 15:26	JANB		
PCB-1221	Not detected	ug/L	0.1	608	10/17/11 15:26	JANB		
PCB-1232	Not detected	ug/L	0.1	608	10/17/11 15:26	JANB		
PCB-1242	Not detected	ug/L	0.1	608	10/17/11 15:26	JANB		
PCB-1248	Not detected	ug/L	0.1	608	10/17/11 15:26	JANB		
PCB-1254	Not detected	ug/L	0.1	608	10/17/11 15:26	JANB		
PCB-1260	0.2	ug/L	0.1	608	10/17/11 15:26	JANB		



Analytical Laboratory Report

Preliminary Report

Lab Sample ID: S50305.05 (continued)

Sample Tag: WMU#4-TANKSC-DECONWASH

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Organics - PCBs/Pesticides (continued)								
PCB (continued)								
PCB, Total	0.2	ug/L	0.1	608	10/17/11 15:26	JANB		
Organics - Semi-Volatiles								
F-Scan								
Cresylic Acid	Not detected	ug/L	300	8270C	10/14/11 20:53	PL		
p,m-Cresol	Not detected	ug/L	300	8270C	10/14/11 20:53	PL	200,000	
o-Cresol	Not detected	ug/L	300	8270C	10/14/11 20:53	PL	200,000	
Nitrobenzene	Not detected	ug/L	300	8270C	10/14/11 20:53	PL	2,000	
Pyridine	Not detected	ug/L	300	8270C	10/14/11 20:53	PL	5,000	
TCLP Semi Volatiles								
o-Cresol	Not detected	ug/L	1,000	8270C	10/14/11 20:53	PL	200,000	
p,m-Cresol	Not detected	ug/L	1,000	8270C	10/14/11 20:53	PL	200,000	
Pentachlorophenol	Not detected	ug/L	1,000	8270C	10/14/11 20:53	PL	100,000	
2,4,5-Trichlorophenol	Not detected	ug/L	1,000	8270C	10/14/11 20:53	PL	400,000	
2,4,6-Trichlorophenol	Not detected	ug/L	1,000	8270C	10/14/11 20:53	PL	2,000	
2,4-Dinitrotoluene	Not detected	ug/L	90	8270C	10/14/11 20:53	PL	130	
Hexachlorobenzene	Not detected	ug/L	90	8270C	10/14/11 20:53	PL	130	
Hexachlorobutadiene	Not detected	ug/L	100	8270C	10/14/11 20:53	PL	500	
Hexachloroethane	Not detected	ug/L	100	8270C	10/14/11 20:53	PL	3,000	
Nitrobenzene	Not detected	ug/L	100	8270C	10/14/11 20:53	PL	2,000	
Pyridine	Not detected	ug/L	100	8270C	10/14/11 20:53	PL	5,000	
Organics - Volatiles								
2-Ethoxyethanol	Not detected	ug/L	2,000	8260M	10/14/11 19:22	JGH		
F Scan								
1-Butanol	Not detected	ug/L	1,000	8260M	10/13/11 20:24	WAT		
Cyclohexanone	Not detected	ug/L	100	8260M	10/13/11 20:24	WAT		
Ethyl Acetate	Not detected	ug/L	100	8260M	10/13/11 20:24	WAT		
Isobutanol	Not detected	ug/L	1,000	8260M	10/13/11 20:24	WAT		
2-Nitropropane	Not detected	ug/L	100	8260M	10/13/11 20:24	WAT		
F Scan								
Benzene	Not detected	ug/L	1	8260M	10/13/11 20:24	WAT	500	
Carbon tetrachloride	Not detected	ug/L	1	8260M	10/13/11 20:24	WAT	500	
Chlorobenzene	Not detected	ug/L	1	8260M	10/13/11 20:24	WAT	100,000	
1,2-Dichlorobenzene	Not detected	ug/L	1	8260M	10/13/11 20:24	WAT		
Ethylbenzene	2	ug/L	1	8260M	10/13/11 20:24	WAT		
Methylene chloride	Not detected	ug/L	1	8260M	10/13/11 20:24	WAT		
Tetrachloroethene	Not detected	ug/L	1	8260M	10/13/11 20:24	WAT	700	
Toluene	11	ug/L	1	8260M	10/13/11 20:24	WAT		
1,1,1-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 20:24	WAT		
1,1,2-Trichloroethane	Not detected	ug/L	1	8260M	10/13/11 20:24	WAT		
Trichloroethene	Not detected	ug/L	1	8260M	10/13/11 20:24	WAT	500	
Trichlorofluoromethane	Not detected	ug/L	1	8260M	10/13/11 20:24	WAT		
p,m-Xylene	5	ug/L	1	8260M	10/13/11 20:24	WAT		
o-Xylene	1	ug/L	1	8260M	10/13/11 20:24	WAT		
Acetone	Not detected	ug/L	100	8260M	10/13/11 20:24	WAT		



Analytical Laboratory Report

Preliminary Report

Lab Sample ID: S50305.05 (continued)

Sample Tag: WMU#4-TANKSC-DECONWASH

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Organics - Volatiles (continued)								
F Scan (continued)								
2-Butanone (MEK)	Not detected	ug/L	100	8260M	10/13/11 20:24	WAT	200,000	
Carbon disulfide	Not detected	ug/L	100	8260M	10/13/11 20:24	WAT		
Diethyl ether	Not detected	ug/L	100	8260M	10/13/11 20:24	WAT		
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	100	8260M	10/13/11 20:24	WAT		
TCLP Volatiles								
Benzene	Incomplete	ug/L		8260B	//		500	
Carbon tetrachloride	Incomplete	ug/L		8260B	//		500	
Chlorobenzene	Incomplete	ug/L		8260B	//		100,000	
Chloroform	Incomplete	ug/L		8260B	//		6,000	
1,4-Dichlorobenzene	Incomplete	ug/L		8260B	//		7,500	
1,2-Dichloroethane	Incomplete	ug/L		8260B	//		500	
1,1-Dichloroethene	Incomplete	ug/L		8260B	//		700	
2-Butanone (MEK)	Incomplete	ug/L		8260B	//		200,000	
Tetrachloroethene	Incomplete	ug/L		8260B	//		700	
Trichloroethene	Incomplete	ug/L		8260B	//		500	
Vinyl chloride	Incomplete	ug/L		8260B	//		200	
Volatile Halocarbons								
Dichlorodifluoromethane	Not detected	ug/L	1	8260B	10/13/11 20:24	WAT		
Trichlorofluoromethane	Not detected	ug/L	1	8260B	10/13/11 20:24	WAT		
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	ug/L	1	8260B	10/13/11 20:24	WAT		
Other / Misc.								
Methanol	Not detected	mg/L	0.400	8015M	10/14/11 12:00	Fiber		O

O-Analysis performed by outside laboratory. See attached report.



CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

eCOC ID: BC101011.02

Send Results To:	Contact & Company Name: Mike Brennan ARCADIS		Telephone: 248-994-2276		Preservative	B	E	E	E	E	E	F	KEYS Preservation Key: A. H ₂ SO ₄ B. HCL C. NaOH D. HNO ₃ E. None F. NaOH G. H. Matrix Key: SE = Sediment SO = Soil Wipe W = Water Container Information Key: 1. 40 mL VOA 2. 1 L Amber 3. 125 mL Plastic 4. 250 mL Plastic 5. 500 mL Plastic 6. 1 L Plastic 7. 2 oz. Glass 8. 32 oz. Glass 9. 4 oz. Glass 10. Other A = Air SL = Sludge NL = NAPL / Oil SW = Surface T = Tissue		
	Address: 10559 Citation Dr, Suite 100		Fax: 810-229-8837		Blank (-)	NA	NA	NA	NA	NA	NA	NA			
	City State Zip Brighton, MI 48116		E-mail Address: michael.brennan@arcadis-us.com		# of Occurrences	2	2	2	4	1	2	1			
	Project Name/Location (City, State): Buick City/ Flint, MI		Project #: B0064410.2011.00900		Chain-of-Custody Information	1	1	2	2	6	10	1			
Sampler's Printed Name: Tony Maffeo		Sampler's Signature: 		PARAMETER ANALYSIS & METHOD											
				See attached Sheet For "Buick City F-List Analyte List"	See attached Sheet For "Buick City F-List Analyte List"	See attached Sheet For "Buick City F-List Analyte List"	Reactivity, TCLP VOCs, TCLP SVOCs, TCLP Metals, PCB's	Reactivity, TCLP VOCs, TCLP SVOCs, TCLP Metals, PCB's	See attached Sheet For "Buick City F-List Analyte List"	See attached Sheet For "Buick City F-List Analyte List"					
Sample ID	Collection		Type		Matrix							REMARKS			
	Date	Time	Comp	Grab											
50305 01 02 03 04 05 WMU#5-SOLID	10/7/11	1100	X		SO										
WMU#5-DECONWASH	10/7/11	0900	X		W	X	X	X	X						
WMU#4-SOLID	10/7/11	1250	X		SO				X	X	X				
WMU#4-TANK-DECONWASH	10/7/11	1510	X		W	X	X	X	X						
WMU#4-TANKSC-DECONWASH	10/7/11	1445	X		W	X	X	X	X						
Special Instructions/Comments: Invoice to: Ms. Monica Wallingford, Racer Trust, 2930 Ecorse Road, Ypsilanti, MI 48198, (313) 486.2928, P.O.No: MT1295a - Please also send copy of Invoicing to Micki Maki (ARCADIS).												Special QA/QC Instructions: Standard deliverable with EDD Requested.			
Laboratory Information and Receipt				Relinquished By				Received By				Laboratory Received By			
Lab Name: Merit		Cooler/Custody Seal: <input checked="" type="checkbox"/> Inlet <input type="checkbox"/> Not Inlet		Printed Name: Tony Maffeo		Signature: 		Printed Name: Tim Glees		Signature: 		Printed Name: Paula Shaw		Signature: 	
<input checked="" type="checkbox"/> Cooler packed with ice (✓)				ARCADIS		Firm: Merit				Firm: Merit					
Specify Turnaround Requirements: 5-Day TAT		Condition/Cooler Temp: Not Applicable		Date/Time: 10/7/11 10:45		Date/Time: 10/7/11 10:45		Date/Time: 10/7/11 10:45		Date/Time: 10-10-11 1150					

BUICK CITY F-LIST SELECT ANALYTE LIST

Select VOCs (USEPA Method 8260): 2-Ethoxyethanol, 2-Nitropropane, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Acetone, Benzene, Carbon Disulfide, Carbon Tetrachloride, Chlorobenzene, Chlorinated Fluorocarbons (dichlorodifluoromethane and trichlorofluoromethane), Ethyl Ether, Methylene Chloride, Methyl Ethyl Ketone, Methyl Isobutyl Ketone, ortho-Dichlorobenzene, Tetrachloroethylene, Toluene, Trichloroethylene, Trichlorofluoromethane, and Xylenes.

Select F-Scan VOCs (USEPA Method 8260): Cyclohexanone and Ethyl Acetate.

Select USEPA Method 8015: Isobutanol, methanol, and n-butyl alcohol.

Select F-Scan SVOCs (USEPA Method 8270): Cresols, Cresylic Acid, Nitrobenzene, and Pyridine.



Analytical Laboratory Report

Report ID: S51101.01(01)
Generated on 01/04/2012

Report to

Attention: Mike Brennan
Arcadis
10559 Citation Drive
Suite 100
Brighton, MI 48116

Phone: 810-229-8594 FAX: 810-229-8837
Email: Michael.Brennan@arcadis-us.com

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S51101.01
Project: B0064410.2011.00900 / Buick City / Flint MI
Collected Date: 12/15/2011
Submitted Date/Time: 12/16/2011 16:50
Sampled by: Megan Meckley
P.O. #: MLT1295

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
Samples are held by the lab for 30 days from the sample submittal date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories.

Laboratory Certifications:

Michigan DNRE (#9956), Ohio EPA (#CL0002), NELAC NY (#11814), NELAC FL (#E871045), WBENC (#2005110032)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Sample Summary (1 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S51101.01	IDW_12152011	Soil	12/15/2011 16:40



Analytical Laboratory Report

Lab Sample ID: S51101.01
 Sample Tag: IDW_12152011
 Collected Date/Time: 12/15/2011 16:40
 Matrix: Soil
 COC Reference: BC121511.2

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	32oz Glass	None	Yes	5.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
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Extraction / Prep.

Extraction, PCB	Completed			3550B	12/20/11 15:02	CCM		
Mercury Digestion	Completed			7471A	12/29/11 10:05	JRH		
Metal Digestion	Completed			3015A	12/29/11 01:00	SLR		
TCLP Zero Headspace Ext.	Completed			1311	12/27/11 12:00	WAR		
TCLP/SPLP BNA Extraction	Completed			3510C	12/28/11 15:48	EMR		

TCLP Extraction

Initial Sample pH	9.62			1311	12/27/11 17:00	WAR		
pH after 3.5 ml HCl	1.96			1311	12/27/11 17:00	WAR		
% Solids	100			1311	12/27/11 17:00	WAR		
Sample Used g	100			1311	12/27/11 17:00	WAR		
Final Volume mL	2,000			1311	12/27/11 17:00	WAR		
TCLP Extraction Fluid	1			1311	12/27/11 17:00	WAR		
Final Extract pH	5.98			1311	12/27/11 17:00	WAR		

Inorganics

Total Solids	89	%	1	Std M 2540 B	12/19/11 11:00	DJS		
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Metals

Arsenic, TCLP	Not detected	mg/L	0.02	6020	12/29/11 13:40	SLS	5.0	
Barium, TCLP	1.63	mg/L	0.05	6020	12/29/11 13:40	SLS	100.0	
Cadmium, TCLP	0.009	mg/L	0.005	6020	12/29/11 13:40	SLS	1.0	
Chromium, TCLP	Not detected	mg/L	0.05	6020	12/29/11 13:40	SLS	5.0	
Lead, TCLP	0.07	mg/L	0.03	6020	12/29/11 13:40	SLS	5.0	
Mercury, TCLP	Not detected	mg/L	0.0002	7471A	12/29/11 14:59	JRT	0.2	
Selenium, TCLP	0.07	mg/L	0.05	6020	12/29/11 13:40	SLS	1.0	
Silver, TCLP	Not detected	mg/L	0.005	6020	12/29/11 13:40	SLS	5.0	

Organics - PCBs/Pesticides

PCB List

PCB-1016	Not detected	ug/kg	330	8082A	12/21/11 15:03	JANB		
PCB-1242	Not detected	ug/kg	330	8082A	12/21/11 15:03	JANB		
PCB-1221	Not detected	ug/kg	330	8082A	12/21/11 15:03	JANB		
PCB-1232	Not detected	ug/kg	330	8082A	12/21/11 15:03	JANB		
PCB-1248	Not detected	ug/kg	330	8082A	12/21/11 15:03	JANB		
PCB-1254	Not detected	ug/kg	330	8082A	12/21/11 15:03	JANB		
PCB-1260	Not detected	ug/kg	330	8082A	12/21/11 15:03	JANB		

Organics - Semi-Volatiles

TCLP Semi Volatiles

o-Cresol	Not detected	ug/L	1,000	8270C	01/03/12 18:21	PL	200,000	
p,m-Cresol	Not detected	ug/L	1,000	8270C	01/03/12 18:21	PL	200,000	
Pentachlorophenol	Not detected	ug/L	1,000	8270C	01/03/12 18:21	PL	100,000	



Analytical Laboratory Report

Lab Sample ID: S51101.01 (continued)

Sample Tag: IDW_12152011

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Organics - Semi-Volatiles (continued)								
TCLP Semi Volatiles (continued)								
2,4,5-Trichlorophenol	Not detected	ug/L	1,000	8270C	01/03/12 18:21	PL	400,000	
2,4,6-Trichlorophenol	Not detected	ug/L	1,000	8270C	01/03/12 18:21	PL	2,000	
2,4-Dinitrotoluene	Not detected	ug/L	90	8270C	01/03/12 18:21	PL	130	
Hexachlorobenzene	Not detected	ug/L	90	8270C	01/03/12 18:21	PL	130	
Hexachlorobutadiene	Not detected	ug/L	100	8270C	01/03/12 18:21	PL	500	
Hexachloroethane	Not detected	ug/L	100	8270C	01/03/12 18:21	PL	3,000	
Nitrobenzene	Not detected	ug/L	100	8270C	01/03/12 18:21	PL	2,000	
Pyridine	Not detected	ug/L	100	8270C	01/03/12 18:21	PL	5,000	
Organics - Volatiles								
TCLP Volatiles								
Benzene	Not detected	ug/L	100	8260B	12/29/11 21:20	WAT	500	
Carbon tetrachloride	Not detected	ug/L	100	8260B	12/29/11 21:20	WAT	500	
Chlorobenzene	Not detected	ug/L	100	8260B	12/29/11 21:20	WAT	100,000	
Chloroform	Not detected	ug/L	100	8260B	12/29/11 21:20	WAT	6,000	
1,4-Dichlorobenzene	Not detected	ug/L	100	8260B	12/29/11 21:20	WAT	7,500	
1,2-Dichloroethane	Not detected	ug/L	100	8260B	12/29/11 21:20	WAT	500	
1,1-Dichloroethene	Not detected	ug/L	100	8260B	12/29/11 21:20	WAT	700	
2-Butanone (MEK)	Not detected	ug/L	1,000	8260B	12/29/11 21:20	WAT	200,000	
Tetrachloroethene	Not detected	ug/L	100	8260B	12/29/11 21:20	WAT	700	
Trichloroethene	Not detected	ug/L	100	8260B	12/29/11 21:20	WAT	500	
Vinyl chloride	Not detected	ug/L	100	8260B	12/29/11 21:20	WAT	200	



Analytical Laboratory Report

Revised Report

Report ID: S51446.01(02)
Generated on 03/23/2012
Replaces report S51446.01(01) generated on 02/14/2012

Report to

Attention: Mike Brennan
Arcadis
10559 Citation Drive
Suite 100
Brighton, MI 48116

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Phone: 810-229-8594 FAX: 810-229-8837
Email: Michael.Brennan@arcadis-us.com

Report Summary

Lab Sample ID(s): S51446.01-S51446.02
Project: B0064410.2012.00900 / Buick City / Flint MI
Collected Date: 01/27/2012
Submitted Date/Time: 01/30/2012 08:25
Sampled by: Megan Meckley
P.O. #: PO126110

Matrix for sample .01 changed to match COC.

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
Samples are held by the lab for 30 days from the sample submittal date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories.

Laboratory Certifications:

Michigan DNRE (#9956), DOD/ISO 17025 (#L11-184), WBENC (#2005110032)
Ohio EPA (#CL0002), IN Drinking Water (#C-MI-07), NELAC NY (#11814), NELAC FL (#E871045)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Revised Report

Sample Summary (2 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S51446.01	IDW_01272012	Soil	01/27/2012 17:25
S51446.02	Tripblank_01272012	Methanol	01/27/2012 17:00



Analytical Laboratory Report

Revised Report

Lab Sample ID: S51446.01
 Sample Tag: IDW_01272012
 Collected Date/Time: 01/27/2012 17:25
 Matrix: Soil
 COC Reference: BCO12712.2

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Amber	None	Yes	10.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
----------	---------	-------	----	--------	---------------	---------	-------	-------

Extraction / Prep.

Extraction, PCB	Completed			3550B	01/30/12 15:48	CCM		
Mercury Digestion	Completed			7471A	02/10/12 11:15	JRH		
Metal Digestion	Completed			3015A	02/13/12 11:00	PER		
TCLP Zero Headspace Ext.	Completed			1311	02/07/12 15:30	WAR		
TCLP/SPLP BNA Extraction	Completed			3510C	02/09/12 20:34	EMR		

TCLP Extraction

Initial Sample pH	10.83			1311	02/08/12 15:30	WAR		
pH after 3.5 ml HCl	5.20			1311	02/08/12 15:30	WAR		
% Solids	100			1311	02/08/12 15:30	WAR		
Sample Used g	100			1311	02/08/12 15:30	WAR		
Final Volume mL	2,000			1311	02/08/12 15:30	WAR		
TCLP Extraction Fluid	2			1311	02/08/12 15:30	WAR		
Final Extract pH	5.19			1311	02/08/12 15:30	WAR		

Inorganics

Flashpoint for Solids	Not detected	mm/sec	2.2	1030	02/03/12 14:01	PL		
Total Solids	65	%	1	Std M 2540 B	02/01/12 14:00	WAR		

Metals

Arsenic, TCLP	Not detected	mg/L	0.02	6020	02/13/12 14:16	PER	7440-38-2	
Barium, TCLP	0.50	mg/L	0.05	6020	02/13/12 14:16	PER	7440-39-3	
Cadmium, TCLP	Not detected	mg/L	0.005	6020	02/13/12 14:16	PER	7440-43-9	
Chromium, TCLP	Not detected	mg/L	0.05	6020	02/13/12 14:16	PER	7440-47-3	
Lead, TCLP	0.06	mg/L	0.03	6020	02/13/12 14:16	PER	7439-92-1	
Mercury, TCLP	Not detected	mg/L	0.0002	7471A	02/10/12 15:55	JRT	7439-97-6	
Selenium, TCLP	Not detected	mg/L	0.05	6020	02/13/12 14:16	PER	7782-49-2	
Silver, TCLP	Not detected	mg/L	0.005	6020	02/13/12 14:16	PER	7440-22-4	

Organics - PCBs/Pesticides

PCB List

PCB-1016	Not detected	ug/kg	330	8082A	01/30/12 19:37	JANB	12674-11-2	
PCB-1242	Not detected	ug/kg	330	8082A	01/30/12 19:37	JANB	53469-21-9	
PCB-1221	Not detected	ug/kg	330	8082A	01/30/12 19:37	JANB	11104-28-2	
PCB-1232	Not detected	ug/kg	330	8082A	01/30/12 19:37	JANB	11141-16-5	
PCB-1248	Not detected	ug/kg	330	8082A	01/30/12 19:37	JANB	12672-29-6	
PCB-1254	Not detected	ug/kg	330	8082A	01/30/12 19:37	JANB	11097-69-1	
PCB-1260	Not detected	ug/kg	330	8082A	01/30/12 19:37	JANB	11096-82-5	

Organics - Semi-Volatiles

TCLP Semi Volatiles

o-Cresol	Not detected	ug/L	1,000	8270C	02/10/12 13:38	PL	95-48-7	
p,m-Cresol	Not detected	ug/L	1,000	8270C	02/10/12 13:38	PL	3/4-Cresol	



Analytical Laboratory Report

Revised Report

Lab Sample ID: S51446.01 (continued)

Sample Tag: IDW_01272012

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
TCLP Semi Volatiles (continued)								
Pentachlorophenol	Not detected	ug/L	1,000	8270C	02/10/12 13:38	PL	87-86-5	
2,4,5-Trichlorophenol	Not detected	ug/L	1,000	8270C	02/10/12 13:38	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	1,000	8270C	02/10/12 13:38	PL	88-06-2	
2,4-Dinitrotoluene	Not detected	ug/L	90	8270C	02/10/12 13:38	PL	121-14-2	
Hexachlorobenzene	Not detected	ug/L	90	8270C	02/10/12 13:38	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	100	8270C	02/10/12 13:38	PL	87-68-3	
Hexachloroethane	Not detected	ug/L	100	8270C	02/10/12 13:38	PL	67-72-1	
Nitrobenzene	Not detected	ug/L	100	8270C	02/10/12 13:38	PL	98-95-3	
Pyridine	Not detected	ug/L	100	8270C	02/10/12 13:38	PL	110-86-1	
Organics - Volatiles								
TCLP Volatiles								
Benzene	Not detected	ug/L	100	8260B	02/10/12 16:52	WAT	71-43-2	
Carbon tetrachloride	Not detected	ug/L	100	8260B	02/10/12 16:52	WAT	56-23-5	
Chlorobenzene	Not detected	ug/L	100	8260B	02/10/12 16:52	WAT	108-90-7	
Chloroform	Not detected	ug/L	100	8260B	02/10/12 16:52	WAT	67-66-3	
1,4-Dichlorobenzene	Not detected	ug/L	100	8260B	02/10/12 16:52	WAT	106-46-7	
1,2-Dichloroethane	Not detected	ug/L	100	8260B	02/10/12 16:52	WAT	107-06-2	
1,1-Dichloroethene	Not detected	ug/L	100	8260B	02/10/12 16:52	WAT	75-35-4	
2-Butanone (MEK)	Not detected	ug/L	1,000	8260B	02/10/12 16:52	WAT	78-93-3	
Tetrachloroethene	Not detected	ug/L	100	8260B	02/10/12 16:52	WAT	127-18-4	
Trichloroethene	Not detected	ug/L	100	8260B	02/10/12 16:52	WAT	79-01-6	
Vinyl chloride	Not detected	ug/L	100	8260B	02/10/12 16:52	WAT	75-01-4	



Analytical Laboratory Report

Revised Report

Lab Sample ID: S51446.02
Sample Tag: Tripblank_01272012
Collected Date/Time: 01/27/2012 17:00
Matrix: Methanol
COC Reference: BCO12712.2

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	10.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Other / Misc.								
No Analyses	Completed				01/31/12 08:45	PCS		



Appendix E

Manifests

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number MID 005 356 712		2. Page 1 of 1		3. Emergency Response Phone (248) 225-3277		4. Manifest Tracking Number 001927744 JJK				
		5. Generator's Name and Mailing Address RACER TRUST / NAO FLINT OPERA 2930 ECORSE RD YPSILANTI, MI 48198 Generator's Phone: (248) 225-3277						Generator's Site Address (if different than mailing address) 902 E. LEITH ST FLINT, MI 48550				
6. Transporter 1 Company Name						U.S. EPA ID Number						
7. Transporter 2 Company Name						U.S. EPA ID Number						
8. Designated Facility Name and Site Address MICHIGAN DISPOSAL WASTE TREATMENT PI 49350 N I-94 SERVICE DRIVE BELLEVILLE, MI 48111 Facility's Phone: (800) 592-5489						U.S. EPA ID Number MID 000 724 831						
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))				10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	X					No.						
		1NA3077, Hazardous waste, solid, n.o.s. (xylene), 9, PGIII, ERG #171				002 DM		01000	P	003 F005		
		2.										
		3.										
	4.											
14. Special Handling Instructions and Additional Information K112159MDI / Solid Haz Non-PCB - WMU#4 Partial rejection from line 1 of manifest 008257945JJK due to free liquids - ok per Tony Maffeo @ Arcadis												
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.												
Generator's/Offoror's Printed/Typed Name <i>John Bobrowski</i>						Signature <i>[Signature]</i>			Month Day Year 11/17/11			
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____												
17. Transporter Acknowledgment of Receipt of Materials												
Transporter 1 Printed/Typed Name						Signature			Month Day Year			
Transporter 2 Printed/Typed Name						Signature			Month Day Year			
18. Discrepancy												
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection												
18b. Alternate Facility (or Generator) Manifest Reference Number: _____ U.S. EPA ID Number _____												
18c. Signature of Alternate Facility (or Generator) _____ Month Day Year _____												
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)												
1. H111			2.			3.			4.			
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a												
Printed/Typed Name <i>Michael R Rohde</i>						Signature <i>[Signature]</i>			Month Day Year 11/17/11			

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number MID005356712	2. Page 1 of 1	3. Emergency Response Phone 800-424-9300	4. Manifest Tracking Number 004038057 FLE		
5. Generator's Name and Mailing Address RACER Trust 401 S. Old Woodward Birmingham, MI 48009 313-486-2908				Generator's Site Address (if different than mailing address) RACER Trust 902 E. Leith St Flint, MI 48550-4512			
6. Transporter 1 Company Name Young's Environmental Cleanup Inc.				U.S. EPA ID Number MID106889506			
7. Transporter 2 Company Name				U.S. EPA ID Number			
8. Designated Facility Name and Site Address Advanced Resource Recovery 27140 Princeton Avenue Inkster, MI 48141 313-724-8600				U.S. EPA ID Number MID057002602			
Facility's Phone:							
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
		No.	Type				
1.	Other waste (water)	001	TT	10.500	G	020L	
2.							
3.							
4.							
14. Special Handling Instructions and Additional Information 0b.1. Non-Hazardous Water *If spilled, dike area, contain in drums contact Chemtree 5483-4							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Offeror's Printed/Typed Name D. NEWCOM AGENT FOR RACER				Signature <i>[Signature]</i>		Month Day Year 10 03 11	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____							
17. Transporter Acknowledgment of Receipt of Materials							
Transporter 1 Printed/Typed Name William Billings				Signature <i>[Signature]</i>		Month Day Year 10 3 11	
Transporter 2 Printed/Typed Name				Signature		Month Day Year	
18. Discrepancy							
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
Manifest Reference Number:							
18b. Alternate Facility (or Generator) U.S. EPA ID Number							
Facility's Phone:							
18c. Signature of Alternate Facility (or Generator)						Month Day Year	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
1.		2.		3.		4.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a							
Printed/Typed Name Sarah deBruin				Signature <i>[Signature]</i>		Month Day Year 10 3 11	

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number MID005358712	2. Page 1 of 1	3. Emergency Response Phone 800-424-9300	4. Manifest Tracking Number 004038058 FLE
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5. Generator's Name and Mailing Address RACER Trust 401 S. Old Woodward Birmingham, MI 48009 313-486-2908	Generator's Site Address (if different than mailing address) RACER TRUST 902 E. Leith St Flint, MI 48550-4512
---	---

6. Transporter 1 Company Name Young's Environmental Cleanup Inc.	U.S. EPA ID Number MID106869508
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7. Transporter 2 Company Name	U.S. EPA ID Number
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8. Designated Facility Name and Site Address Advanced Resource Recovery 27140 Princeton Avenue Inkster, MI 48141 313-724-8600	U.S. EPA ID Number MID057002802
---	------------------------------------

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit WL/Vol.	13. Waste Codes	
		No.	Type				
1.	Other waste (water)	001	TT	4900	G	028L	
2.							
3.							
4.							

14. Special Handling Instructions and Additional Information 9b. 1. Non-Hazardous Water *If spilled, dike area, contain in drums contact Chemtree	#5483-4
--	----------------

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Officer's Printed/Typed Name D. Newkirk	Signature <i>[Signature]</i>	Month 10	Day 03	Year 11
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16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.	Port of entry/exit:	Date leaving U.S.:
--	---------------------	--------------------

17. Transporter Acknowledgment of Receipt of Materials				
Transporter 1 Printed/Typed Name Roger Gabriel	Signature <i>[Signature]</i>	Month 10	Day 03	Year 11
Transporter 2 Printed/Typed Name	Signature	Month	Day	Year

18. Discrepancy					
18a. Discrepancy Indication Space	<input type="checkbox"/> Quantity	<input type="checkbox"/> Type	<input type="checkbox"/> Residue	<input type="checkbox"/> Partial Rejection	<input type="checkbox"/> Full Rejection
Manifest Reference Number:					

18b. Alternate Facility (or Generator)	U.S. EPA ID Number
--	--------------------

18c. Signature of Alternate Facility (or Generator)	Month Day Year
---	----------------

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)			
1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a				
Printed/Typed Name Suzuki deBruin	Signature <i>[Signature]</i>	Month 10	Day 03	Year 11

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number MID005356712	2. Page 1 of 1	3. Emergency Response Phone 313-486-2908	4. Manifest Tracking Number 005280338	FLE
5. Generator's Name and Mailing Address Racor Invt/Arcadis NAO Flint Attn: Beth Nanzer 28550 Cabot Drive Novi, MI 748377 313-486-2908 Generator's Phone:			Generator's Site Address (if different than mailing address) Racor Trust NAO Flint Ops Attn: Beth Nanzer 902 E. Leith Flint, MI 48550 313-486-2908			
6. Transporter 1 Company Name U.S. Industrial Technologies			U.S. EPA ID Number MIK757944491			
7. Transporter 2 Company Name			U.S. EPA ID Number			
8. Designated Facility Name and Site Address U.S. Industrial Technologies, Inc. 13075 Newburgh Road Livonia, MI 48150 734-462-4100 Facility's Phone:			U.S. EPA ID Number MIK757944491			
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
		No.	Type			
	1. Non RCRA, Non DOT Regulated Material	04	DM	220	G	NONE
	2.					
	3.					
	4.					
14. Special Handling Instructions and Additional Information 1) # RTFN-OT-0222-01 Solid Non Haz, Non PCB - WMU IDW						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Offor's Printed/Typed Name D. Newman			Signature <i>[Signature]</i>		Month 3	Day 21
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____						
17. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name Scott Harrison			Signature <i>[Signature]</i>		Month 3	Day 21
Transporter 2 Printed/Typed Name			Signature		Month	Day
18. Discrepancy						
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
Manifest Reference Number: _____						
18b. Alternate Facility (or Generator)					U.S. EPA ID Number	
Facility's Phone: _____						
18c. Signature of Alternate Facility (or Generator)					Month	Day
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1.	2.	3.	4.			
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
Printed/Typed Name			Signature		Month	Day

GENERATOR

TRANSPORTER INT'L

DESIGNATED FACILITY

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number MID 005 356 712	2. Page 1 of 1	3. Emergency Response Phone (248) 225-3277	4. Manifest Tracking Number 008257943 JJK	
5. Generator's Name and Mailing Address RACER TRUST / NAO FLINT OPERA 2930 ECORSE RD YPSILANTI, MI 48198				Generator's Site Address (if different than mailing address) 902 E. LEITH ST FLINT, MI 48550		
Generator's Phone: (248) 225-3277				6. Transporter 1 Company Name EQ INDUSTRIAL SERVICES		
7. Transporter 2 Company Name				U.S. EPA ID Number MIO 000 263 871		
8. Designated Facility Name and Site Address EQ DETROIT, INC. 1923 FREDERICK DETROIT, MI 48211 Facility's Phone: (313) 347-1300				U.S. EPA ID Number MID 980 991 566		
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit WL/Vol.	13. Waste Codes
X	1. HAZARDOUS waste, liquid, h.o.s. (toluene, xylene), v, PGIII, ERG #171	No.	Type			F005 F003
	2. NON HAZARDOUS NON REGULATED LIQUID WASTE	038	Dm	2070	G	
	3. NON HAZARDOUS SOLID WASTE, NOT DOT NOT RCRA REGULATED	002	Dm	0110	G	U29L
	4.	011	Dm	04000	P	
14. Special Handling Instructions and Additional Information 1. K117170DET / Liquid Haz Non-PCB - WMU#5 2. K117170DET / Liquid Nonhaz Non-PCB - WMU#5 - Totes 3. K117170DET / Solid Nonhaz Non-PCB - WMU #5 DRUM HAS ECG ROOM ASK						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Officer's Printed/Typed Name D. NEWCOM (AGENT FOR RACER)				Signature <i>[Signature]</i>	Month 11	Day 14
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.				Port of entry/exit: Date leaving U.S.:		
17. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name Raymond Root				Signature <i>[Signature]</i>	Month 11	Day 14
Transporter 2 Printed/Typed Name				Signature	Month	Day
18. Discrepancy						
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
Manifest Reference Number: U.S. EPA ID Number						
18b. Alternate Facility (or Generator) Facility's Phone:						
18c. Signature of Alternate Facility (or Generator) Month Day Year						
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1. H141	2. LIW	3. NONE	4.			
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a						
Printed/Typed Name Tammy J. Thoke				Signature <i>[Signature]</i>	Month 11	Day 14

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: **MID 005 356 712**

2. Page 1 of 1

3. Emergency Response Phone: **(248) 225-3277**

4. Manifest Tracking Number: **008257945 JJK**

5. Generator's Name and Mailing Address: **RACER TRUST / NAO FLINT OPERA**

Generator's Site Address (if different than mailing address): **902 E. LEITH ST FLINT, MI 48550**

Generator's Phone: **(248) 225-3277**

U.S. EPA ID Number: **MIO 000 263 671**

6. Transporter 1 Company Name: **EQ INDUSTRIAL SERVICES**

U.S. EPA ID Number: **MIO 000 263 671**

7. Transporter 2 Company Name: **EQ Industrial Services**

U.S. EPA ID Number: **MIO 000 263 671**

8. Designated Facility Name and Site Address: **WAYNE DISPOSAL, INC SITE 2 LANDFILL**

49350 N I-94 SERVICE DRIVE
BELLEVILLE, MI 48111
(800) 592-5489

U.S. EPA ID Number: **MID 048 090 633**

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
		No.	Type					
X	1. HA3077, Hazardous waste, solid, n.o.s. (xylene), 9, PGIII, ERG #171	004	Drum	1000	P	9003		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information:
1. **K117178ND / Solid Haz Non-PCB - WMLUM**

DRIVER HAS ERG BOOK RSN

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offero's Printed/Typed Name: **D. NEWCOMB (AGENT FOR RACER)**

Signature: *[Signature]*

Month Day Year: **11/14/11**

16. International Shipments: Import to U.S. Export from U.S.

Port of entry/exit: _____
Date leaving U.S.: _____

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: **Raymond Root**

Signature: *[Signature]*

Month Day Year: **11/14/11**

Transporter 2 Printed/Typed Name: **KYAN Rushmore**

Signature: *[Signature]*

Month Day Year: **11/14/11**

18. Discrepancy

18a. Discrepancy Indication Space: Quantity Type Residue Partial Rejection Full Rejection

ok to change manifest per Tony Maffeo @ Arcadis **11-17-11 JB**

Manifest Reference Number: **001927744JJK**

U.S. EPA ID Number: _____

18b. Alternate Facility (or Generator)

Facility's Name: _____
Facility's Phone: _____

Month Day Year: _____

18c. Signature of Alternate Facility (or Generator)

Signature: _____

Month Day Year: _____

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1. **H132** 2. _____ 3. _____ 4. _____

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a

Printed/Typed Name: **[Signature]**

Signature: *[Signature]*

Month Day Year: **11/17/11**

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number MID005358712	2. Page 1 of 1	3. Emergency Response Phone 800-424-9300	4. Manifest Tracking Number 004038058 FLE	
5. Generator's Name and Mailing Address RACER Trust 401 S. Old Woodward Birmingham, MI 48009 313-486-2908			Generator's Site Address (if different than mailing address) RACER TRUST 902 E. Leith St Flint, MI 48550-4512			
6. Transporter 1 Company Name Young's Environmental Cleanup Inc.			U.S. EPA ID Number MID106869508			
7. Transporter 2 Company Name			U.S. EPA ID Number			
8. Designated Facility Name and Site Address Advanced Resource Recovery 27140 Princeton Avenue Inkster, MI 48141 313-724-8600			U.S. EPA ID Number MID057002802			
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit WL/Vol.	13. Waste Codes
1.	Other waste (water)	001 TT		4900	G	028L
2.						
3.						
4.						
14. Special Handling Instructions and Additional Information 9b. f. Non-Hazardous Water *If spilled, dike area, contain in drums contact Chemtree #5483-4						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Officer's Printed/Typed Name D. NEWCOM			Signature <i>[Signature]</i>		Month Day Year 10 03 11	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____						
17. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name Roger Gabriel			Signature <i>[Signature]</i>		Month Day Year 10 03 11	
Transporter 2 Printed/Typed Name			Signature		Month Day Year	
18. Discrepancy						
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
Manifest Reference Number:						
18b. Alternate Facility (or Generator)			U.S. EPA ID Number			
Facility's Phone:						
18c. Signature of Alternate Facility (or Generator)			Month Day Year			
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1.	2.	3.	4.			
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a						
Printed/Typed Name Suzuki detruin			Signature <i>[Signature]</i>		Month Day Year 10 03 11	

GENERATOR

INTL

TRANSPORTER

DESIGNATED FACILITY

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number MID005356712	2. Page 1 of 1	3. Emergency Response Phone 313-486-2908	4. Manifest Tracking Number 005280338	FLE
5. Generator's Name and Mailing Address Racer Trust/Arcadia NAO Flint Attn: Beth Nanzer 28550 Cabot Drive Novi, MI 748377 313-486-2908 Generator's Phone:				Generator's Site Address (if different than mailing address) Racer Trust NAO Flint Ops Attn: Beth Nanzer 902 E. Leith Flint, MI 48550 313-486-2908		
6. Transporter 1 Company Name U.S. Industrial Technologies				U.S. EPA ID Number MIK757944491		
7. Transporter 2 Company Name				U.S. EPA ID Number		
8. Designated Facility Name and Site Address U.S. Industrial Technologies, Inc. 13075 Newburgh Road Livonia, MI 48150 734-462-4100 Facility's Phone:				U.S. EPA ID Number MIK757944491		
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
		No.	Type			
	1. Non RCRA, Non DOT Regulated Material	04	DM	220	G	NONE
	2.					
	3.					
	4.					
14. Special Handling Instructions and Additional Information 1) # RTFN-OT-0222-01 Solid Non Haz, Non PCB - WMU IDW						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Offor's Printed/Typed Name D. Newman				Signature <i>[Signature]</i>		Month Day Year 3 21 12
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____						
17. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name Scott Harrison				Signature <i>[Signature]</i>		Month Day Year 3 21 12
Transporter 2 Printed/Typed Name				Signature		Month Day Year
18. Discrepancy						
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
Manifest Reference Number: _____						
18b. Alternate Facility (or Generator)				U.S. EPA ID Number		
Facility's Phone: _____						
18c. Signature of Alternate Facility (or Generator)						Month Day Year
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1.	2.	3.	4.			
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
Printed/Typed Name				Signature		Month Day Year

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number MID 005 356 712	2. Page 1 of 1	3. Emergency Response Phone (248) 225-3277	4. Manifest Tracking Number 008257943 JJK						
5. Generator's Name and Mailing Address RACER TRUST / NAO FLINT OPERA 2930 ECORSE RD YPSILANTI, MI 48198				Generator's Site Address (if different than mailing address) 902 E. LEITH ST FLINT, MI 48550							
Generator's Phone: (248) 225-3277											
6. Transporter 1 Company Name EQ INDUSTRIAL SERVICES				U.S. EPA ID Number MIO 000 263 871							
7. Transporter 2 Company Name				U.S. EPA ID Number							
8. Designated Facility Name and Site Address EQ DETROIT, INC. 1923 FREDERICK DETROIT, MI 48211 Facility's Phone: (313) 347-1300				U.S. EPA ID Number MID 980 991 566							
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))			10. Containers		11. Total Quantity	12. Unit WL/Vol.	13. Waste Codes			
X	1. HAZARDOUS waste, liquid, h.o.s. (toluene, xylene), v, PGIII, ERG #171			038	Dm	2070	G	F005	F003		
	2. NON HAZARDOUS NON REGULATED LIQUID WASTE			002	Dm	0110	G	U29L			
	3. NON HAZARDOUS SOLID WASTE, NOT DOT NOT RCRA REGULATED			011	Dm	04000	P				
	4.										
14. Special Handling Instructions and Additional Information 1. K117170DET / Liquid Haz Non-PCB - WMU#5 2. K117170DET / Liquid Nonhaz Non-PCB - WMU#5 - Totes 3. K117170DET / Solid Nonhaz Non-PCB - WMU #5 DRIVER HAS EMB ROOM KEY											
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.											
Generator's/Officer's Printed/Typed Name D. NEWCOM (AGENT FOR RACER)							Signature <i>[Signature]</i>		Month 11	Day 14	Year 11
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____											
17. Transporter Acknowledgment of Receipt of Materials											
Transporter 1 Printed/Typed Name Raymond Root				Signature <i>[Signature]</i>		Month 11	Day 14	Year 11			
Transporter 2 Printed/Typed Name				Signature		Month	Day	Year			
18. Discrepancy											
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection											
Manifest Reference Number: _____ U.S. EPA ID Number _____											
18b. Alternate Facility (or Generator) _____											
18c. Signature of Alternate Facility (or Generator) _____ Month _____ Day _____ Year _____											
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)											
1.	H141			2.	LIW			3.	NONE		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a											
Printed/Typed Name Tammy J. Thoke				Signature <i>[Signature]</i>		Month 11	Day 14	Year 11			

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: **MID 005 356 712**

2. Page 1 of 1

3. Emergency Response Phone: **(248) 225-3277**

4. Manifest Tracking Number: **008257945 JJK**

5. Generator's Name and Mailing Address: **RACER TRUST / NAO FLINT OPERA**

Generator's Site Address (if different than mailing address): **902 E. LEITH ST FLINT, MI 48550**

Generator's Phone: **(248) 225-3277**

U.S. EPA ID Number: **MIO 000 263 671**

6. Transporter 1 Company Name: **EQ INDUSTRIAL SERVICES**

U.S. EPA ID Number: **MIO 000 263 671**

7. Transporter 2 Company Name: **EQ Industrial Services**

U.S. EPA ID Number: **MIO 000 263 671**

8. Designated Facility Name and Site Address: **WAYNE DISPOSAL, INC SITE 2 LANDFILL**

49350 N I-94 SERVICE DRIVE BELLEVILLE, MI 48111

Facility's Phone: **(800) 592-5489**

U.S. EPA ID Number: **MID 048 090 633**

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
		No.	Type					
X	1. HA3077, Hazardous waste, solid, n.o.s. (xylene), 9, PGIII, ERG #171	004	Drum	1000	P	9003		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information:
 1. **K117178ND / Solid Haz Non-PCB - WMLUM**

DRIVER HAS ERG BOOK RSN

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offero's Printed/Typed Name: **D. NEWCOMB (AGENT FOR RACER)**

Signature: *[Signature]*

Month Day Year: **11 14 11**

16. International Shipments: Import to U.S. Export from U.S.

Port of entry/exit: _____ Date leaving U.S.: _____

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: **Raymond Root**

Signature: *[Signature]*

Month Day Year: **11 14 11**

Transporter 2 Printed/Typed Name: **KYAN Rushmore**

Signature: *[Signature]*

Month Day Year: **11 14 11**

18. Discrepancy

18a. Discrepancy Indication Space: Quantity Type Residue Partial Rejection Full Rejection

ok to change manifest per Tony Maffeo @ Arcadis

Manifest Reference Number: **11-17-11 JB**

U.S. EPA ID Number: **001927744JJK**

18b. Alternate Facility (or Generator)

Facility's Name: _____

Facility's Phone: _____

Month Day Year: _____

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1. **H132**

2. _____

3. _____

4. _____

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a

Printed/Typed Name: **[Signature]**

Signature: *[Signature]*

Month Day Year: **11 17 11**

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)



Appendix F

Project Analyte List (PAL) VOCs and
PAL SVOCs (BBL, 2001)

TABLE 2

PROJECT ANALYTE LIST (PAL) AND TCLP CONSTITUENTS

MODIFIED TCL ANALYTES

<u>SEMIVOLATILE COMPOUNDS BY 8270C</u>			
<u>Analyte</u>	<u>CAS No.</u>	<u>Analyte</u>	<u>CAS No.</u>
Acenaphthene	83-32-9	3,3'-Dichlorobenzidine	91-94-1
Acenaphthylene	208-96-8	2,4-Dichlorophenol	120-83-2
Acetophenone	98-86-2	Diethyl phthalate	84-66-2
Anthracene	120-12-7	Dimethyl phthalate	131-11-3
Atrazine	1912-24-9	2,4-Dimethylphenol	105-67-9
Benzaldehyde	100-52-7	4,6-Dinitro-2-methylphenol	534-52-1
Benzo(a)anthracene	56-55-3	2,4-Dinitrophenol	51-28-5
Benzo(a)pyrene	50-32-8	2,4-Dinitrotoluene	121-14-2
Benzo(b)fluoranthene	205-99-2	2,6-Dinitrotoluene	606-20-2
Benzo(g,h,i)perylene	191-24-2	Fluoranthene	206-44-0
Benzo(k)fluoranthene	207-08-9	Fluorene	86-73-7
1,1'-Biphenyl	92-52-4	Hexachlorobenzene	118-74-1
bis(2-chloroethoxy)methane	111-91-1	Hexachlorobutadiene	87-68-3
bis(2-chloroethyl)ether	111-44-4	Hexachlorocyclopentadiene	77-47-4
bis(2-chloroisopropyl)ether	108-60-1	Hexachloroethane	67-72-1
bis(2-ethylhexyl)phthalate	117-81-7	Indeno(1,2,3-cd)pyrene	193-39-5
4-Bromophenyl phenylether	101-55-3	Isophorone	78-59-1
Butyl benzyl phthalate	85-68-7	2-Methylnaphthalene	91-57-6
Caprolactam	105-60-2	Naphthalene	91-20-3
Carbazole	86-74-8	2-Nitroaniline	88-74-4
4-Chloro-3-methylphenol	59-50-7	3-Nitroaniline	99-09-2
4-Chloroaniline	106-47-8	4-Nitroaniline	100-01-6
2-Chloronaphthalene	91-58-7	Nitrobenzene	98-95-3
2-Chlorophenol	95-57-8	2-Nitrophenol	88-75-5
4-Chlorophenyl-phenylether	7005-72-3	4-Nitrophenol	100-02-7
2,2'-oxybis(1-Chloropropane)	108-60-1	N-Nitrosodi-n-propylamine	621-64-7
Chrysene	218-01-9	N-Nitrosodiphenylamine	86-30-6
2-Methylphenol (o-Cresol)	95-48-7	Pentachlorophenol	87-86-5
4-Methylphenol (p-Cresol)	106-44-5	Phenanthrene	85-01-8
Di-n-butylphthalate	84-74-2	Phenol	108-95-2
Di-n-octylphthalate	117-84-0	Pyrene	129-00-0
Dibenz(a,h)anthracene	53-70-3	2,4,5-Trichlorophenol	95-95-4
Dibenzofuran	132-64-9	2,4,6-Trichlorophenol	88-06-2
<u>Analyte</u>	<u>CAS No.</u>	<u>Analyte</u>	<u>CAS No.</u>
Acetone	67-64-1	trans-1,2-Dichloroethene	156-60-5
Benzene	71-43-2	1,2-Dichloropropane	78-87-5
Bromodichloromethane	75-27-4	cis-1,3-Dichloropropene	10061-01-5
Bromoform	75-25-2	trans-1,3-Dichloropropene	10061-02-6
Bromomethane	74-83-9	Ethylbenzene	100-41-4
2-Butanone	78-93-3	2-Hexanone	591-78-6
Carbon Disulfide	75-15-0	Isopropylbenzene	98-82-8
Carbon Tetrachloride	56-23-5	Methyl Acetate	79-20-9
Chlorobenzene	108-90-7	Methyl Cyclohexane	108-87-2
Chloroethane	75-00-3	4-Methyl-2-pentanone	108-10-1
Chloroform	67-66-3	Methylene Chloride	75-09-2
Chloromethane	74-87-3	Methyl tert-Butyl Ether	1634-04-4
Cyclohexane	110-82-7	Styrene	100-42-5
Dibromochloromethane	124-48-1	1,1,2,2-Tetrachloroethane	79-34-5
1,2-Dibromo-3-chloropropane	96-12-8	Tetrachloroethene	127-18-4
1,2-Dibromoethane	106-93-4	Toluene	108-88-3
1,2-Dichlorobenzene	95-50-1	1,2,4-Trichlorobenzene	120-82-1
1,3-Dichlorobenzene	541-73-1	1,1,1-Trichloroethane	71-55-6
1,4-Dichlorobenzene	106-46-7	1,1,2-Trichloroethane	79-00-5
Dichlorodifluoromethane	75-71-8	Trichloroethene	79-01-6
1,1-Dichloroethane	75-34-3	Trichlorofluoromethane	75-69-4
1,2-Dichloroethane	107-06-2	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1
1,1-Dichloroethene	75-35-4	Vinyl Chloride	75-01-4
cis-1,2-Dichloroethene	156-59-2	Xylenes (total)	1330-20-7

TABLE 2

PROJECT ANALYTE LIST (PAL) AND TCLP CONSTITUENTS

MODIFIED TCL ANALYTESAROCLORS BY 8082

<u>Analyte</u>	<u>CAS No.</u>	<u>Analyte</u>	<u>CAS No.</u>
Aroclor-1016	12674-11-2	Aroclor-1248	12672-29-6
Aroclor-1221	11104-28-2	Aroclor-1254	11097-69-1
Aroclor-1232	11141-16-5	Aroclor-1260	11096-82-5
Aroclor-1242	53469-21-9		

MODIFIED TAL LIST (TOXIC TAL ANALYTES PLUS ADDITIONAL CONSTITUENTS)INORGANICS BY 6010B/7000A

<u>Analyte</u>	<u>CAS No.</u>	<u>Analyte</u>	<u>CAS No.</u>
Antimony	7440-36-0	Lead	7439-92-1
Arsenic	7440-38-2	Manganese	7439-96-5
Barium	7440-39-3	Mercury	7439-97-6
Beryllium	7440-41-7	Nickel	7440-02-0
Cadmium	7440-43-9	Selenium	7782-49-2
Chromium	7440-47-3	Silver	7440-22-4
Cobalt	7440-48-4	Thallium	7440-28-0
Copper	7440-50-8	Vanadium	7440-62-2
Cyanide	7440-50-7	Zinc	7440-66-6

TCLP ANALYTESSEMIVOLATILE COMPOUNDS BY 8270C - 1311 (TCLP)

<u>Analyte</u>	<u>CAS No.</u>	<u>Analyte</u>	<u>CAS No.</u>
Antimony	7440-36-0	4-Methylphenol (p-Cresol)	106-44-5
2,4-Dinitrotoluene	121-14-2	Nitrobenzene	98-95-3
Hexachlorobenzene	118-74-1	Pentachlorophenol	87-86-5
Hexachlorobutadiene	87-68-3	Pyridine	110-86-1
Hexachloroethane	67-72-1	2,4,5-Trichlorophenol	95-95-4
2-Methylphenol (o-Cresol)	95-48-7	2,4,6-Trichlorophenol	88-06-2
3-Methylphenol (m-Cresol)	108-39-4		

VOLATILE COMPOUNDS BY 8260B - 1311 (TCLP)

<u>Analyte</u>	<u>CAS No.</u>	<u>Analyte</u>	<u>CAS No.</u>
Benzene	71-43-2	1,1-Dichloroethene	75-35-4
Carbon Tetrachloride	56-23-5	2-Butanone	78-93-3
Chlorobenzene	108-90-7	Tetrachloroethene	127-18-4
Chloroform	67-66-3	Trichloroethene	79-01-6
1,4-Dichlorobenzene	106-46-7	Vinyl Chloride	75-01-4
1,2-Dichloroethane	107-06-2		

AROCLORS BY 8082 - 1311 (TCLP)

<u>Analyte</u>	<u>CAS No.</u>	<u>Analyte</u>	<u>CAS No.</u>
Aroclor-1016	12674-11-2	Aroclor-1248	12672-29-6
Aroclor-1221	11104-28-2	Aroclor-1254	11097-69-1
Aroclor-1232	11141-16-5	Aroclor-1260	11096-82-5
Aroclor-1242	53469-21-9		

INORGANICS BY 6010B/7000A, 9010B, 9030B - TCLP

<u>Analyte</u>	<u>CAS No.</u>	<u>Analyte</u>	<u>CAS No.</u>
Arsenic	7440-38-2	Lead	7439-92-1
Barium	7440-39-3	Mercury	7439-97-6
Cadmium	7440-43-9	Selenium	7782-49-2
Chromium	7440-47-3	Silver	7440-22-4

Notes:

- 1) This list summarizes the compounds by fraction which are analyzed in accordance with the Superfund Target Compound List (TCL) for volatile and semivolatile organics, and Superfund toxic Target Analyte List (toxic TAL) for inorganics. Additional compounds have been added to this list based on prior Site analytical data.